

NORWICH TO TILBURY

EN020027

Joint Local Impact Report

Suffolk County Council FC74BF695

Babergh District Council FD2A958D5

Mid Suffolk District Council FF822847B

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Glossary of Acronyms

<i>BNG</i>	<i>Biodiversity Net Gain</i>
<i>JLP</i>	<i>Joint Local Plan</i>
<i>PROW</i>	<i>Public Right of Way</i>
<i>BMV</i>	<i>Best and Most Versatile (agricultural land)</i>
<i>NDHA</i>	<i>Non-designated Heritage Asset</i>
<i>NL</i>	<i>National Landscape</i>
<i>DCO</i>	<i>Development Consent Order</i>
<i>ES</i>	<i>Environmental Statement</i>
<i>LHA</i>	<i>Local Highway Authority</i>
<i>LIR</i>	<i>Local Impact Report</i>
<i>NSIP</i>	<i>Nationally Significant Infrastructure Project</i>
<i>PPA</i>	<i>Planning Performance Agreement</i>

“BDC” refers to Babergh District Council; “MSDC” refers to Mid Suffolk District Council; “BMSDC” refers to BDC and MSDC jointly; “SCC” refers to Suffolk County Council; and “the Councils” refers to BDC, MSDC, and SCC jointly.

Purpose of this Submission

The document has been prepared by Babergh District Council, Mid Suffolk District Council, and Suffolk County Council to provide a Local Impact Report (“**LIR**”) detailing the policy context, assessment of impacts, and required mitigation and/or compensation. The assessment of impacts has been separated by specialism or issue. The Councils have indicated which local authority is the lead authority at the head of each section. Examination Library references are used throughout to assist readers.

Annexes

Additions to the main content of the Local Impact Report

- A Suffolk County Council Archaeological Service, Comments on Application Documents
- B Waveney Valley, Rationale for Additional Measures
- C Babergh and Mid Suffolk District Councils, Landscape and Visual Detailed Comments

Appendices

Policies, Strategy, and Reference Documents

- 1 Order Limits of the Proposed Development
- 2 East Anglia Network Study, 2024
- 3 The Horlock Rules
- 4 The Holford Rules
- 5 Suffolk Minerals and Waste Local Plan (“**SMWLP**”), 2020
- 6 Babergh and Mid Suffolk Joint Local Plan (“**JLP**”) – Part 1, 2023
- 7 Stowmarket Area Action Plan, 2013
- 8 Capel St Mary Neighbourhood Plan, 2025
- 9 Copdock and Washbrook Neighbourhood Plan, 2025
- 10 East Bergholt Neighbourhood Plan, 2016
- 11 Elmsett Neighbourhood Plan, 2019
- 12 Hadleigh Neighbourhood Plan, 2025
- 13 [Emerging] Hintlesham and Chattisham Neighbourhood Plan
- 14 Sproughton Neighbourhood Plan, 2023
- 15 Botesdale and Rickinghall Neighbourhood Plan, 2020
- 16 Diss and District Neighbourhood Plan, 2023
- 17 Mendlesham Neighbourhood Plan, 2022
- 18 Needham Market Neighbourhood Plan, 2022
- 19 Stowupland Neighbourhood Plan, 2019
- 20 Valued Landscape Assessment – Stour Valley Project Area, 2020

- 21 Valued Landscape Assessment – Suffolk Coast & Heaths Additional Project Area, 2020
- 22 Valued Landscape Assessment – Waveney Valley, 2024
- 23 Agricultural Land Classification
- 24 General Arrangement of Raydon Airfield
- 25 Civil Aviation Authority Airfield Advisory Team, Statutory Consultation Response
- 26 Civil Aviation Authority Airfield Advisory Team, Final Correspondence
- 27 Extent of the Dedham Vale AONB
- 28 General Distribution of Sand and Gravel Resources in Suffolk

Overview

1 Introduction

- 1.1 Babergh District Council (“**BDC**”), Mid Suffolk District Council (“**MSDC**”), and Suffolk County Council (“**SCC**”) are statutory consultees for Nationally Significant Infrastructure Projects (“**NSIPs**”) which involve works within or neighbouring their respective administrative areas. Officers have scrutinised the proposals submitted by the Applicant and have spoken with local communities, local Councillors, colleagues from Braintree District Council, Colchester City Council, South Norfolk and Broadland District Councils, Tendring District Council, Norfolk County Council, Essex County Council, and the Dedham Vale National Landscape Partnership.
- 1.2 This Local Impact Report (“**LIR**”) has been prepared in accordance with Section 60(3) of the Planning Act 2008 (as amended) and having regard to the guidance for Local Authorities provided by the Planning Inspectorate (“**PINS**”),¹ and the Ministry for Housing, Communities and Local Government (“**MHCLG**”) Planning Act 2008 (“**PA2008**”) guidance for the Examination stage for NSIPs.²
- 1.3 In this LIR, the councils seek to set out their concerns to the Examining Authority (“**ExA**”). The Councils hope to influence improvements to the Proposed Development, in the interests of the local communities, so that the Development Consent Order (“**DCO**”) (if made) presents the best version of the scheme achievable.
- 1.4 The Norwich to Tilbury proposal is to build a new 400kV electricity transmission line between Norwich and Tilbury. The entire proposal is 183 kilometres (114 miles) in length and crosses parts of Norfolk, Suffolk, and Essex. The Suffolk section is 53 kilometres (33 miles in length) and crosses parts of Babergh and Mid Suffolk District Councils. The scheme also crosses the Dedham Vale National Landscape (“**DVNL**”) at the border with Essex.
- 1.5 The County Electoral Divisions affected potentially include the following:
- Hartismere
 - Upper Gipping
 - Thedwastre North

¹ <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-for-local-authorities>

² <https://www.gov.uk/guidance/planning-act-2008-examination-stage-for-nationally-significant-infrastructure-projects>

- iv. Thredling
- v. Stowmarket North and Stowupland
- vi. Bosmere
- vii. Cosford [neighbouring]
- viii. Gipping Valley
- ix. Belstead Brook
- x. Hadleigh [neighbouring]
- xi. Samford
- xii. Stour Valley [neighbouring]

1.6 The Wards affected potentially include the following:

- i. Palgrave
- ii. Gislingham
- iii. Rickinghall [neighbouring]
- iv. Bacton
- v. Mendlesham
- vi. Haughley, Stowupland & Wetherden
- vii. Stonham
- viii. Needham Market
- ix. Stow Thorney [neighbouring]
- x. Combs Ford [neighbouring]
- xi. Battisford & Ringshall
- xii. Blakenham
- xiii. South East Cosford
- xiv. Bramford
- xv. Copdock & Washbrook
- xvi. Sroughton & Pinewood
- xvii. Hadleigh South [neighbouring]
- xviii. Brett Vale

Suffolk County Council's Position Statement

1.7 At its Cabinet meeting of the 21 May 2024, SCC resolved to:

- i. In accordance with the Council's Energy and Climate Adaptive Infrastructure Policy, recognise the importance of the Norwich to

Tilbury proposals as part of the required infrastructure to connect low carbon energy generation developments that will deliver energy security and contribute to UK government targets, but;

- ii. Set out the Council's clear preference for alternative options, as published by the Electricity System Operator, in particular, for High Voltage Direct Current Undergrounding, or, if practicable and deliverable, an offshore solution, being mindful of potential impacts in East Suffolk;
- iii. To formally and strongly request NGET (and Ofgem recognising the applicant's licence obligations) to pause the Norwich to Tilbury proposals, to enable the effective consideration of these alternatives;
- iv. To lodge an objection to the scheme, as currently presented, because;
 1. Of the need for additional undergrounding, of both the proposed 400kV Line and of UK Power Networks Infrastructure;
 2. The proposals do not adequately address significant issues, and that the Council expects, in the highlighted areas, clearer assessments, outcomes, and mitigations, to be included in the application that will be submitted to the Planning Inspectorate;
 3. Of the need for much greater clarity regarding the relationship between the proposed project and proposed solar projects, including the assessment and management of cumulative effects.
- v. Set out the Council's clear preference that this project should, in coordination with other infrastructure promoters and owners, resolve local supply and connectivity issues in the Stowmarket area for, and around, the Freeport at Gateway 14, and;
- vi. To recognise the beneficial changes that have been made to the scheme alignment, and the addition of further undergrounding, for both the proposed 400kV line, and the existing 132kV UK Power Network pylons.³

Babergh and Mid Suffolk District Councils' Position Statement

- 1.8 At their cabinet briefing meetings on 17 and 18 November 2025 respectively, Mid Suffolk DC and Babergh DC confirmed instructions to officers to make

³ [https://committeeminutes.suffolk.gov.uk/DocSetPage.aspx?MeetingTitle=\(21-05-2024\),%20The%20Cabinet](https://committeeminutes.suffolk.gov.uk/DocSetPage.aspx?MeetingTitle=(21-05-2024),%20The%20Cabinet)

submissions to the examination including the matters set out in Relevant Representations and this joint Local Impact Report.

2 Terms of Reference

Introduction

- 2.1 National Grid Electricity Transmission (referred to as “**NGET**” or “**the Applicant**”) has submitted a DCO application for 400kV grid reinforcement between Norwich Main Substation in Norfolk and Tilbury North Substation in Essex. This Local Impact Report addresses the local impacts of the proposals.

Scope of the Report

- 2.2 This report constitutes the Local Impact Report of Babergh District Council (“**BDC**”), Mid Suffolk District Council (“**MSDC**”) and Suffolk County Council (“**SCC**”) (referred to jointly as “**the Councils**”).
- 2.3 At present, the local authorities in the county of Suffolk follow a two-tier structure. The below comprises a description of the responsibilities and functions of each of the Councils.
- 2.4 SCC is the upper-tier local authority for the county of Suffolk and has a variety of statutory responsibilities to provide services and discharge regulatory functions, which together affect a great many aspects of the built, natural, and social environments. These functions include acting as local highway authority, traffic authority, transport authority, waste planning authority, waste regulation authority, minerals planning authority, county planning authority, lead local flood authority, fire authority (including public safety), public health authority, education authority, and social services authority. SCC also holds responsibility for maintaining the Definitive Map and the Historic Environment Record.
- 2.5 BDC and MSDC (jointly referred to as “**BMSDC**”) are the lower-tier local authorities in the areas within Suffolk relevant to the Proposed Development’s Order Limits. These authorities have a variety of statutory responsibilities to provide services and discharge regulatory functions such as housing, local planning authority, waste collection, environmental health, and leisure facilities.
- 2.6 The report specifically describes the impact of the Works within the districts of Babergh and Mid Suffolk District Councils in the county of Suffolk (described in full in the DCO application) namely:
- i. Construction, operation and decommissioning of a 400kV overhead transmission electric line, including end sealing compounds, and underground cabling system (Work No. 2, 5, 6, and 7);

- ii. Construction, operation and decommissioning of two new gantries within Bramford Substation associated with the overhead transmission electric line, and extension to the existing Bramford Substation (Work No. 3 and 4);
 - iii. Removal of existing 132kV UKPN overhead distribution electric line and pylons, and installation of cable sealing end compounds and underground cabling system (Work No. 25, 26, 27, 28, 29, and 30)
 - iv. Temporary construction compounds sites to facilitate the Proposed Development (Work No. 37, 38, 39 and 40);
 - v. Other construction activities and temporary works associated with the above Works.
- 2.7 This LIR does not describe the Works any further, relying on the Applicant's descriptions as set out in the DCO application documents.
- 2.8 The councils have experience with the NSIP process, through pre-application to post-decision activities including the Discharge of Requirements ("DOR"). The councils have been a statutory consultee on various NSIPs, these include Offshore Wind Farms (i.e. East Anglia One, East Anglia Three, East Anglia One North, East Anglia Two, Fives Estuaries, North Falls), Solar Farms (Sunnica Energy Farm), and a Nuclear Power Station (Sizewell C).
- 2.9 Suffolk County Council is also familiar with a promoter's responsibilities under the Planning Act 2008 regime, having successfully promoted the Lake Lothing Third Crossing DCO in Lowestoft – now operational and known as the Gull Wing Bridge.
- 2.10 Most importantly, the councils have had experience of a recent NGET grid reinforcement scheme which has gone through the NSIP consenting process - Bramford to Twinstead – which was consented in 2024, with the DOR processes and works beginning in 2025. Suffolk County Council is also currently engaged in the Examination of NGET's Sea Link project, which is an under-sea grid reinforcement between the Suffolk coast and the Kent coast, with onshore works in both counties.
- 2.11 The Host Local Authorities continue to engage with the Applicants through the draft Statement of Common Ground ("SoCG") process, with a view to narrowing the issues in dispute.

Structure of the Report

- 2.12 Section 60(3) of the Planning Act 2008 defines Local Impact Reports as: “a report in writing giving details of the likely impact of the proposed development on the authority’s area (or any part of that area).”⁴
- 2.13 Section 104(2)(b) and 105(2)(a) of the Planning Act 2008 states that: “In deciding the application, the Secretary of State must have regard to any local impact report submitted to the Secretary of State before the deadline.”⁵
- 2.14 The Planning Inspectorate’s NSIP Advice for Local Authorities notes the following: “The report should cover any topic the local authority consider is relevant to the impact of the project on their area and the local communities affected. [...] The LIR should include a statement of positive, neutral and negative local impacts.”⁶
- 2.15 This LIR provides an overview of policies relevant to all issues, then details an assessment of local impacts separated by specialism or issue. First, outlining a summary of the concerns relevant to that specialism or issue, then policy context (including reference to the Councils’ Relevant Representation), before detailing the local impact assessment for that specialism or issue. This assessment is broken down into construction, operational, and decommissioning phase impacts. Further detail on the concerns and required mitigation to improve these will be provided, where appropriate.
- 2.16 Where the Applicant has sought to address these concerns, these will be referenced to the application documentation, including the DCO articles, requirements and obligations where relevant.

⁴ <https://www.legislation.gov.uk/ukpga/2008/29/section/60>

⁵ <https://www.legislation.gov.uk/ukpga/2008/29/section/104>

⁶ <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-for-local-authorities#impact>

3 Description of the Area

- 3.1 The character of the area is predominantly rural with a dispersed pattern of small towns, villages and farmsteads. The Proposed Development traverses through Norfolk, Suffolk, and Essex, including crossing the Dedham Vale National Landscape.
- 3.2 The Proposed Development comprises a grid reinforcement from Norwich Main Substation in Norfolk then connecting Bramford Substation and the new East Anglia Connection Node (“**EACN**”) Substation to the new Tilbury North Substation.
- 3.3 In the immediate area surrounding Bramford Substation, several consented Development Consent Orders are present. Namely, East Anglia ONE and East Anglia THREE Offshore Wind Farms (construction of an adjacent substation), and Bramford to Twinstead 400kV grid reinforcement (connecting to Bramford Substation).
- 3.4 The Bramford Substation area is also subject to proposals and permissions under the Town and Country Planning Act 1990 regime, primarily for energy generation, and these include: solar photovoltaic cells, battery energy storage systems, and a flywheel energy storage facility.
- 3.5 The Councils recognise that where Proposed Development will cross through the Dedham Vale National Landscape that sealing end compounds and underground cabling system will be utilised to avoid and mitigate landscape and visual impacts.
- 3.6 The Order Limits of the Proposed Development are outlined in **Appendix 1**.

4 Policy Context

National Policy

National Policy Statements

- 4.1 When considering NSIP proposals under the Planning Act 2008, the relevant Secretary of State will refer to National Policy Statements (“**NPS**”).
- 4.2 The NPS for Energy were published in July 2011, last updated in December 2025 and came into force in January 2026. However, because the application was accepted for examination in September 2025, before the final publication of the amendments in the latest updates to the suite of NPS for Energy, the transitional arrangements set out in section 1.6 of the Overarching NPS for Energy (“**EN-1**”) (2025) mean that it is the suite of NPS for Energy that were published in January 2024 that have effect for the purposes of the application. As set out in paragraph 1.6.3 of EN-1 (2025) the latest suite of NPS for Energy have the potential to be important and relevant considerations but they are not the determining NPS for this application.
- 4.3 Overarching NPS for Energy (“**EN-1**”) is the overarching national policy statement for energy. This sets out the UK Government’s commitment to increasing renewable generation capacity and recognises that in the short to medium term, much of the new capacity is likely to come from onshore and offshore wind.⁷ EN-1 recognises a need for substantial reinforcement of the electricity transmission network “*in East Anglia*” to handle increased power flows from offshore wind generation (para 3.3.68) but is not more geographically specific and does not refer to this project. Where network reinforcement is proposed, EN-1 recognises (para 3.3.78) that the case for that reinforcement would be demonstrated if the proposal represents an efficient and economical means of reinforcing the network to accommodate connections for new generating facilities or of adding resilience and capacity to supply present and future levels of demand, but with the proviso that any such proposal “*needs to follow good design, avoidance and mitigation principles... as referenced in EN-5*”.
- 4.4 EN-1 identifies an “*urgent need*” for new electricity NSIPs to be brought forward “*as soon as possible*” (para 3.3.83) but stops short of stating that this means such proposals must be in place by 2030 (or any other set date). The date of 2030 is referred to in the context of the Government’s “*ambition*” for the amount of offshore wind generation it wishes to see

⁷<https://assets.publishing.service.gov.uk/media/695e4a71e83db7562d671929/overarching-nps-for-energy-en1-withdrawn.pdf>

delivered (para 3.3.73). Any assessment of what is “possible” in the context of an individual project would have to have regard to the proviso in para 3.3.78 on the need for good design and compliance with avoidance and mitigation principles.

- 4.5 EN-1 also recognises that new grid projects are Critical National Priority (**CNP**) network infrastructure (paras 3.3.70 and 4.2.5) but, as explained in para 4.2.7, the CNP policy is applied “**following** normal consideration of the need case, the impacts of the project, and the application of the mitigation hierarchy.” EN-1 also indicates 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 or regulatory requirements.” The CNP policy therefore does not absolve an applicant from needing to address the impacts of a project by following the mitigation hierarchy of seeking to avoid, reduce, mitigate, or compensate for adverse impacts.
- 4.6 NPS for Renewable Energy Infrastructure (“**EN-3**”) is the UK Government’s strategy for renewable energy infrastructure.⁸
- 4.7 NPS for Electricity Networks Infrastructure (“**EN-5**”) is the UK Government’s strategy for electricity network infrastructure.⁹ This policy statement applies to not only transmission systems but also associated infrastructure such as substations and converter stations. This policy statement sets out the general principles that should be applied in the assessment of development consent application across the range of energy technologies. In relation to mitigation, EN-5 indicates (para 2.10.1) that applicants should consider and address routing and avoidance/minimisation of environmental impacts at an early stage in the development. Specifically in the context of landscape impacts EN-5 states (para 2.11.3) that the Secretary of State should be satisfied that all feasible options for mitigation, including the rationalisation, reconfiguration, or undergrounding of existing electricity networks infrastructure have been considered and evaluated appropriately.

National Planning Policy Framework

- 4.8 The National Planning Policy Framework (“**NPPF**”) was last updated in December 2024 (and amended in February 2025) and provides national policy in respect of proposals under the Town and Country Planning Act

⁸<https://assets.publishing.service.gov.uk/media/695e4abce83db7562d67192a/nps-renewable-energy-infrastructure-en3-withdrawn.pdf>

⁹<https://assets.publishing.service.gov.uk/media/695e4a307ad4bff6f7afdfc5/nps-electricity-networks-infrastructure-en5-withdrawn.pdf>

1990 (“**TCPA1990**”). It is however also a material consideration when considering NSIP proposals.¹⁰

- 4.9 A revised version of the NPPF was published on 16 December 2025 and remains a draft during its consultation which closes on 10 March 2026.¹¹

Centralised Strategic Network Plan

- 4.10 The National Energy System Operator (“**NESO**”) is developing the Centralised Strategic Network Plan (“**CSNP**”), establishing how the electricity, gas, and hydrogen network will evolve as a whole energy system over the next 25 years. Currently, this is due to be published by the end of 2028.
- 4.11 Whilst NESO develop the CSNP, NESO have published, in March 2024, a transitional plan titled ‘Beyond 2030’ which assesses the current status of the network, and the options for delivery throughout the 2030s to achieve the desired outcomes. In the case of East Anglia, this report directs to the East Anglia Network Study (**Appendix 2**).

Horlock Rules

- 4.12 The Horlock Rules are National Grid’s guidelines for the siting and design of substations (**Appendix 3**).

Holford Rules

- 4.13 The Holford Rules are National Grid’s guidelines for the routeing of new high voltage overhead transmission lines (**Appendix 4**).

A Green Future: Our 25 Year Plan to Improve the Environment

- 4.14 The Government’s ‘A Green Future: Our 25 Year Plan to Improve the Environment’ document (published January 2018, updated February 2023) is the national high level environmental strategy which includes targets in a number of relevant areas.¹²

The UK’s Modern Industrial Strategy

- 4.15 The Industrial Strategy Sector Plans policy papers (including Clean Energy Industries) were published in June 2025 updated in September 2025.

¹⁰https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf

¹¹<https://www.gov.uk/government/consultations/national-planning-policy-framework-proposed-reforms-and-other-changes-to-the-planning-system>

¹²<https://assets.publishing.service.gov.uk/media/5ab3a67840f0b65bb584297e/25-year-environment-plan.pdf>

- 4.16 By 2035, the Government has the ambition for the UK to be a global leader in Clean Energy Industries, and to become a world-leading exporter of low-carbon products, services and innovation.¹³

The Town and Country Planning Direction 2002

- 4.17 The Town and Country Planning (safeguarded aerodromes, technical sites and military explosives storage areas) Direction 2002 applies to military explosive storage areas in addition to aerodromes and technical sites, coming into effect on 10 February 2003 (last updated December 2016).¹⁴

Civil Air Publication 793, Safe Operating Practices at Unlicensed Aerodromes

- 4.18 The Civil Air Publication 793 (“**CAP793**”) on the safe operating practices at Unlicensed Aerodromes was published by the Civil Aviation Authority’s Safety Regulation Group in June 2010.¹⁵

Community Benefits

- 4.19 The Government published social research and analysis report on the topic of community benefits, for electricity transmission network infrastructure, on 21 March 2024. This document includes communities view and preferences towards community benefits, noting that 67% of residents were supportive of community benefits for transmission infrastructure and 69% were interested in co-designing a community benefit scheme.¹⁶
- 4.20 On 10 March 2025, the Government published its guidance document concerning Community Funds for Transmission Infrastructure. This details the voluntary approach to community benefits for electricity transmission infrastructure, outlining that community benefits should: deliver what communities want, support the capacity and capability of communities, result in a lasting legacy, be flexible to adapt to community preferences, and secure fairer and more transparent outcomes.¹⁷
- 4.21 The Government consulted on a mandatory approach to community benefits for low carbon energy infrastructure between 21 May and 16 July 2025. Subject to parliamentary approval, this would apply to projects that generate over 5MW which have yet to commence by late 2027.¹⁸

¹³ <https://www.gov.uk/government/publications/industrial-strategy-sector-plans/sector-plans>

¹⁴ <https://www.gov.uk/government/publications/safeguarding-aerodromes-technical-sites-and-military-explosives-storage-areas>

¹⁵ <https://www.caa.co.uk/publication/download/13965>

¹⁶ <https://assets.publishing.service.gov.uk/media/65f89eeaca3670001a13a348/community-benefits-electricity-transmission-network-infrastructure.pdf>

¹⁷ <https://assets.publishing.service.gov.uk/media/67cef18c54faabbadf916090/community-funds-for-transmission-infrastructure.pdf>

¹⁸ <https://www.gov.uk/government/publications/community-benefits-and-shared-ownership-for-low-carbon-energy-infrastructure>

Local Policy

Development Plan

- 4.22 The relevant documents that comprise the Development Plan are identified below in **Table 1** and where the policies they contain are relevant, this is shown in **Table 2**.
- 4.23 The full text of the relevant Development Plan policies can be found in **Appendices 5 – 19**.
- 4.24 The presumption in favour of sustainable development is noted in the following policies and explanation of this can be found in the NPPF (paragraph 11).¹⁹ Therefore, it is not discussed any further below.

Suffolk Minerals and Waste Local Plan

- 4.25 Suffolk County Council adopted the Suffolk Minerals and Waste Local Plan in July 2020 (**Appendix 5**). This plan provides the framework for the determination of planning applications for minerals and waste development, and the safeguarding of these sites.

Babergh and Mid Suffolk Joint Local Plan

- 4.26 The Babergh and Mid Suffolk Joint Local Plan – Part 1 (**Appendix 6**) was adopted in November 2023 by both Babergh District Council and Mid Suffolk District Council. Previously, Part 2 (to include allocation policies) was due to be produced, however, this has been dropped in favour of a Joint Local Plan Review following announcement of the Government's 30-month plan making process.²⁰

Neighbourhood Plans

- 4.27 The following Neighbourhood Plans cover areas which are affected by the proposals in some way:
- i. Diss and District
 - ii. Botesdale and Rickinghall [neighbouring]
 - iii. Mendlesham
 - iv. Stowupland
 - v. Needham Market [neighbouring]
 - vi. Elmsett [neighbouring]
 - vii. Sproughton

¹⁹https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf

²⁰<https://www.gov.uk/guidance/30-month-local-plan-process-an-overview>

- viii. Copdock and Washbrook
- ix. [Emerging] Chattisham and Hintlesham
- x. Hadleigh [neighbouring]
- xi. Capel St Mary [neighbouring]
- xii. East Bergholt

Further Information

- 4.28 Further consideration of how the proposals interact with the adopted and draft development plan policies is provided in the issue-based chapters below.

Table 1: Development Plan for Babergh and Mid Suffolk District Council administrative boundaries

1a tem	Applicable Area	Authority Tier	Plan	Made	LIR Appendix
1b	Suffolk	County	Suffolk Minerals and Waste Local Plan (“ SMWLP ”)	2020	5
1c	Babergh and Mid Suffolk	District	Babergh and Mid Suffolk Joint Local Plan (“ JLP ”) – Part 1	2023	6
1d	Mid Suffolk	District	Stowmarket Area Action Plan	2013	7
Babergh Neighbourhood Plans					
1e	Acton	Parish	Acton Neighbourhood Plan	2024	
1f	Aldham	Parish	Aldham Neighbourhood Plan	2020	
1g	Assington	Parish	Assington Neighbourhood Plan	2022	
1h	Bentley	Parish	Bentley Neighbourhood Plan	2022	
1i	Boxford	Parish	Boxford Neighbourhood Plan	2022	
1j	Brettenham	Parish	Brettenham Neighbourhood Plan	2025	
1k	Capel St Mary	Parish	Capel St Mary Neighbourhood Plan	2025	8*
1l	Chelmondiston	Parish	Chelmondiston Neighbourhood Plan	2022	
1m	Copdock and Washbrook	Parish	Copdock and Washbrook Neighbourhood Plan	2025	9
1n	East Bergholt	Parish	East Bergholt Neighbourhood Plan	2016	10
1o	Edwardstone	Parish	Edwardstone Neighbourhood Plan	2024	
1p	Elmsett	Parish	Elmsett Neighbourhood Plan	2019	11*
1q	Great Waldingfield	Parish	Great Waldingfield Neighbourhood Plan	2023	
1r	Hadleigh	Parish	Hadleigh Neighbourhood Plan	2025	12*
1s	Hintlesham and Chattisham	Parish	[Emerging] Hintlesham and Chattisham Neighbourhood Plan		13

1t	Hitcham	Parish	Hitcham Neighbourhood Plan	2025	
1u	Holbrook	Parish	Holbrook Neighbourhood Plan	2023	
1v	Lavenham	Parish	Lavenham Neighbourhood Plan	2016	
1w	Lawshall	Parish	Lawshall Neighbourhood Plan	2024	
1x	Leavenheath	Parish	Leavenheath Neighbourhood Plan	2023	
1y	Little Cornard	Parish	Little Cornard Neighbourhood Plan	2022	
1z	Little Waldingfield	Parish	Little Waldingfield Neighbourhood Plan	2022	
1aa	Long Melford	Parish	Long Melford Neighbourhood Plan	2022	
1bb	Newton	Parish	Newton Neighbourhood Plan	2022	
1cc	Sproughton	Parish	Sproughton Neighbourhood Plan	2023	14
1dd	Stutton	Parish	Stutton Neighbourhood Plan	2023	
1ee	Whatfield	Parish	Whatfield Neighbourhood Plan	2022	
1ff	Wherstead	Parish	Wherstead Neighbourhood Plan	2023	
Mid Suffolk Neighbourhood Plans					
1gg	Baylham	Parish	Baylham Neighbourhood Plan	2025	
1hh	Beyton	Parish	Beyton Neighbourhood Plan	2024	
1ii	Botesdale and Rickinghall	Parish	Botesdale and Rickinghall Neighbourhood Plan	2020	15*
1jj	Brome and Oakley, Stuston, Palgrave	Parish	Diss and District Neighbourhood Plan	2023	16
1kk	Debenham	Parish	Debenham Neighbourhood Plan	2019	
1ll	Drinkstone	Parish	Drinkstone Neighbourhood Plan	2021	
1mm	Elmswell	Parish	Elmswell Neighbourhood Plan	2023	
1nn	Eye	Parish	Eye Neighbourhood Plan	2021	
1oo	Fressingfield	Parish	Fressingfield Neighbourhood Plan	2020	

1pp	Haughley	Parish	Haughley Neighbourhood Plan	2019	
1qq	Laxfield	Parish	Laxfield Neighbourhood Plan	2022	
1rr	Mendlesham	Parish	Mendlesham Neighbourhood Plan	2022	17
1ss	Needham Market	Parish	Needham Market Neighbourhood Plan	2022	18*
1tt	Redgrave	Parish	Redgrave Neighbourhood Plan	2022	
1uu	Stradbroke	Parish	Stradbroke Neighbourhood Plan	2019	
1vv	Stowupland	Parish	Stowupland Neighbourhood Plan	2019	19
1ww	Thorndon	Parish	Thorndon Neighbourhood Plan	2022	
1xx	Thurston	Parish	Thurston Neighbourhood Plan	2019	
1yy	Walsham le Willows	Parish	Walsham le Willows Neighbourhood Plan	2023	
1zz	Wetheringsett cum Brockford	Parish	Wetheringsett cum Brockford Neighbourhood Plan	2024	
1aaa	Wilby	Parish	Wilby Neighbourhood Plan	2021	
1bbb	Woolpit	Parish	Woolpit Neighbourhood Plan	2022	
*Policy Document is neighbouring to the Proposed Development, and not directly affected					

Table 2: Adopted Local Development Plan Policy Interactions

	Agriculture, Soils, and Geology	Airfield Safeguarding	Archaeology	Ecology	Economy, Skills, and Tourism	Flood and Water Environment	Highways	Landscape and Visual	Legal	Noise and Vibration	Public Health	Public Rights of Way
Suffolk Minerals and Waste Local Plan												
MS9												
MS10												
WP18												
MS5												
Babergh and Mid Suffolk Joint Local Plan – Part 1												
SP07												
SP08												
SP09												
LP12												
LP15												
LP16												
LP18												
LP17												
LP19												
LP25												
LP26												
LP27												
LP29												

Other Relevant Local Policy

- 4.29 The following paragraphs note several additional documents produced and endorsed by the relevant authorities which represent local policy on specific topics which the Councils consider of relevance to the proposed developments.

SCC Energy and Climate Adaptive Infrastructure Policy

- 4.30 At its Cabinet meeting on 16 May 2023, Suffolk County Council updated its adopted Energy Infrastructure Policy, indicating its overall stance on projects required to deliver the UK's Net Zero ambitions. The policy states:
- 4.31 "Suffolk County Council has declared a Climate Emergency and is therefore predisposed to supporting projects that are necessary to deliver Net-Zero Carbon for the UK. However, projects will not be supported unless the harms of the project alone, as well as cumulatively and in combination with other projects, are adequately recognised, assessed, appropriately mitigated, and, if necessary, compensated for." ²¹

Suffolk's Local Transport Plan

- 4.32 As Local Highway Authority ("LHA"), Suffolk County Council published 'Suffolk's Local Transport Plan 2025-2040' which outlines the Council's long-term ambitions for the transport network. ²²

Suffolk Green Access Strategy

- 4.33 In 2020, Suffolk County Council published the 'Suffolk Green Access Strategy: Rights of Way Improvement Plan' which covers the period 2020 to 2030, seeks to get more people using and enjoying Suffolk's green access network. ²³

Dedham Vale National Landscape Management Plan

- 4.34 The Dedham Vale National Landscape Partnership published the 'Dedham Vale Area of Outstanding Natural Beauty and Stour Valley Management Plan 2021-2026'. It is a statutory duty of the local authorities with an Area of Outstanding Natural Beauty ("AONB") in their area, in whole or in part, to produce and review a management plan every five years. The Partnership is comprised of the environmental; agricultural; business; community sectors and local authorities. The plan guides the work of these organisations and seeks to balance the need of the different sectors and ensuring that the

²¹ [https://committeeminutes.suffolk.gov.uk/DocSetPage.aspx?MeetingTitle=\(16-05-2023\),%20The%20Cabinet](https://committeeminutes.suffolk.gov.uk/DocSetPage.aspx?MeetingTitle=(16-05-2023),%20The%20Cabinet)

²² <https://www.suffolk.gov.uk/roads-and-transport/transport-planning/suffolks-local-transport-plan-2025-2040>

²³ <https://www.suffolk.gov.uk/asset-library/imported/suffolk-green-access-strategy-2020-2030.pdf>

Dedham Vale AONB and Stour Valley remain an example of the finest landscape in the country. It sets out a vision for the area and topic areas offering guidance on how the area should be managed.²⁴

National Landscape Special Quality Indicators

- 4.35 The Suffolk Coast and Heaths AONB published the ‘*Natural Beauty and Special Qualities Indicators*’ document on 21 November 2016. It identifies the features that constitute the natural beauty and special qualities of the whole of the AONB. The document follows a rigorous criteria-based approach for establishing and identifying the special qualities of this nationally important landscape.²⁵

Babergh and Mid Suffolk Renewable and Low Carbon Energy Position Statements

- 4.36 Babergh and Mid Suffolk District Councils have both established Renewable and Low Carbon Energy Position Statements that outline their commitment to promoting renewable energy and reducing emissions. These statements are part of the planning policies and are used to guide the development of renewable energy projects within the districts. The Councils aim to support the transition to clean energy and ensure that renewable energy developments are acceptable and beneficial for the environment and the community.^{26;27}

Valued Landscape Assessment – Stour Valley Project Area

- 4.37 In 2019, Suffolk Coastal District Council (now forms part of East Suffolk Council) commissioned a valued landscape assessment of the Additional Project Areas associated with the Dedham Vale and the Suffolk Coast & Heaths Areas of Outstanding Natural Beauty, which lie beyond the designation boundaries (**Appendix 20**).

Valued Landscape Assessment – Suffolk Coast & Heaths Additional Project Area

- 4.38 In 2019, Suffolk Coastal District Council (now forms part of East Suffolk Council) commissioned a valued landscape assessment of the Additional Project Areas associated with the Dedham Vale and the Suffolk Coast & Heaths Areas of Outstanding Natural Beauty, which lie beyond the designation boundaries (**Appendix 21**).

²⁴ <https://dedhamvale-nl.org.uk/wp-content/uploads/2021/12/2021-Management-Plan-Final-Online-version.pdf>

²⁵ <https://coastandheaths-nl.org.uk/wp-content/uploads/2021/01/Natural-Beauty-and-Special-Qualities-of-the-Suffolk-Coast-and-Heaths-2016.pdf>

²⁶ <https://www.babergh.gov.uk/documents/d/babergh/bdc-renewable-and-low-carbon-energy-position-statement>

²⁷ <https://www.midsuffolk.gov.uk/documents/d/mid-suffolk/renewable-and-local-carbon-energy-position-statement>

Valued Landscape Assessment – Waveney Valley

- 4.39** In 2023, Suffolk and Norfolk County Councils commissioned a valued landscape assessment of the Waveney Valley which straddles the Counties of Norfolk and Suffolk (**Appendix 22**).

Impacts by Issue

5 Agriculture, Soils and Geology

Lead Authorities	Suffolk County Council
Supporting Authorities	Babergh District Council; Mid Suffolk District Council

Summary

- 5.1 Areas of Best and Most Versatile (“**BMV**”) agricultural land would become unavailable in areas occupied by surface infrastructure including lattice towers and sealing end compounds and would require remediation to the same standard following decommissioning.
- 5.2 Areas of BMV agricultural land would be unavailable during construction and decommissioning in areas of underground cabling and would require remediation to the same standard following construction and decommissioning.
- 5.3 The proposal would cause disruption to field drains in particularly areas of cable undergrounding and mitigation would be required to restore drainage following construction and decommissioning.
- 5.4 A map showing the general distribution of agricultural land classification is appended (**Appendix 23**).

Table 3: Summary of Impacts – Agriculture, Soils and Geology

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
3a	Surface Infrastructure	Negative	N/A	NPS / Green Future / NPPF / BMSDC
3b	Underground Cables	Negative	N/A	NPS / Green Future / NPPF / BMSDC
3c	Drainage	Negative	N/A	NPS / Green Future / NPPF / BMSDC
Operational Phase Impacts				
3d	Surface Infrastructure	Negative	N/A	NPS / Green Future / NPPF / BMSDC
3e	Underground Cables	Neutral	Requirement for reinstatement of field drains	NPS / Green Future / NPPF / BMSDC
3f	Drainage	Neutral	Requirement for reinstatement of field drains	NPS / Green Future / NPPF / BMSDC
Decommissioning Phase Impacts				
3g	Surface Infrastructure	Negative	Requirement for reinstatement of BMV land	NPS / Green Future / NPPF / BMSDC
3h	Underground Cables	Negative	Requirement for reinstatement of BMV land	NPS / Green Future / NPPF / BMSDC
3i	Drainage	Negative	Requirement for reinstatement of field drains	NPS / Green Future / NPPF / BMSDC

Policy Context

National Policy

A Green Future: Our 25 Year Plan to Improve the Environment

- 5.5 “Goals and Targets
- 5.6 5. Using resources from nature more sustainably and efficiently we will ensure that resources from nature, such as food, fish and timber, are used more sustainably and efficiently.
- 5.7 We will do this by:
- 5.8 Maximising the value and benefits we get from our resources, doubling resource productivity by 2050.
- 5.9 Improving our approach to soil management: by 2030 we want all of England’s soils to be managed sustainably, and we will use natural capital thinking to develop appropriate soil metrics and management approaches.”

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 5.10 (5.11.12) “Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5).”
- 5.11 (5.11.13) “Applicants should also identify any effects and seek to minimise impacts on soil health and protect and improve soil quality taking into account any mitigation measures proposed.”

National Planning Policy Framework, December 2024

- 5.12 (187) “Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 5.13 (a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- 5.14 (b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;”

Local Policy

Babergh and Mid Suffolk Joint Local Plan – Part 1, November 2023

- 5.15 Policy LP15 titled “Environmental Protection and Conservation” seeks to minimise the loss of the best and most versatile agricultural land under the following criteria:
- 5.16 “1. Development proposals must demonstrate appropriate consideration of the following:
- 5.17 2. LAND Efficient and Effective Use of Resources/Land
- 5.18 a. Previously developed land will be prioritised. Where development needs to take place on greenfield land, avoidance of the best and most versatile agricultural land should be prioritised.”

Other Relevant Local Policy

- 5.19 None identified.

Relevant Representation

- 5.20 None identified.

Local Impact Assessment

Construction Phase Impacts

Positive

- 5.21 None identified.

Neutral

- 5.22 None identified.

Negative

- 5.23 There would be a reduction in BMV agricultural land available and field drainage would be disrupted.

Operational Phase Impacts

Positive

- 5.24 None identified.

Neutral

- 5.25 Assuming field drainage is reinstated following construction, then there would be a neutral impact on drainage and underground cabling.

Negative

- 5.26 There would be a loss of BMV land available and potential severing or sterilisation of land affecting effective operational use of remaining land.

Decommissioning Phase Impacts

Positive

- 5.27 None identified.

Neutral

- 5.28 None identified.

Negative

- 5.29 There would be a loss of BMV agricultural land available and field drainage would be disrupted.

Required Mitigation

- 5.30 BMV land would require reinstatement to the same or greater soil quality. Appropriate mitigation for severed or sterilised remaining land is necessary. Field drainage systems should be replaced as required after construction and decommissioning.

6 Airfield Safeguarding

Lead Authorities	Suffolk County Council
Supporting Authorities	Babergh District Council; Mid Suffolk District Council

Summary

- 6.1 SCC was instrumental in facilitating constructive dialogue between the Applicant and the Civil Aviation Authority Airfield Advisory Team (“**CAA AAT**”). The CAA AAT has since been disbanded, and this section provides a summary of the position of where SCC believes the areas of disagreement remain in respect of Raydon Airfield.
- 6.2 National policy seeks to encourage general aviation and safeguard the operation of airfields including unlicensed airfields such as Raydon Wings.
- 6.3 The proposal however would cause disruption to the runway during ground investigation works, construction and after construction as a result of settlement and the likely necessity for remedial measures.
- 6.4 The flight path of aircraft would be compromised and obstructed by the cable sealing end compound.
- 6.5 A map showing the general arrangement of Raydon Airfield is appended at **Appendix 24**.

Table 4: Summary of Impacts – Airfield Safeguarding

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
4a	Surface Infrastructure	Negative	Relocate the cable sealing end compound	CAP168 / CAP738 / CAP793 / NPPF
4b	Underground Cables	Negative	Relocate the route of the underground cables	CAP168 / CAP738 / CAP793 / NPPF
4c	Airfield Operations	Negative	Relocate the route of the underground cables and cable sealing end compound	CAP168 / CAP738 / CAP793 / NPPF
Operational Phase Impacts				
4d	Surface Infrastructure	Negative	Relocate the cable sealing end compound	CAP168 / CAP738 / CAP793 / NPPF
4e	Underground Cables	Negative	Relocate the route of the underground cables	CAP168 / CAP738 / CAP793 / NPPF
4f	Airfield Operations	Negative	Relocate the route of the underground cables and cable sealing end compound	CAP168 / CAP738 / CAP793 / NPPF
Decommissioning Phase Impacts				
4g	Surface Infrastructure	Negative	Relocate the cable sealing end compound	CAP168 / CAP738 / CAP793 / NPPF
4h	Underground Cables	Negative	Relocate the route of the underground cables	CAP168 / CAP738 / CAP793 / NPPF
4i	Airfield Operations	Negative	Relocate the route of the underground cables and cable sealing end compound	CAP168 / CAP738 / CAP793 / NPPF

Policy Context

National Policy

National Planning Policy Framework, December 2024

- 6.6 (111) “Planning policies should:
- 6.7 f) recognise the importance of maintaining a national network of general aviation airfields, and their need to adapt and change over time – taking into account their economic value in serving business, leisure, training and emergency service needs, and the General Aviation Strategy”

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 6.8 (5.5.50) “In particular, the Secretary of State should be satisfied that the proposal has been designed, where possible, to minimise adverse impacts on the operation and safety of aerodromes and that realistically achievable mitigation is carried out on existing surveillance systems such as radar/tracking technologies. It is incumbent on Operators of aerodromes to regularly review the possibility of agreeing to make reasonable changes to operational procedures.”

National Policy Statement for Electricity Networks (EN-5), November 2023

- 6.9 (2.11.15) “Where a statutory consultee on the safeguarding of technical facilities identifies a risk that the EMF effect of electricity network infrastructure would compromise the effective and safe operation of such facilities, the potential impact and siting and design alternatives will need to have been fully considered as part of the application.”
- 6.10 No technical sites within Suffolk are known to be affected although it is proposed to route overhead lines and underground cables on or near airfields which conceivably could interfere with radio communication and navigational aids.

The Town and Country Planning Direction 2002

- 6.11 “This circular:
- i. provides details of the system of safeguarding;
 - ii. lists the civil aerodromes which are officially safeguarded; and
 - iii. lists the local planning authority areas containing civil en-route technical sites for which separate official safeguarding maps have been issued.”
 - iv. None of the airfields in the vicinity of the proposed development are officially safeguarded.

Civil Air Publication 793 Safe Operating Practices at Unlicensed Aerodromes (“CAP 793”), July 2010

- 6.12 Chapter 4 paragraph 3.6 refers to there being a minimum 2km distance between the mid-point of the runway and an obstacle of 150ft or more.
- 6.13 There are a number of airfields affected by the proposals for siting 50m high pylons that are within 2km. It is also noted that Tibbenham Airfield say 5km would be more appropriate as they need to negotiate Priory Farm Airfield²⁸ overhead before continuing to climb.

Local Policy

Babergh & Mid Suffolk Joint Local Plan – Part 1, November 2023

- 6.14 Policy LP25, ‘Energy Sources, Storage and Distribution’ requires energy projects to have impacts on airfield safeguarding fully considered and effectively mitigated.

Other Relevant Local Policy

- 6.15 In July 2024 at the Statutory Consultation stage, the Civil Aviation Authority Airfield Advisory Team (“**CAA AAT**”) made the following comments (**Appendix 25**):
- 6.16 “General Aviation (GA) is the domain for all civil aviation operations outside of public air transport. The GA sector provides essential services such as search and rescue and airborne emergency response – it is the test bed for aviation innovation, and the domain for sport/leisure flying and flight training. GA aerodromes serve as transport connectivity nodes across the country and are likely to be important strategic sites for future flight advancement. Government publications acknowledge the importance of General Aviation, citing strategic objectives for **“the UK to be the best place in the world for General Aviation”** in the General Aviation Roadmap²⁸.
- 6.17 In respect of Raydon Wings the CAA AAT stated: “Existing power line infrastructure (blue) runs parallel to the runway at approximately 1.8km to the north. An additional existing power line runs past the aerodrome approximately 3.5km from the 27 threshold on the extended centreline of runway 09/27 to the east, running north to south.
- 6.18 It is clear that the proposed power line (red) will introduce a new vertical obstruction, at just 300m from the runway centre point, to the north of the aerodrome.

²⁸ [General Aviation Roadmap: spring 2021](#)

- 6.19 Early left turns from when departing runway 09 (easterly departure) may not be possible with the proposed infrastructure, and consideration for approach procedures (including emergencies) to land onto runway 27 will be required.”
- 6.20 In the most recent correspondence (March 2025) (**Appendix 26**), the CAA AAT the letter stated:
- 6.21 “I understand that there has been some adjustment to the proposed line route in proximity to the aerodrome. At present, I understand that owners of the site face an uncertain future because of the proposed line route. The ability for the site to continue to operate as it does today, as well as to adapt and change over time, is not assured. Part of the issue seems to be the close proximity of the sealing end compound of the proposed scheme, and related pylons to the aerodrome, just 300m. An alternative location for the sealing end compound might offer greater vertical clearances by moving infrastructure away from sensitive aviation factors. Further discussion with the aerodrome will be most valuable in finding a solution.”

Relevant Representation

- 6.22 Suffolk County Council’s comments on Airfield Safeguarding can be found in paragraph 286 in its Relevant Representation [**RR-3520**].

Local Impact Assessment

Construction Phase Impacts

Positive

6.23 None identified.

Neutral

6.24 None identified.

Negative

6.25 There would be disruption to the grass runway and flight path of aircraft.

Operational Phase Impacts

Positive

6.26 None identified.

Neutral

6.27 None identified.

Negative

6.28 There would be disruption to the grass runway and flight path of aircraft.

Decommissioning Phase Impacts

Positive

6.29 None identified.

Neutral

6.30 None identified.

Negative

6.31 There would be disruption to the grass runway and flight path of aircraft.

Comments on Application Documents

6.32 No comments at this deadline.

Required Mitigation

- 6.33 The proposals should be relocated to avoid Raydon Wings.

7 Archaeology

Lead Authorities	Suffolk County Council
Supporting Authorities	Babergh District Council; Mid Suffolk District Council

Summary

- 7.1 Suffolk County Council Archaeological Service (“**SCCAS**”) raises no objection in principle to the Proposed Development. However, without a comprehensive programme of archaeological evaluation, supported by geoarchaeological and palaeoenvironmental assessment to inform a clear mitigation strategy, the scheme risks causing avoidable harm to the historic environment. That outcome would be inconsistent with EN-1, which requires both direct and indirect impacts to be identified and understood, and for harm to be avoided or minimised through design and mitigation, with any justified loss of archaeological assets preserved by record. Given the linear alignment of the scheme and its passage through diverse East Anglian archaeological landscapes, there is potential for previously unknown heritage assets of local to national significance; establishing their presence, extent and significance will require further archaeological evaluation (geophysical survey, trial trenching, coring and deposit modelling) to inform an appropriate programme of archaeological mitigation.
- 7.2 SCCAS has engaged positively with the Applicant and their consultants during pre-application and will continue constructive engagement throughout the Examination, including via the dDCO, Local Impact Report, Written Representations, and Statement of Common Ground.

Table 5: Summary of Impacts – Archaeology				
Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
5a	Destruction of archaeological heritage assets within the Order Limits	Negative	Full programme of archaeological assessment, comprising geophysical survey, trial trenching, and geoarchaeological and palaeoenvironmental assessment	NPS EN-1 / NPPF
Operational Phase Impacts				
5b	Underground Cables would gradually integrate into the landscape	Neutral		NPS EN-1 / NPPF
5c	Impacts on the setting of heritage assets would persist	Negative		NPS EN-1 / NPPF
5d	Any works that involve further ground disturbance could directly affect archaeological deposits	Negative	To avoid irreversible loss, any intrusive activity must be managed through a detailed HEMP	NPS EN-1 / NPPF
Decommissioning Phase Impacts				
5e	Any works that involve further ground disturbance could directly affect archaeological deposits	Negative	To avoid irreversible loss, any intrusive activity must be preceded by targeted archaeological assessment and carried out under an agree DWSI and appropriate archaeological supervision, recording, analysis and deposition arrangements	NPS EN-1 / NPPF

Policy Context

National Policy

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 7.3 (5.9.1) “The construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment above, at and below the surface of the ground.
- 7.4 (5.9.2) “The historic environment includes all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, landscaped and planted or managed flora.”
- 7.5 (5.9.3) “Those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called ‘heritage assets’. Heritage assets may be buildings, monuments, sites, places, areas or landscapes, or any combination of these. The sum of the heritage interests that a heritage asset holds is referred to as its significance. Significance derives not only from a heritage asset’s physical presence, but also from its setting.”
- 7.6 (5.9.6) “Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments or Protected Wreck Sites should be considered subject to the policies for designated heritage assets.”
- 7.7 (5.9.9) “The applicant should undertake an assessment of any likely significant heritage impacts of the proposed development as part of the EIA, and describe these along with how the mitigation hierarchy has been applied in the ES (see Section 4.3). This should include consideration of heritage assets above, at, and below the surface of the ground.”
- 7.8 (5.9.11) “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.”
- 7.9 (5.9.13) “The applicant is encouraged, where opportunities exist, to prepare proposals which can make a positive contribution to the historic environment, and to consider how their scheme takes account of the significance of heritage assets affected.”

- 7.10 (5.9.21) “Where there is a high probability (based on an adequate assessment) that a development site may include, as yet undiscovered heritage assets with archaeological interest, the Secretary of State will consider requirements to ensure appropriate procedures are in place for the identification and treatment of such assets discovered during construction.”

National Planning Policy Framework, December 2024

- 7.11 (212) “When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.”
- 7.12 (213) “Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:
- 7.13 a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;
- 7.14 b) assets of the highest significance, notably 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, should be wholly exceptional.
- 7.15 (214) “Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:
- 7.16 a) the nature of the heritage asset prevents all reasonable uses of the site; and
- 7.17 b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- 7.18 c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
- 7.19 d) the harm or loss is outweighed by the benefit of bringing the site back into use.
- 7.20 (215) “Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be

weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.”

Local Policy

Babergh & Mid Suffolk Joint Local Plan – Part 1, November 2023

- 7.21 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP19 titled “The Historic Environment” states that where an application potentially affects heritage assets, the Councils will “depending on the nature of the works/development proposed, require the applicant to submit a heritage statement.” This must include appropriate assessment and, where necessary, a field evaluation. “In addition, where an application potentially affects heritage assets of archaeological interest, the heritage statement must ... demonstrate how the preservation of archaeological assets can be achieved through the design of the development and safeguarding during construction.” The Policy also sets out the ways in which the Councils intend to safeguard and enhance the historic environment regarding proposed developments.
- 7.22 In respect of archaeology, Policy LP19 refers to the need to “secure appropriate mitigation measures and if appropriate a programme of archaeological investigation, recording, reporting, archiving, publication, and community involvement; to advance public understanding of the significance of any heritage assets to be lost (wholly or in part); and to make this evidence and any archive generated publicly accessible.”
- 7.23 Babergh & Mid Suffolk Joint Local Plan Submission Draft Policy LP25 titled “Energy Sources, Storage and Distribution” states that:
- “Renewable, decentralised and community energy generating proposals will be supported including where:
- (a) The impact on (but not limited to) landscape, highway safety, ecology, heritage, residential amenity, drainage, airfield safeguarding and the local community has been fully taken into consideration and where appropriate, effectively mitigated;
 - (c) The impact of on and off-site power generation infrastructure being acceptable, having regard to other policies in this Plan.”

Other Relevant Local Policy

- 7.24 None identified.

Relevant Representation

- 7.25 Suffolk County Council’s comments on Archaeology can be found between paragraphs 11 - 29 in its Relevant Representation [RR-3520].

Local Impact Assessment

Construction Phase Impacts

Positive

7.26 None identified.

Neutral

7.27 None identified.

Negative

7.28 The development, including pre-commencement and construction, has the potential to damage or destroy archaeological heritage assets within the Order Limits. In line with the Overarching National Policy Statement for Energy (“**EN-1**”), the Applicant must assess the significance of heritage assets, avoid harm where practicable, and set out proportionate mitigation (preservation in situ, targeted excavation, recording, archiving and dissemination). Full archaeological evaluation (geophysical survey, trial trenching, geoarchaeological and palaeoenvironmental assessment) remains outstanding for substantial parts of the scheme. To date, only areas defined by the applicant as “priority areas” have been archaeologically investigated, and these also require further work to inform appropriate archaeological mitigation.

7.29 A full programme of archaeological assessment, comprising geophysical survey, trial trenching and geoarchaeological and palaeoenvironmental assessment, is necessary to quantify the full development impacts and to define appropriate mitigation. Further archaeological evaluation and mitigation must be secured through the DCO and delivered under an approved Archaeological Mitigation Strategy (“**AMS**”) and Outline Written Scheme of Investigation (“**OWSI**”). In the absence of further evaluation and secured mitigation, the project would cause significant harm to archaeological assets and would conflict with national policy for conserving the historic environment.

Operational Phase Impacts

Positive

7.30 None identified.

Neutral

7.31 The underground cable sections would gradually integrate into the landscape over time.

Negative

- 7.32 Impacts on the setting of heritage assets from surface infrastructure would persist for the duration of the operational phase.
- 7.33 Any subsequent works during operation that involve further ground disturbance could directly affect archaeological deposits that were not fully investigated or that were preserved *in situ* during construction, for example where preservation *in situ* was adopted as a mitigation measure.
- 7.34 To avoid irreversible loss, any future intrusive activity in these areas must be managed through a detailed Historic Environment Management Plan (“HEMP”) to provide a clear programme of archaeological control, agreed procedures for prior assessment, and secured mitigation measures before groundworks commence.

Decommissioning Phase Impacts*Positive*

- 7.35 None identified.

Neutral

- 7.36 None identified.

Negative

- 7.37 Any decommissioning works that involve ground disturbance, including the decommissioning of project infrastructure and facilitating works decommissioning existing 132kV infrastructure has the potential to directly affect archaeological deposits.
- 7.38 To prevent irreversible loss, any intrusive decommissioning activity must be preceded by targeted archaeological assessment and carried out only under an agreed Written Scheme of Investigation with appropriate archaeological supervision, recording, analysis and deposition arrangements. These requirements should be secured in the DCO and the decommissioning plan so that any future interventions are managed, funded and consented to protect the historic environment.

Comments on Application Documents

- 7.39 SCCAS comments on application documents can be found in **Annex A** of this Local Impact Report.

Required Mitigation

- 7.40 Matters relating to built heritage and conservation areas are led by Babergh and Mid-Suffolk District Council and matters relating to Scheduled Monuments are the responsibility of Historic England. Other aspects of the historic environment, specifically archaeology matters are provided below:

Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation

- 7.41 Should this project be consented, all archaeological evaluation and mitigation for the project must be implemented in accordance with an approved Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (“**AMS-OWSI**”). The submitted Outline AMS-OWSI (Document 7.5) remains a draft, is unapproved, and does not demonstrate a clear, deliverable programme to evaluate and mitigate the development impacts. SCCAS has provided detailed comments to National Grid and their agents; these comments are appended at **Annex A** and must be addressed before the AMS-OWSI can be approved.
- 7.42 In summary, SCCAS’s detailed comments seek unambiguous wording, comprehensive and consistent evaluation coverage, clear mapping and figures, and defined responsibilities for the Detailed Written Scheme of Investigation (“**DWSI**”) submission and contractor appointment. SCCAS also require robust post-excavation and archiving commitments, and the production and approval of an Updated Project Design (“**UPD**”), to be informed by the Post-Excavation Assessment reports (“**PXA**”), that sets out timeframes for completing the full analysis and confirms secured funding for full specialist post-excavation analysis, publication, archive deposition and dissemination of results. SCCAS further recommends stronger provision for training, monitoring, and public outreach, and confirmation that live constraints mapping will be used. The final AMS-OWSI, all subsequent DWSIs and contractor method statements, and the UPD must be approved in writing by the relevant Local Planning Authority Archaeological Advisors (“**LPAAA**”).
- 7.43 If the AMS-OWSI cannot be revised to meet the required standards, substantive changes to the DCO Requirement wording will be necessary to secure adequate protection for the historic environment.

Archaeological assessment and evaluation

- 7.44 There will be significant ground disturbance from underground cables, pylon works and third-party infrastructure which are likely to cause partial or complete loss of below-ground archaeological heritage assets across

much of the scheme. Owing to the project's scale and the extent of disturbance, there is a high probability that archaeology that is not presently recorded in the Historic Environment Record (“**HER**”) will be encountered during the archaeological evaluations, and the resulting archaeological mitigation works.

Historic Environment Baseline Report

- 7.45 The Historic Environment Baseline Report (“**HEBR**”) (Document 6.11.A1) for archaeology must go beyond a simple inventory of the HER entries and provide a structured assessment of archaeological potential to evaluate the likelihood of project impacts encountering currently unknown heritage assets of unknown significance. This assessment should draw on known assets, landscape context, geology, findspot distributions, cropmarks, previous investigations, and geoarchaeological and palaeoenvironmental evidence to form the ES archaeological baseline and produce mapped zones of known archaeological potential (high/medium/low) to indicate priority areas for early evaluation (geophysics, trial trenching, and geoarchaeological and palaeoenvironmental assessment) where potential constraints are identified, to inform project design, mitigation and project delivery timetables.
- 7.46 The HEBR should also treat the HER as a working resource rather than a definitive map, since it records only known sites and is continually updated by new fieldwork and research.
- 7.47 Additionally, the mitigation measures set out in the Historic Environment Assessment Tables (document 6.11.A2) are inadequate to address the likely impacts of this scheme and risk avoidable and irreversible harm to the historic environment. This would be inconsistent with EN-1, which requires that both direct and indirect impacts are identified and understood and that harm is avoided or minimised through design and mitigation, with any justified loss of archaeological assets preserved by record. Given the route's passage through multiple, distinct East Anglian landscapes, there is a realistic potential for previously unknown heritage assets of local to national significance, which is not accommodated for when assessing the HER data. Accordingly, the assessment tables must set out the requirement for a full programme of archaeological evaluation, including geophysical survey, trial trenching, and where relevant geoarchaeological and palaeoenvironmental assessment, to establish presence, extent, character and significance of archaeological heritage assets and to inform design and mitigation measures.

- 7.48 Where avoidance is not feasible, mitigation must follow the hierarchy of preservation in situ, or, where loss is justified, preservation by record with excavation, recording, post-excavation analysis, publication and deposition of the archive in an appropriate archaeological archive repository. All work must be undertaken in accordance with the approved AMS-OWSI and relevant DWSIs, which will be prepared and implemented to professional standards and agreed with the local planning authority and where relevant, Historic England.
- 7.49 There is no public benefit in unnecessary destruction or damage to archaeological heritage assets.

Archaeological evaluation

- 7.50 In consultation with National Grid² archaeological consultants, a programme of pre-determination evaluation, comprising geophysical survey and trial trenching, has been agreed for the “priority areas” only. These areas focus on areas of construction impact and do not focus on areas of greater archaeological potential. While this targeted approach is valuable for assessing the direct impacts of specific construction activities (for example, the undergrounding of the 400kV line), it will not identify archaeological potential beyond those areas. Archaeological remains are likely to occur across the wider scheme, and limiting evaluation to priority areas therefore leaves gaps in our understanding of where archaeology could constrain development. The developer needs to recognise these risks and the AMS-OWSI needs to allow for a programme of thorough evaluation of development impacts so that suitable archaeological mitigation can be designed and implemented.
- 7.51 Geophysical surveys are currently being carried out in the priority areas. Surveys of the non-priority areas are scheduled to begin during the examination but are unlikely to be completed before the application is determined. Interim results are presented in Document 6.11.A4: Environmental Statement Appendix 11.4 – Geophysical Survey Results Report. However, this report does not include a full analysis of the survey results, nor does it provide a complete geophysical survey of the project Order Limits. Full geophysical survey reports will therefore be required for review and comment by the relevant Local Planning Authority Archaeological Advisors (“**LPAAA**”) and once approved, must be submitted for inclusion in the appropriate county Historic Environment Records (“**HER**”).
- 7.52 The current geophysical survey is limited to magnetometry, which is sensitive to variations in the Earth’s magnetic field and favour features that

provide sufficient magnetic contrast, such as fired features, large features and/or ditches with magnetically enhanced fills etc. whereas features with little to no magnetic contrast may not be detected. Interpretation of magnetometer results is inherently subjective and should not be relied upon in isolation, therefore trial trenching is required to ground-truth anomalies, confirm negative results, and establish the presence, character, date and significance of archaeological remains and deposits to inform mitigation or design decisions.

- 7.53 The Written Scheme of Investigation for pre-determination archaeological evaluation of priority areas has been approved by SCCAS, and the works are currently ongoing. Results of the trial trenching that has been undertaken to date within the priority areas has been supplied as interim reports (Document 6.11.A5 Environmental Statement Appendix 11.5 – Trial Trenching Results Reports **[AS-078]** and **[AS-079]**). This document does not provide a full analysis of the priority areas, only interim reports. Therefore, full reports will need to be supplied for review and comment by the relevant Local Planning Authority Archaeological Advisors (“**LPAAA**”) and once approved supplied for inclusion in the relevant county Historic Environment Records (“**HER**”).
- 7.54 Results shown in the interim reports and through site monitoring visits of the trial trenching of the priority areas, have identified extensive and important previously unidentified archaeological remains, that will require appropriate mitigation should consent be granted. This indicates a high likelihood of further unrecorded assets being identified along the remainder of the route.
- 7.55 Full archaeological evaluation (geophysical survey, trial trenching and geoarchaeological and palaeoenvironmental assessment) remains outstanding for substantial parts of the scheme.
- 7.56 Based upon current information within the County Historic Environment Record, the proposed construction laydown area, east of Wortham (located north of Lion Road 610100,277750) lies near recorded archaeological heritage assets of potential regional to national significance (Historic Environment Baseline Report number 2164). SCCAS therefore recommends an upfront archaeological evaluation to establish the presence, absence, significance, extent and depth of archaeology within the laydown area, as such remains could form a constraint upon development. Given the temporary nature of the laydown area, avoidance or redesign should be prioritised where significant remains are identified. However, where avoidance is not possible, appropriate mitigation must be implemented to record the heritage assets ahead of pre-commencement works and

construction, in accordance with EN1. This could have significant time and cost implications for the development and must be scheduled early into the programme to avoid delays to project delivery.

- 7.57 SCCAS has specific concerns about delivering archaeological evaluation and mitigation for the third-party 132kV decommissioning and undergrounding works as part of the Norwich–Tilbury project. To date, the areas of proposed 132kV undergrounding have not been assessed, and it is likely that results of the full evaluation, both geophysical survey and trial trenching, of these areas would not be available for the examination. As this is comprises necessary facilitating works to deliver the scheme, it is therefore recommended that these works are covered by the DCO and associated obligations to ensure they are fully assessed and mitigated. The Applicant's programme should make clear, enforceable provision for evaluating and mitigating third party works, so that they do not proceed without undertaking the required archaeological mitigation or appropriate heritage safeguards are in place.
- 7.58 SCCAS considers that all remaining and any subsequently added areas within the Suffolk Order Limits, including site accesses, haul roads, compounds, pylon bases and construction zones, ecological mitigation areas and biodiversity net gain areas etc., require a full programme of archaeological evaluation to inform appropriate mitigation. Should the project be consented, these works should be carried out at the earliest opportunity post-consent so mitigation can be developed and integrated into project programmes. Provision must be made for additional mitigation or preservation *in situ* of nationally significant remains if these are identified as part of the ongoing or post-consent evaluation.
- 7.59 Archaeological remains that, by reason of their significance, must be preserved in situ or are agreed to be preserved in situ because of scheme design, must be protected from damage during pre-commencement works, throughout construction, and during operation and decommissioning. Where preservation in situ is proposed, the mitigation strategy must include a mandatory, long-term protection strategy covering construction, operation, decommissioning and perpetual management, this strategy must be submitted to and approved by the relevant Local Planning authority. Provision must be made for the preparation, submission and approval of a detailed Historic Environment Management Plan (HEMP), together with associated obligations, monitoring arrangements and remedial measures, to secure the ongoing management, recording and protection of preserved areas for the lifetime of the development and beyond.

Geoarchaeological and Palaeoenvironmental Assessment

- 7.60 Document 6.11.A6 Environmental Statement Appendix 11.6 - Geoarchaeological monitoring of Ground Investigation Works Report **[APP-214]** identified deposits with potential archaeological and palaeoenvironmental value, notably peats and organic silts. The scope of the monitoring did not include palaeoenvironmental assessment or scientific dating, and consequently, the chronology, preservation conditions, and significance of these deposits remain undetermined. Accordingly, this document constitutes a preliminary assessment only and should not be considered as a substitute for the full geoarchaeological and palaeoenvironmental assessment that will be required to inform project design decisions and mitigation.
- 7.61 SCCAS therefore recommends a programme of geoarchaeological assessment including transects of boreholes within the river valleys to refine the deposit models, and to inform a programme of coring, palaeoenvironmental sampling and scientific dating (e.g. radiocarbon, OSL where appropriate). The results should be used to assess the survival and significance of deposits, to inform an appropriate mitigation strategy and to feed directly into project design. This programme must be secured by enforceable Requirement wording and scheduled early in the project timetable so that findings can inform design decisions and mitigation.

dDCO Requirement Wording

- 7.62 SCCAS are not currently in agreement with the proposed wording of DCO Requirement 5 and Article 23 and amendments are necessary for agreement to be reached.

Part 4 – Supplemental Powers: Article 23 Removal of Human Remains

- 7.63 The current wording of the dDCO under Part 4 – Supplemental Powers: Article 23 Removal of Human Remains; raises significant concerns regarding the appropriate treatment of archaeological human remains. It also introduces potential risks to archaeological heritage assets and risks of project delays.
- 7.64 To the best of our knowledge, there are no records of any historic human remains or burial sites within the Suffolk Norwich to Tilbury Order Limits. However, it is not uncommon for human remains to be encountered during archaeological fieldwork, and a project of this scale should therefore anticipate the potential discovery of such remains during ongoing evaluation and mitigation. SCCAS considers article 23 conflicts with archaeological best practice for dealing with human remains in

archaeological contexts as it would lead to burial features being exposed for an extended period, constituting a risk of damage or harm.

- 7.65 For remains over 100 years old, it is usually standard archaeological practice that the terms of the Burial Act 1857 are followed; however, by article 23(17), section 25 of the Burial Act 1857 is disapplied in respect of a removal carried out in accordance with article 23.
- 7.66 SCCAS considers article 23 should be amended so that the removal of remains considered to be over 100 years old should be carried out in line with the Burial Act 1857, any issued burial license, the relevant detailed written scheme of investigation, and best practice documents.
- 7.67 SCCAS therefore recommends that article 23 is amended as follows – “**(17) Subject to subject to paragraph (17)A**, section 25 of the Burial Act 1857 (offence of removal of body from burial grounds) does not apply to a removal carried out in accordance with this article.

(17A) Subject to paragraph (17B), the disapplication mentioned in paragraph (17) does not apply to the removal of human remains where the undertaker is satisfied that the remains were interred more than 100 years ago.

(17B) A removal to which paragraph (17A) applies must also be carried out in accordance with any issued burial license, any relevant detailed written scheme of investigation approved in accordance with requirement 5 (archaeology), and best practice documents”.

- 7.68 SCCAS requests that the Applicant engages with SCCAS in respect of the drafting of this article.

Schedule 3 – Requirements: Requirement 5 Archaeology

- 7.69 **Schedule 3 (requirements) (requirement 5(1) (archaeology)** – the Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (“**AMS-OWSI**”) [APP-328] does not provide adequate or appropriate provision for archaeological evaluation and mitigation, and therefore, does not provide appropriate protection for the historic environment. As submitted, SCCAS do not agree with its contents.
- 7.70 For requirement 5 to be acceptable, the AMS-OWSI must be revised to meet appropriate standards and SCCAS are actively engaging with the applicant in this regard.
- 7.71 However, if the AMS-OWSI cannot be satisfactorily amended before the application is determined, SCCAS would recommend the following amendments to requirement 5 to secure the post-consent approval of documents:

“5(1)(a) No stage of the authorised development may commence until the Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation have been submitted to and approved by Suffolk County Council.

5(1)(b) No stage of the authorised development may commence until either a preservation in situ management plan, or a detailed written scheme of investigation of areas of archaeological interest relevant to that stage (if any), as identified within the **approved** outline archaeological mitigation strategy and outline written scheme of investigation or identified through evaluation work as set out in the **approved** outline archaeological mitigation strategy and outline written scheme of investigation, has been submitted to and approved by the relevant planning authority and, if relevant, Historic England.”

- 7.72 Schedule 3 (requirements) (requirement 5(2) (archaeology) –** the development is expected to be delivered in stages, and each stage may involve multiple phases of archaeological work including evaluation and mitigation. Accordingly, Requirement 5(2) should be amended to refer to **“detailed written schemes of investigation” (DWSI)** (plural, rather than singular) to reflect that more than one DWSI will be produced for this scheme.
- 7.73** Using the plural recognises that each stage may require multiple DWSIs and ensures clarity for the applicant and discharging authority, and secures the appropriate level of archaeological investigation, recording, and mitigation for all parts of the authorised development.
- 7.74 Schedule 3 (requirements) (requirement 5(3) (archaeology) –** paragraph (3) provides for a single DWSI, however, as discussed above, each stage is likely to have multiple DWSIs produced to deliver the appropriate level of archaeological investigation. SCCAS would therefore recommend this is reflected in paragraph 3 as follows:
- “(3) **Each** ~~The~~ detailed written scheme of investigation...”
- 7.75 Schedule 3 (requirements) (requirement 5(4) (archaeology) –** the introductory words “For the avoidance of doubt” are unnecessary and should be omitted.
- 7.76 Schedule 3 (requirements) (requirement 5(3) (archaeology) –** **recommended further provisions:** there must also be provision to secure geoarchaeological and palaeoenvironmental assessment and mitigation and full post-excavation analysis, timely publication, and deposit of complete physical and digital archives, with funding in place to deliver these

stages. In the light of this, SCCAS recommend the inclusion of the following provisions in requirement 5:

“5(5) No stage of the authorised development may commence until a detailed written scheme of investigation for geoarchaeological and palaeoenvironmental assessment and mitigation has been submitted and approved by the relevant planning authority and, if relevant, Historic England.

5(6) No later than two years after the completion of the construction phase of work, an Updated Project Design must be submitted to and approved by the Local Planning Authority. The Updated Project Design must be in general accordance with the approved Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation, and relevant Detailed Written Schemes of Investigation, and set out scope for full post-excavation analysis, publication, and address the site-specific research agendas. Post-excavation analysis and publication must be carried out in accordance with the approved Updated Project Design.

5(7) The full archaeological archive, both physical and digital, must be deposited to the relevant archaeological archive repository, for that County, in accordance with the approved archaeological Updated Project Design.

7.77 This drafting is based on requirement 3(6) (archaeology and peat) of the Sizewell C (Nuclear Generating Station) Order 2022 (SI 2022/853) and so is a regime which the Secretary of State has already considered appropriate for Suffolk. SCCAS consider the regime should apply to the instant project also. For completeness, requirement 3(6) of the Sizewell Order states –

“Unless otherwise agreed with Suffolk County Council

(a) No later than two years following the completion of the fieldwork specified in each site-specific written scheme of investigation, a site-specific post excavation assessment for that site must be completed in accordance with the Overarching Written Scheme of Investigation and submitted to Suffolk County Council for approval.

(b) No later than one year following approval of the final site-specific post excavation assessment, an archaeological updated project design for all sites, must be submitted to Suffolk County Council for approval. The archaeological updated project design must be produced in general accordance with the Overarching Archaeological Written Scheme of Investigation, include details of the scope of post-excavation analysis and publication and have regards to the site-specific research agendas set out in the site-specific written schemes of investigation.

(c) Post-excavation analysis and publication must be carried out in accordance with the approved archaeological updated project design.

(d) The full archaeological archive must be submitted to the Suffolk County Council Archaeological Service (Archives) in accordance with the archaeological updated project design”.

- 7.78 **Schedule 3 (requirements) (requirement 5(2) (archaeology))** – this provision names “the relevant planning authority” as the discharging authority. In Suffolk, SCC should be the discharging authority because archaeology is a county function. This approach is precedented. For instance, requirement 3 (project wide: archaeology and peat) of the Sizewell C (Nuclear Generating Station) Order 2022 (SI 2022/853) names SCC as the approving authority for archaeological matters.

General Comments

- 7.79 As has been shown by other NSIPs in the region, time will be a critical factor in delivering archaeological assessment and mitigation. Archaeological works should be programmed into the project at the earliest opportunity, with sufficient time allowed to enable evaluations to be undertaken and also mitigation to be completed sufficiently in advance of the start of any pre-commencement or construction works, so as to avoid any delays to the development schedule.
- 7.80 Numerous large projects taking place in the county at the same time is putting significant pressure on available archaeological work forces. Therefore, SCCAS advise that National Grid should seek to appoint an archaeological contractor for ongoing archaeological and assessment works at the earliest opportunity.

8 Built Heritage

Lead Authorities	Babergh District Council; Mid Suffolk District Council
Supporting Authorities	Suffolk County Council

Summary

- 8.1 The Councils raise no objection in principle to the Proposed Development. However, without a clearer rationale for how embedded, standard and additional mitigation have informed the submitted design, particularly in relation to the identified Mid-level of Less than Substantial Harm to designated heritage assets, the scheme risks resulting in avoidable adverse effects on built heritage significance. This would be inconsistent with the requirements of EN-1, which expects both direct and indirect impacts on the historic environment to be robustly assessed, understood and minimised through design iteration and proportionate mitigation. Given the extent of the Order Limits and the proximity of numerous designated and non-designated heritage assets whose settings contribute to their significance, further clarification is required regarding the evaluation of design alternatives, the justification for pylon siting, and the approach to managing the limits of deviation to avoid any worsening of effects beyond those assessed in the Environmental Statement.
- 8.2 The Councils have engaged constructively with the Applicant throughout the pre application process and will continue to do so during the Examination. However, additional information is required to demonstrate that mitigation has been optimised, that limits of deviation will not lead to materially greater harm than assessed, and that the approach to both construction phase and operational phase impacts on built heritage assets is consistent with national policy, national guidance, and local plan requirements.

Table 6: Summary of Impacts – Built Heritage

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
6a	Standard construction-phase controls (e.g., managing vibration, retaining hedgerows/earthworks where practicable) help avoid unnecessary impacts.	Positive	Application of standard mitigation measures (e.g., NV04, NV05; H06–H07); early engagement with owners where vibration concerns arise.	EN-1; NPPG; HE Good Practice Advice Notes 2 & 3; Local Plan Policy LP19
6b	Some construction activities result in temporary effects on setting, but these are largely short-term and reversible.	Neutral	Implementation of Construction Environmental Management / CoCP controls; careful siting of haul roads and temporary works.	EN-1; Local Plan SP09; LP19
6c	Potential for a moderate level of Less than Substantial Harm to the significance of assets during construction due to siting of temporary infrastructure, haul roads, plant, and movement within Limits of Deviation.	Negative	Further clarification on construction-phase routing/layout decisions; tighter control on Limits of Deviation; asset-specific mitigation where Mid-level of Less than Substantial Harm identified.	EN-1 (5.9), HE Guidance on Setting, Local Plan LP19
6d	Potential for vibration impacts to damage historic fabric.	Negative	Confirmation of appropriate assessment, avoidance and measures to ensure pre- and post-condition survey and repairs.	EN-1 (5.9), HE Guidance on Setting, Local Plan LP19
Operational Phase Impacts				
6e	Embedded design choices (e.g., route refinement, pylon selection) have reduced impacts in certain locations.	Positive	Continued justification of design choices; ensure embedded mitigation is secured.	EN-1; HE GPA3; Local Plan LP19
6f	Some heritage assets experience only low-level setting change not amounting to significant harm.	Neutral	Maintain adherence to assessed design; prevent worsening through Limits of Deviation.	EN-1; NPPG

6g	For several designated heritage assets, assessment identifies Mid-level of less than Substantial Harm to significance due to permanent visual intrusion of pylons/overhead lines; LoD may worsen this.	Negative	Clearer evidence on alternative alignments; tighter control of LoD; explanation of embedded mitigation rationale; avoid increased harm through design change at detailed stage.	EN-1 (5.9.27–5.9.33); HE GPA3; Local Plan LP19, SP09
Decommissioning Phase Impacts				
6h	Removal of pylons and overhead lines would reduce long-term setting impacts on designated heritage assets.	Positive	Ensure decommissioning avoids physical harm to surviving landscape features and historic fabric.	EN-1; NPPG; Local Plan LP19
6i	Short-term decommissioning works likely to mirror temporary construction effects.	Neutral	Apply standard environmental and heritage controls; maintain communication with asset owners.	EN-1; CEMP/CoCP equivalent
6j	Risk of temporary disturbance to setting or nearby fabric during removal works.	Negative	Require a Decommissioning Environmental Management Plan with heritage safeguards; protect boundary features and avoid unnecessary ground disturbance.	EN-1 (mitigation requirements); HE GPA2

Policy Context

National Policy

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 8.4 (5.9.1) “The construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment above, at and below the surface of the ground.
- 8.5 (5.9.2) “The historic environment includes all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, landscaped and planted or managed flora.”
- 8.6 (5.9.3) “Those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called ‘heritage assets’. Heritage assets may be buildings, monuments, sites, places, areas or landscapes, or any combination of these. The sum of the heritage interests that a heritage asset holds is referred to as its significance. Significance derives not only from a heritage asset’s physical presence, but also from its setting.”
- 8.7 (5.9.6) “Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments or Protected Wreck Sites should be considered subject to the policies for designated heritage assets.”
- 8.8 (5.9.9) “The applicant should undertake an assessment of any likely significant heritage impacts of the proposed development as part of the EIA, and describe these along with how the mitigation hierarchy has been applied in the ES (see Section 4.3). This should include consideration of heritage assets above, at, and below the surface of the ground.”
- 8.9 (5.9.13) “The applicant is encouraged, where opportunities exist, to prepare proposals which can make a positive contribution to the historic environment, and to consider how their scheme takes account of the significance of heritage assets affected.”

National Planning Policy Framework, December 2024

- 8.10 (212) “When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.”

- 8.11 (213) “Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:
- a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;
 - b) assets of the highest significance, notably 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, should be wholly exceptional.
- 8.12 (214) “Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:
- a) the nature of the heritage asset prevents all reasonable uses of the site; and
 - b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
 - c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
 - d) the harm or loss is outweighed by the benefit of bringing the site back into use.
- 8.13 (215) “Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.”

Local Policy

Babergh & Mid Suffolk Joint Local Plan – Part 1, November 2023

- 8.14 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP19 titled “The Historic Environment” states that where an application potentially affects heritage assets, the Councils will “depending on the nature of the works/development proposed, require the applicant to submit a heritage statement.” This must include appropriate assessment and, where necessary, a field evaluation. “In addition, where an application potentially affects heritage assets of archaeological interest, the heritage statement must ... demonstrate how the preservation of archaeological assets can be

achieved through the design of the development and safeguarding during construction.” The Policy also sets out the ways in which the Councils intend to safeguard and enhance the historic environment regarding proposed developments.

- 8.15 Babergh & Mid Suffolk Joint Local Plan Policy LP25 titled “Energy Sources, Storage and Distribution” states that “Renewable, decentralised and community energy generating proposals will be supported including where:
- a. The impact on (but not limited to) landscape, highway safety, ecology, heritage, residential amenity, drainage, airfield safeguarding and the local community has been fully taken into consideration and where appropriate, effectively mitigated;
 - c. The impact of on and off-site power generation infrastructure being acceptable, having regard to other policies in this Plan.”
- 8.16 Babergh Mid Suffolk Policy SP09 requires all development to conserve and enhance the natural and historic environment, avoid or mitigate harm to Protected Habitats Sites, including through well-designed green infrastructure, biodiversity net gain and embedded mitigation, and to contribute to monitoring and management measures where impacts such as recreational pressure or reduced air quality may affect site integrity.

Other Relevant Local Policy

- 8.17 None identified.

Relevant Representation

- 8.18 Babergh and Mid Suffolk District Council’s comments on Built Heritage can be found in their Relevant Representations **[RR-0314]** and **[RR-2540]**.

Local Impact Assessment

Construction Phase Impacts

Positive

- 8.20 None identified.

Neutral

- 8.21 Temporary construction-phase activities, including plant movement and temporary compounds, will give rise to limited and short-term changes to the setting of some heritage assets. These effects are reversible and not expected to result in lasting harm where works remain within the assessed design parameters.

Negative

- 8.22 Construction activities, including the establishment of haul roads, temporary works areas and construction access routes, have the potential to cause adverse effects on the setting and significance of designated heritage assets, particularly where large-scale plant or construction operations occur in close proximity to listed buildings, conservation areas or key view corridors.
- 8.23 Concerns remain regarding the Limits of Deviation (“**LoD**”), which permit lateral, longitudinal and vertical movement of infrastructure during construction. These flexibilities create a risk that construction-phase impacts could exceed those assessed in the Environmental Statement, resulting in a greater degree of Less than Substantial Harm to certain assets.

Operational Phase Impacts

Positive

- 8.24 None identified.

Neutral

- 8.25 In some locations the operational scheme is predicted to result in only low-level changes to setting that do not amount to harm to the significance of designated heritage assets, provided infrastructure remains within the assessed alignment and height parameters.

Negative

- 8.26 The operational scheme is assessed to cause a moderate level of Less than Substantial Harm to the significance of several designated heritage assets due to the visual prominence of pylons and overhead lines within their settings. Concerns persist that the permitted Limits of Deviation could

exacerbate these effects by allowing pylons or overhead lines to be placed closer to sensitive assets or to increase in height.

8.27 Further clarification is required regarding:

- i. How embedded mitigation (route refinement, pylon height selection, avoidance of key vistas) informed final design choices.
- ii. Whether alternative alignments or pylon locations were fully explored.
- iii. How the Applicant will guarantee that LoD will not result in operational impacts beyond those assessed.

8.28 Without this information secured through the DCO, the operational phase may not comply with EN-1 requirements for understanding, minimising and justifying heritage harm.

Decommissioning Phase Impacts

Positive

8.29 The removal of overhead lines, pylons and associated infrastructure would ultimately reduce long-term setting impacts on designated heritage assets, reinstating an open agrarian landscape in many locations.

Neutral

8.30 None identified.

Negative

8.31 Decommissioning works have the potential to cause temporary adverse effects on the setting of designated heritage assets and could re-introduce construction-type disturbances, including plant movement, temporary infrastructure and groundworks. If decommissioning diverges materially from the assessed design, it risks unanticipated or unmanaged heritage impacts.

Comments on the Application Documents

Assessment of Impact and Cumulative Effects

- 8.32 The level of impact upon the setting and significance of designated heritage assets set out in **[APP-210]** 6.11.A2 Environmental Statement Appendix 11.2 - Historic Environment Assessment Tables (Final Issue A) is agreed; this impact assessment is understood to be based upon the route shown in the Works Plans **[APP-019]**, **[APP-020]**, **[APP-022]** and **[APP-023]** of the Examination Library.
- 8.33 Cumulative effects of the development are split by the application into two categories: intra-project and inter-project.
- 8.34 Intra-project cumulative effects identified by the Applicant are those caused by the project and therefore formally assessed within the Environmental Statement. These include contamination of below ground deposits due to construction, setting effects and changes to groundwater. No further comment on this is necessary, as the intra-project effects are part of the overarching assessment.
- 8.35 Inter-project cumulative effects are those which are resultant of the combination of the Norwich to Tilbury project (this application) and other existing projects. No significant cumulative effects on the setting or significance of heritage assets have been identified within the Babergh or Mid Suffolk districts.
- 8.36 However, the limits of deviation included within the Draft Development Consent Order (“**dDCO**”) are a concern, due to how these will allow for movement and adaptation of the route as work commences.

Draft Development Consent Order (DCO)

- 8.37 **Article 5 (limits of Deviation)** - The Order Limits are generally 100 m wide for the proposed overhead line (50 metres either side of the centre line of the proposed overhead line). There are concerns regarding the lateral, longitudinal (horizontal) and vertical limits of deviation set out in Article 5 of the Draft DCO with regards to the potential worsening of temporary (construction) and permanent impacts on the setting and significance of heritage assets to those set out in the Applicant's Environmental Statement assessments (which are based on the Works Plan (document 2.3), Figure 4.1 Proposed Project Design (document 6.4.F1) and 4.2 Project Design – Permanent Features (document 6.4.F2). The limits of deviation could bring pylons and overhead lines up to 50 metres closer to heritage assets (laterally) and allow movement anywhere along the line of the project (longitudinally), exacerbating their detracting visual impacts. Pylons may

also be of an additional height of up to 6 metres from the pylon design heights set out in the Works Plan, and up to 18 metres for certain pylons where it is necessary to allow a change from proposed low height pylons to standard height pylons.

- 8.38 Article 5 also sets out horizontal limits of deviation for other permanent above ground structures, erections and apparatus including substations and sealing end compounds such that they may be located anywhere within the parameters shown by the pink dashed lines on the Works Plans. They may also be up to 10% above the maximum height shown on the table of parameters forming part of the Works Plans (and may also be any amount lower in height as the undertaker considers convenient).
- 8.39 The limits of deviation are of particular potential concern with regards to the designated heritage assets listed below, which are in closest proximity to the Order Limits and where a Mid-level of Less than Substantial Harm (“**LTSH**”) to their significance has been identified by the Applicant at the Operation and Maintenance phase of the project. NB These are provided as examples and are not intended to be an exhaustive list of all assets where there are potential concerns with regards to the limits of deviation. There is the potential for designated heritage assets that have been assessed as having a Low level of LTSH to their significance to experience a mid level of LTSH due to pylons, overhead lines and other permanent above ground structures being located in closer proximity within the lateral and longitudinal limits of deviation.

Mid Suffolk (Section B):

- Grade II* listed Roydon Hall (List entry number 1033215)
- Grade II* listed Barn 30 Metres North West of Roydon Hall (List entry number 1284584)
- Grade II* listed Creting Hall (List entry number 1352073)
- Grade II listed Court Farmhouse (List entry number 1251595)
- Grade II listed Hill Farmhouse (List entry number 1032730)
- Grade II listed Poplar Farmhouse (List entry number 1182121)
- Grade II listed Doles Farmhouse (List entry number 1352325)
- Grade II listed Star Orchard (List entry number 1032663)
- Grade II listed Firtree Farmhouse (List entry number 1032662)
- Grade II listed Upland House (List entry number 1182102)
- Grade II listed Hill Farmhouse (List entry number 1182339)

- 8.40 Grade II listed Bleak Hall (List entry number 1251669)
- 8.41 No designated heritage assets have been assessed by the Applicant to experience a mid-level of LTSH to their significance during the Operational phase of the project. As above, however, there may be potential for this with regards to assets in proximity to pylons and overhead lines if these are moved closer to the assets within the limits of deviation.
- 8.42 Commitment GG34 in Table 6.1 of Document 7.2 Outline Code of Construction Practice, sets out commitments to restricting the movement of specific pylons or infrastructure along the longitudinal limits of deviation but there are no such identified heritage assets within Sections B or C of the project. Where such assets have been identified, the lateral and vertical limits of deviation would still apply. These commitments are to be confirmed by the Main Works Contractor(s) if the project is consented.
- 8.43 It is unclear whether these proposed restrictions to the limits of deviation with regard to the setting and significance of designated heritage assets arose as part of a systematic approach to identification as part of the ES assessment and this should be clarified in order to establish whether similar restrictions to the LoD were considered for other assets but rejected due to other requirements/constraints or restrictions.

Management Plans

- 8.44 **Construction Vibration Effects on Buildings and Structures** - In document 6.14 Environmental Statement Chapter 14 - Noise and Vibration [APP-256] the Applicant has identified the potential for damage to a total of five buildings or structures due to construction vibration from potential compaction activities. None of these are located in Babergh or Mid Suffolk Districts.
- 8.45 Construction Noise and Vibration Mitigation measures NV04 and NV05 are relevant but measures should be put in place to avoid damage to these structures rather than rectifying any damage arising from the works after the fact. Site specific measures should be set out in the Main Works Contractor(s) Noise and Vibration Management Plan as set out in NV05 and agreed prior to relevant works commencing.
- 8.46 No structures or buildings have been identified where there is the potential for damage from vibration from potential piling activities in any project section.

Other Comments

- 8.47 The following commentary is taken from the letter provided at the Relevant Representations stage, however, due to the importance of this matter and

for ease of reference, it is reiterated (and amended where applicable) below.

- 8.48 The Applicant's assessment of the impacts of the project on the historic environment have been provided taking into account all proposed mitigation measures. The overall approach to mitigating the negative effects of the development is set out in document 6.5 Environmental Statement Chapter 5 - EIA Approach and Method (Final Issue A) of the submission. Mitigation has been split into three types by the Applicant in relation to heritage assets: embedded, standard and additional. Descriptions of these are outlined on pages 98-100 of document 6.11 Environmental Statement Chapter 11- Historic Environment (Final Issue A) **[APP-068]**.
- 8.49 The embedded and standard mitigation measures are acceptable in principle, however, the residual effects of the proposals at both Construction and Operation and Management phases of the project include a mid-level of less than substantial harm to the significance of some designated heritage assets (a summary is provided below).
- 8.50 Regarding additional mitigation measure, the document reads: "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."
- 8.51 At Relevant Representation stage, the Councils assumed this is meant to read 'additional mitigation is not required'; however, the Applicant has since clarified the wording is correct as they have identified the requirement for additional mitigation for archaeology.
- 8.52 It is agreed that in many cases, the introduction of measures such as additional planting to screen the proposed development in views from, towards and including built heritage assets would not be desirable where it would have the effect of curtailing or truncating views across an open agrarian landscape setting which contributes to the understanding of an asset's historic function and which helps reveal its architectural interest.
- 8.53 Following our review and assessment of the Applicant's conclusions on the impacts of the project on heritage assets, for each designated heritage asset where a mid-level of less than substantial harm has been identified to its significance at the Operation and Maintenance phase of the project we would request further details are provided by National Grid regarding the embedded mitigation measures that have been employed, for example, the selected overhead line routes and pylon locations and whether or what, if any, alternatives were assessed prior to the submitted project design.

- 8.54 Standard mitigation measures relate to the Construction phase of the project. Of these, the following are relevant:

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).

The Councils recommend that this is further expanded to clarify the definitions of ‘appropriate’ replacements, and ask for the relevant local authorities to be contacted before such elements are removed, in order to discuss the manner of replacement as well as the extent of any removals of fences, walls, etc.

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.

The Councils recommend expansion of H07, to create a hotline or method of contact for building owners who are concerned about the effects of construction vibration on their buildings as works are undertaken, to allay fears and allow the monitoring of effects.

- 8.55 Following our review and assessment of the Applicant’s conclusions on the impacts of the project on heritage assets, for each designated heritage asset where a Mid-Level of less than substantial harm has been identified to its significance at the Construction phase of the project the Councils would request further details are provided by the Applicant regarding the mitigation measures that have been employed, for example, the selected locations of haul roads and other aspects of construction related activity and infrastructure and whether or what, if any, alternatives were assessed prior to the submitted project design.

Required Mitigation

- 8.56 Mitigation will require:
- Clearer justification for the construction layout and the positioning of temporary works.
 - Tighter control of LoD through the DCO to ensure that construction does not introduce materially worse impacts on heritage settings.

- 8.57 Asset specific measures where mid levels of harm were identified, including minimising the proximity of temporary infrastructure and managing construction vibration to avoid fabric damage.
- iii. In the absence of strengthened and secured mitigation, the construction phase could conflict with EN-1 requirements to minimise harm to the historic environment through informed design and proportionate mitigation.
 - iv. To prevent avoidable harm, decommissioning must:
 - v. Be guided by a dedicated Decommissioning Environmental Management Plan with heritage controls.
 - vi. Avoid worsened setting impacts by maintaining separation distances and visual relationships established during operation.
 - vii. Manage any ground disturbance or temporary works in locations sensitive to heritage setting.

9 Ecology

Lead Authorities	Babergh District Council; Mid Suffolk District Council
Supporting Authorities	Suffolk County Council

Summary

- 9.1 The baseline collection and assessment of impacts have been thorough and correctly applied throughout the ES process.
- 9.2 Whilst it is considered suboptimal that 3% of the DCO has not been subject to direct survey and therefore entirely accurate impact assessment, it is considered likely that the presumptive impact assessment and precautionary approach will suffice to ensure no significant impacts. However, detailed location plans and description of how assessments were made (in lieu of site survey) of all sections, should be provided to provide confidence in this approach.
- 9.3 Habitat loss (both temporary and permanent) within the entire DCO has been identified and mitigated for suitably within the ES and Landscape Ecological Management Plan (“**LEMP**”) or Code of Construction Practice (“**CoCP**”). It is essential that reinstatement, monitoring and adaptive management is guaranteed through the process via a suitable mechanism.
- 9.4 Protected species issues have been identified and largely appropriately mitigated through mitigation and/or licensing as required. However, there are some concerns regarding the extent of bat survey works completed for examination prior to DCO, and whether it allows appropriate confidence in the proposed bat roost mitigation scheme.
- 9.5 Also, additional mitigation should be designed as required in the specific case of reptiles within a “Key reptile site” at Sproughton Park County Wildlife Site (“**CWS**”), to ensure incidental impacts upon the site’s functionality is not impacted during construction.
- 9.6 The proposals for 10% Biodiversity Net Gain (“**BNG**”) are welcome. The scope and extent of BNG should however be extended beyond the 10% minimum to provide contingency for failures in habitat creation or enhancement, particularly with “on-site” BNG. The BNG report [**APP-299**] requires updating in all aspects, to take regard of habitat surveys undertaken in 2025 and the Suffolk LNRS published on 31 October 2025.
- 9.7 The detail of the locations of BNG along with a Habitat Management and Monitoring Plan (“**HMMP**”), must be produced to demonstrate a strict accordance with the Mitigation Hierarchy. This would mean demonstrating

that where possible the plan seeks to apply BNG in **as close a proximity as possible** to the point of impact and in sites where it can have the greatest proportionate impact. Where such sites are not located near the point of impact, the selection of sites must justify in detail and adhere to Lawton's Principles. The HMMP must also make clear the mechanisms required to ensure adaptive management prevents failure of any retention, creation or enhancement of habitats through the required 30-year monitoring period.

- 9.8 The application needs to ensure that adequate mitigation plans are in place to cover unforeseen and additional impacts throughout the pre-commencement and construction phases and beyond e.g. site entrances, storage areas, access routes etc. to ensure no unmitigated impacts on habitats are caused without the Mitigation Hierarchy being applied. In order to ensure sufficient monitoring occurs to cover the timescale required to confirm success of reinstatement, habitat creation and establishment of all habitats the monitoring period should extend to the specifications outlined for all such habitats within the BNG guidelines and this monitoring period and subsequent adaptive management to reach suitable condition, should be installed within the LEMP and the DCO.
- 9.9 The consideration that construction works are temporary and therefore in some cases long-term impacts would be negligible. It is considered however that this may overlook significant short/medium term impacts on certain habitats and species (e.g. bat foraging and commuting) through isolation and separation of habitats. Whilst this connectivity may well be reinstated through the proposed mitigation, if populations are significantly impacted in the intervening period, the future quality of the habitat may prove moot.
- 9.10 An Ecology Working Group should be formed to oversee, receive progress reports and advise on unforeseen issues for the entire project **prior** to pre-commencement works taking place and throughout the construction phase and monitoring periods as stipulated within the LEMP and HMMP.
- 9.11 The extent and capacity of the ECoW team must be suitable to ensure all necessary support, survey, monitoring and communication with contractors regarding all biodiversity issues are met. The ECoW should regularly report to the Ecology Working Group.

Table 7: Summary of Impacts – Ecology

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
7a	Temporary habitat loss	Neutral	Ensure reinstatement of habitats post construction result in habitats of no less than equal condition and quality with the same constituent species and characteristics.	
7b	Permanent loss of habitat	Negative	Compensatory habitats to be created and managed to at least match condition and specific character of lost habitat.	
7c	Permanent loss of habitat	Negative	Apply same proposed mitigation measures for habitats on any areas requiring retrospective habitat loss, not identified within ES e.g. temporary site access etc.	
7d	Degradation of faunal populations	Negative	Specific site assessment and mitigation plans (as required) to ensure severance of functionality of the site e.g. access s between important breeding, feeding, hibernation sites etc.	
7e	7f Potential loss of bat roost sites (in trees)	Negative	An evidence-based, worst-case scenario estimation of the bat tree roost impact, and the design of a more confidently proportionate bat tree roost mitigation/compensation scheme	
7g	7h Short to medium term negative impacts on protected species populations through impacts on ecological function of habitat.	Negative	Ensure pre-commencement and update surveys for faunal groups identify short term impacts of works on species and prescribe mitigation to prevent impacts during this period in addition to long term impacts.	
7i	7j Lack of correct application of measures for retention, protection, reinstatement and creation of habitats	Negative	Ensure ECoW is fit for purpose to a scheme of this scale and that their powers and remit enable them to guarantee the required elements of the reports listed. Scope of ECoW to be detailed to Ecology Working Group (see	

	and protected species as detailed in the LEMP, CoCP and HMMP		below) prior to pre-commencement works and negotiated, as required.	
7k	7l Lack of detailed survey data for 3% of construction area may have caused potential significant impacts on unrecognised receptors to occur.	Negative	Detailed information regarding locations of unsurveyed areas to be presented along with rationale and justification for impact assessment of these areas using an appropriate proxy.	
7m	7n Oversights, unplanned works, unexpected ecological issues etc. Are not correctly identified and mitigated for during works.	Negative	Form an Ecology Working Group of suitable members in the sector e.g. LA ecologists, SWT. NE; to receive regular updates on progress and application of works outlined within the LEMP, HMMP and, where required, consultations from the ECoW and other members of the applicant's team when required.	
7o	7p BNG requirements are not met.	Negative	Targets for BNG should exceed the 10% minimum to provide a contingency, if: habitats fail to establish, fail to reach required condition or are otherwise unachieved. Appropriate monitoring and adaptive management must be designed and presented within the HMMP to ensure BNG is achieved through successful habitat retention (temporary loss), creation and enhancement.	
Operational Phase Impacts				
7q	Establishment and management of Environment Areas.	Positive	Ensure implementation of prescribed management within an HMMP (for BNG) in order to establish required habitat, in required condition.	
7r	Impacts on future populations of birds associated with WaLOR	Neutral	Installation of bird deflectors and spacers on wires across the Waveney valley.	

			Suitable long-term monitoring programme to establish measures are effective.	
7s	Failure of retained, reinstated, created and enhanced habitats to meet previous or required condition during establishment and maturation phases.	Negative	7t	
7u	Habitat destruction through decommissioning works.	Negative	7v	
Decommissioning Phase Impacts				
7w	Reduction in potential collision impacts on bird populations.	Positive		
7x	Habitat destruction through decommissioning works.	Negative	Suitable precautionary methods and protected species mitigation designed based on up-to-date survey.	
7y	7z Protected species impacts	Negative	Suitable precautionary methods and protected species mitigation designed based on up-to-date survey.	
7aall	7bb Degradation of enhanced and created habitats	Negative	Reduction/loss of management methods designed to retain habitats within Environment Areas.	

Policy Context

National Policy

A Green Future: Our 25 Year Plan to Improve the Environment

- 9.12 “Actions we will take include:
- 9.13 Making sure that existing requirements for net gain for biodiversity in national planning policy are strengthened, including consulting on whether they should be mandated alongside any exemptions that may be necessary”

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 9.14 (5.4.35) “Applicants should include appropriate avoidance, mitigation, compensation and enhancement measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:
- i. during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works
 - ii. the timing of construction has been planned to avoid or limit disturbance
 - iii. during construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements
 - iv. habitats will, where practicable, be restored after construction works have finished
 - v. opportunities will be taken to enhance existing habitats rather than replace them, and where practicable, create new habitats of value within the site landscaping proposals. Where habitat creation is required as mitigation, compensation, or enhancement, the location and quality will be of key importance. In this regard habitat creation should be focused on areas where the most ecological and ecosystems benefits can be realised.
 - vi. mitigations required as a result of legal protection of habitats or species will be complied with.”
- 9.15 (5.4.36) “Applicants should produce and implement a Biodiversity Management Strategy as part of their development proposals. This could include provision for biodiversity awareness training to employees and

contractors so as to avoid unnecessary adverse impacts on biodiversity during the construction and operation stages.”

National Planning Policy Framework, December 2024

- 9.16 (187) “Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 9.17 a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- 9.18 b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;”
- 9.19 (193) “When determining planning applications, local planning authorities should apply the following principles:
- 9.20 a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- 9.21 b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- 9.22 c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- 9.23 d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”

Local Policy

Babergh and Mid Suffolk Joint Local Plan – Part 1, November 2023

- 9.24 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP16 titled “Biodiversity & Geodiversity” states that all development should follow a biodiversity mitigation hierarchy of seeking firstly to; enhance habitats, avoid impacts, mitigate against harmful impacts, or as a last resort compensate for losses that cannot be avoided or mitigated for. Development must also identify and pursue opportunities for securing measurable net gains, equivalent of a minimum 10% increase, for biodiversity. Development adversely impacting protected species will not be permitted unless there is no alternative and the LPA is satisfied that suitable measures have been taken, as listed in the policy.
- 9.25 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP25 titled “Energy Sources, Storage and Distribution” states that “Renewable, decentralised and community energy generating proposals will be supported where:
- 9.26 “a. The impact on (but not limited to) landscape, highway safety, ecology, heritage, residential amenity, drainage, airfield safeguarding and the local community has been fully taken into consideration and where appropriate, effectively mitigated;
- 9.27 c. The impact of on and off-site power generation infrastructure (for example over-head wires, cable runs, invertors, control buildings, security fencing and highway access points), is acceptable to the Local Planning Authority.

Other Relevant Local Policy

- 9.28 None identified.

Relevant Representation

- 9.29 Suffolk County Council’s comments on Ecology can be found between paragraphs 30 – 47 in its Relevant Representation [RR-3520].

Local Impact Assessment

Construction Phase Impacts

Positive

- 9.30 None identified

Neutral

- 9.31 Temporary habitat loss: During the construction process some areas of habitat will be removed to provide site access, store materials etc. in locations where permanent (for the operational phase at least) constructions will not be located. In these cases, the habitats must be reinstated or recreated as their previous habitat type (or one of superior biodiversity value/distinctiveness) and in the same or enhanced ecological condition.

Negative

- 9.32 Permanent loss of habitat (as identified and assessed within the ES and mitigated for in the LEMP): In locations where newly constructed infrastructure and other built development will be situated within the DCO, existing habitats will be removed and not reinstated for at least the operational phase of the scheme.
- 9.33 Permanent/Temporary loss of habitats beyond the areas covered in para 10.44 above: During the pre-commencement and construction phases, contractors may identify situations where they consider additional habitat areas and features require temporary or permanent removal to complete works. In these cases, habitats which have not been entirely assessed as to their ecological value may be impacted upon and unmitigated for, resulting in unforeseen losses to ecological value and negating the value of other compensation and or enhancement. E.g. temporary haul roads, visibility splays for temporary access points, rerouting or repositioning of access or storage areas etc.
- 9.34 The approach taken to the tree bat roost surveys and mitigation, as mentioned in the BMSDC Relevant Representation, remains a cause for concern. Where static bat detector surveys within the Order Limits recorded barbastelle bat activity above a defined threshold, robust roost survey methods were employed, including aerial inspections, dusk emergence surveys, backtracking surveys, and radio-tracking. This level of tree roost survey was undertaken at only 12 discrete locations, which covers only a fraction of the overall potential for bat roost tree impacts. This survey deficit appears to be justified by the supposition that: (1) barbastelle are a more important conservation concern than other bat

species (despite the roosts of other species having equivalent legal protection); and (2) simply going through the Natural England bat mitigation licensing process wherever it is found to be needed (by a positive roost survey result) will ultimately and inevitably result in a neutral or positive impact outcome. The Councils regard this as a flawed approach lacking evidence to support it. The Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition) advise that because of the limitations inherent to the process of identifying bat roosts in trees, "*... it is arguable that all trees with bat-roosting potential should be considered part of a roosting resource that will be used at one time or another by tree-roosting bats.*" If only identified PRF-M trees are to be subject to aerial inspections/emergence surveys prior to works, and only trees confirmed to support roosting bats by those surveys will be compensated for, then BMSDC believes that the overall impact on bat roost resources will be significantly under-estimated and under-mitigated.

- 9.35 Impacts on all protected bat species need to be assessed with reasonable confidence and the proposed mitigation considered appropriate, prior to determination, to support a lawful decision. Supposing that a greater level of roost tree survey is not feasible pre DCO, the Councils advise an evidence-based, worst-case scenario estimation of the bat tree roost impact, and the design of a more confidently proportionate bat tree roost mitigation/compensation scheme.
- 9.36 Short to medium term negative impacts on protected species populations through impacts on ecological function of habitat: whilst the ES has identified negligible impacts on faunal receptors in the long term via the mitigation hierarchy, in some cases the construction works may have incidental short-term impacts which could delay or hinder the recovery of populations in the long term. E.g severance of habitat or loss of areas required for certain periods of their lifecycle.
- 9.37 An example would be the reptile population at Sroughton Park CWS. It has been identified as being a "key site" for reptiles within the ES process as detailed in the Reptile Report **[APP-164]**. The mitigation for works within the area is suitable to ensure the works themselves do not kill or injure individual animals, however the loss of habitat through the CWS may create a temporary barrier to movement across the site meaning animals may find key areas, such as feeding, hibernating and breeding areas inaccessible to them, until habitat is reinstated and connectivity is reestablished. These impacts on ecological functionality should be identified in pre-works surveys of all faunal groups and mitigated for accordingly to reduce potential short-term impacts on populations.

- 9.38 Lack of correct application of measures for retention, protection, reinstatement and creation of habitats and faunal groups, as detailed in the LEMP, CoCP and HMMP: on a project of this scale with the area covered and number of organisations and individuals involved, there is a risk that communication or interpretation can result in key factors regarding ecology being overlooked, misinterpreted or misapplied.
- 9.39 Lack of detailed survey data for 3% of construction area may have caused potential significant impacts on unrecognised receptors to occur. The ES Chapter 8 (Rev B) **[APP-158]** paragraph 8.4.26, states that c.3% of the land within the Order Limits has not been subject to direct survey and assessments have been made based on drone images and aerial photography. In this case, 3% is likely to comprise over 3 miles of habitat. Whilst it is understandable that during the survey period a proportion of the site may not be accessible in such a large scheme and the Councils do not at this stage stand opposed to the use of a precautionary approach to assessing this land, further information is required to outline the location of the unsurveyed land and to clarify and explain the rationale and justification for the assessment as incorporated within the ES.
- 9.40 Oversights, unplanned works, unexpected ecological issues etc. are not correctly identified and mitigated for during works: in previous NSIPS occasions have arisen where due to unforeseen circumstances works have been required beyond the Order Limits or in addition to those outlined within the DCO. In these cases, habitats and protected species may face direct impacts not covered by mitigation or protection outlined within the LEMP and CoCP. A mechanism guaranteeing that sufficient assessment and mitigation planning is in place and implemented in such circumstances should be produced. This would require strict adherence to the mitigation hierarchy when being applied i.e. it is avoided if at all possible, in the first instance and so forth.
- 9.41 Biodiversity Net Gain has been proposed **[APP-299]** in Table 7.1 to meet the minimum requirement of 10% for hedgerows on site and for habitat using offsite BNG. Therefore for 10% to be achieved, all habitats retained, created and enhanced on site must be successful with no failure. A target of 15% would provide a greater guarantee of a 10% minimum being achieved across the scheme.
- 9.42 The BNG report **[APP-299]** has not been updated to incorporate the results of the additional results of the update habitat survey **[AS-028]**. These will likely alter the results of the most recent BNG metric and must be amended.
- 9.43 A Habitat Monitoring and Management Plan (HMMP) will need to be specifically produced (or incorporated within the LEMP to include all the

requirements associated with BNG, including the responsibilities and schedule for monitoring. The contents of the HMMP must be agreed by the Ecology Working Group and/or the District Councils prior to implementation.

- 9.44 In the ES Chapter 8 **[AS-031]** within the breeding bird impact assessment section of Table 8.23, it is stated that permanent habitat loss without mitigation would cause a medium negative effect. Mitigation for permanent habitat loss is proposed as, “Mitigation for the permanent loss of habitat would be delivered through the creation/enhancement of habitat associated with achieving BNG for the Project.”. BNG is habitat-based, not species-based. It measures changes in habitat extent and condition using the statutory biodiversity metric. Species-specific mitigation remains a separate requirement. Natural England’s Biodiversity Metric User Guide states: *“The metric measures changes in habitat extent and condition. It does not account for species-specific mitigation or compensation.”* and Defra state within their BNG Principles, (<https://www.gov.uk/guidance/biodiversity-net-gain>) *“BNG does not replace or override existing legal protections for species. Species-specific mitigation must be delivered separately.”* Therefore, mitigation for impacts upon breeding bird populations should be provided in addition to BNG habitat creation or enhancement.

Operational Phase Impacts

Positive

- 9.45 Successful implementation of BNG within the scheme should result in an overall biodiversity gain, in regard to habit, with potential additional benefit to individual plant, animal and fungi species and associated ecosystems.

Neutral

- 9.46 Impacts on future populations of birds associated with WaLOR: these have been duly considered within the ES and proposed mitigation for future bird populations in particular (i.e. bird deflectors and spacers on the wires) have been identified and proposed. These are welcome although the efficacy of these measures will need to be demonstrated through appropriate monitoring of the area where they are located. Such monitoring can be discussed and detailed by the Ecology Working Group.

Negative

- 9.47 Failure of retained, reinstated, created and enhanced habitats to meet previous or required condition during establishment and maturation phases: the reinstatement and compensation of habitats must be successful for the impact assessment, as written, to be considered

accurate. Some of the habitats requiring reinstatement or creation will require a greater amount of time to establish and prove successful than the 5 years of proposed monitoring. A longer period of monitoring of at least 10 years should be undertaken to more confidently assess success and provide opportunity for remedial mitigation and adaptive management as required. The 30-year monitoring period required for BNG would be considered suitable.

Decommissioning Phase Impacts

Positive

- 9.48 Removal of overhead cables would remove any potential collision risk to birds in their locations.

Neutral

- 9.49 Not identified

Negative

- 9.50 Habitat destruction through decommissioning works: unmitigated habitat destruction during the decommissioning phase may result in significant impacts on the habitats and species present at the time of works.
- 9.51 Protected species impacts: at the time of decommissioning, protected species present within the works area may be subject to significant negative impacts, similar to those outlined within the construction phase.
- 9.52 Degradation of enhanced and created habitats: once the scheme is decommissioned, those habitats created, enhanced and managed may no longer be subject to management suitable for retention of their character or condition or they may be lost entirely. This may then result, in a long-term loss in biodiversity.

Comments on Application Documents

9.53 No comments at this deadline.

Required Mitigation

- 9.54 An Ecology Working Group should be set up to monitor, support and advise the scheme on the requirements for mitigation as laid out within the LEMP and CoCP. The group should incorporate suitably qualified and or experienced members from e.g District Councils, Wildlife Trusts, Natural England and the ECoW for the scheme. Regular updates on progress of the LEMP and other key issues to be decided by the group would be provided along with consultation for any alterations to the documents caused by factors not yet apparent. E.g. change to design, occurrence of protected species, extreme weather events etc.
- 9.55 The ECoW arrangement should be detailed with regard to: remit, resourcing, enforcement powers and numbers and presented to the Ecology Working Group for acceptance that it is considered likely to be fit for purpose, or subject to negotiation. The specifications of the ECoW for the entire scheme should be detailed and approved and guaranteed through appropriate mechanisms prior to any pre-commencement works taking place.
- 9.56 Any additional works, not considered within the ES process so far must undergo a sufficient and proportionate impact assessment before being undertaken. This should be undertaken by the ECoW and presented to the Ecology Working Group for agreement, **before works commence**. Mitigation designed for any such works must meet the Mitigation Hierarchy requirements wherever possible. As an example, in the event an unplanned temporary access is required onto a highway: firstly can it be relocated to prevent impacts; can it be controlled by traffic management to prevent cutting a visibility splay; can a hedge or trees be coppiced or pruned rather than removed; can sufficient compensatory habitat be created post works; can sufficient compensatory habitat be created offsite?
- 9.57 The Biodiversity Net Gain (“**BNG**”) report [**APP-299**] should be updated to include results of the habitat surveys undertaken during 2025 to replace the data used from the Stage 1 Survey for reasons of accuracy regardless of whether sizeable alterations to the baseline calculations occur.
- 9.58 The BNG targets should either be extended to incorporate a higher target of BNG e.g. 15% or have a built-in contingency to cope with failure to create or establish habitat within the required timescales. A BNG Plan and Habitat Management and Monitoring Plan (“**HMMP**”) should be written detailing the baseline conditions, proposed habitat creation and proposed enhancement types and conditions, detail of management methods and proposed monitoring schedule and responsibilities.

- 9.59 Suitable mitigation for breeding birds should be detailed, so as to result in negligible impacts upon the receptor, not using the Environment Areas as replacement or enhanced habitat where these habitats form part of BNG calculations. I.e. mitigation for breeding birds should be additional to BNG not an incidental result of BNG.
- 9.60 To ensure success of habitat reinstatement, aftercare monitoring period should be extended to 10 years. If sufficient evidence for long term success is identified sooner than this, the Ecology Working Group can sign off habitats, once the evidence has been presented to them.
- 9.61 Pre-works protected species surveys should identify any requirement for additional mitigation, specifically for short-term potential impacts on ecosystem functionality. E.g in the specific case of reptiles within a “Key reptile site” at Sroughton County Wildlife Site (“**CWS**”), the ecologist should identify potential key areas for hunting, breeding, hibernating etc. and ensure access between such features does not cause any impact on the local population by e.g. micro siting, creation of features in areas where they are do not currently occur etc. This will help to ensure incidental impacts upon the site’s functionality is not impacted during construction.
- 9.62 A monitoring scheme for the WaLOR area should be designed to ensure the efficacy of the bird deflectors and spacers designed to reduce future bird collisions. If indications are that they are not preventing significant impacts on any future populations, additional or alternative mitigation should be considered and implemented to reduce the impact to an acceptable level. The Ecology Working Group should be consulted for opinions on the scope of this monitoring.
- 9.63 Prior to decommissioning, an Environmental Impact Assessment should be undertaken to establish the baseline conditions, assess impacts and provide suitable mitigation to result in enhanced biodiversity outcomes.

10 Economy, Skills and Tourism

Lead Authorities	Suffolk County Council
Supporting Authorities	Babergh District Council; Mid Suffolk District Council

Summary

- 10.1 The Councils recognise the strategic importance of Norwich to Tilbury in enabling the UK's transition to net zero and acknowledge potential economic benefits. However, the socio-economic assessment presented by the Applicant is incomplete and underestimates both risks and opportunities. The Environmental Statement (“**ES**”) scopes out operational employment and provides only high-level commentary on construction-phase impacts, without robust modelling of workforce demand, supply chain integration, or cumulative effects.

Construction Phase

- 10.2 The project is expected to generate a peak workforce of approximately 1,720 Full Time Equivalent (“**FTE**”), with only 10% assumed to be home-based. This assumption significantly limits the potential for local employment and induced economic benefits. No clear commitments have been made to secure local labour participation, apprenticeships, or targeted interventions to address skills gaps. The ES does not apply multipliers to estimate indirect or induced economic impacts, nor does it define the spatial distribution of benefits. Without proactive measures, such as a Local Procurement and Social Value Strategy, workforce accommodation planning, and structured engagement with Suffolk Small and Medium-sized Enterprises (“**SME**”), the opportunity for meaningful economic uplift will remain limited.
- 10.3 The Councils are concerned about cumulative workforce pressures. Norwich to Tilbury will overlap with Sizewell C, Sea Link, LionLink, and multiple offshore wind projects, creating intense competition for specialist skills in civils, mechanical and electrical trades, and project management. The ES conclusion that labour capacity is sufficient ([APP-281], Chapter 17) does not adequately address concurrent demand for these roles or explain the methodology used. Evidence from regional labour forecasts suggests this assumption is flawed. The Applicant should confirm that current workforce data and worst-case scenarios have been used, particularly given recent increases in peak workforce numbers at projects such as Hinkley Point C.

Supply Chain Opportunities

- 10.4 While the ES notes potential supply chain benefits, it lacks scenario-based modelling of local procurement opportunities and does not distinguish between hyper-local (district), local (county), and regional (East of England) engagement. Without such modelling, there is no robust estimate of indirect or induced employment or Gross Value Added (“**GVA**”). There is also insufficient recognition of potential negative effects, including wage inflation, diversion of capacity from SMEs, and supply chain saturation due to overlapping NSIPs.

Operational Phase

- 10.5 The Applicant has scoped out operational employment impacts, citing limited numbers. The Councils disagree. Norwich to Tilbury is part of a growing cluster of energy assets, including Sizewell B and C, EA1N/EA2 substations, and LionLink, that collectively require a skilled operational and maintenance workforce. It is short-sighted to treat operational employment in isolation and dismiss its cumulative regional importance.

Decommissioning Phase

- 10.6 Decommissioning could create minor positive impacts for local supply chains and employment, but these will be short-lived unless linked to long-term skills and business development strategies. Risks of workforce displacement and churn remain, as experienced with other NSIPs.

Required Mitigation

- 10.7 The Councils expect the Applicant to:
- i. Commit to a comprehensive Skills and Employment Plan, secured by a DCO requirement or Section 106 agreement, detailing phase-by-phase workforce modelling, apprenticeship targets, and social value measures.
 - ii. Participate in Suffolk's Regional Skills Coordination Function (“**RSCF**”) and Major Infrastructure Forum to ensure coordinated workforce planning.
 - iii. Deliver and fund targeted skills interventions aligned with project phases, including commitments to ‘earn and learn’ positions (minimum 5% of roles).
 - iv. Develop a Local Procurement Strategy with clear targets for SME engagement and measures to mitigate supply chain saturation.
 - v. Embed social value requirements within contracts to drive local recruitment and training outcomes.

- vi. Without these commitments, the Councils consider that the socio-economic benefits of Norwich to Tilbury will remain marginal, while negative impacts, particularly workforce displacement and cumulative labour market pressures, could be significant.

Table 8: Summary of Impacts – Economy, Skills and Tourism

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
8a	Investments in local economy as part of the construction programme and associated local/regional supply chain opportunities (incl. GVA)	Positive	Engage with the Local and Regional Supply Chain following the Supplementary Guidance. Establish Governance with Local Economic Development Partners Commit to Regional Supply Chain Monitoring and Reporting Work with the Regional Skills Coordination Function at the County Council to identify and make use of opportunities for collaboration and enhancement. A new DCO Requirement obligating the production and implementation of a Skills and Employment Plan which includes provision for supply chain engagement in consultation with SCC and the Regional Skills Co-ordination Function.	SCC Supplementary Guidance
8b	The project could generate some supply chain-related and spending-related jobs during construction, but these benefits will be limited and dispersed without proactive measures.	Positive	Develop a Local Procurement and Social Value Strategy. Plan for workforce accommodation and coordinate with local service providers. Engage early with Suffolk economic development and local authorities. Secure commitments through a Skills and Employment Plan, embedded in the DCO or Section 106 agreement. Implement strategies to encourage non-homebased workers to spend locally.	
8c	Supporting and enhancing	Neutral	Commit to structured investment in skills and training infrastructure.	SCC's supplementary guidance

	Suffolk's skills infrastructure and training offer.		Align with Suffolk's Regional Skills Coordination Function (RSCF) and existing initiatives. Secure governance arrangements to deliver legacy-focused skills outcomes.	
8d	Contributions to skills development or integration with existing initiatives.	Neutral	Provide proportionate contributions to skills development. Integrate with existing regional initiatives and training facilities. Develop a Skills and Employment Plan secured by DCO requirement or Section 106 agreement.	SCC Energy and Climate Adaptive Infrastructure Policy
8e	Overlapping construction peaks from multiple NSIPs will increase demand for skilled labour. The promoter has a critical role in ensuring skills infrastructure keeps pace and delivers a long-term legacy beyond the temporary construction period.	Neutral	Scenario-based workforce modelling to forecast cumulative demand. Co-fund targeted skills interventions aligned with project phases. Embed commitments in a Skills and Employment Plan.	SCC Supplementary Guidance
8f	Workforce availability to regional businesses and supply chains due to workforce displacement and churn.	Negative	Work collaboratively with the Councils to adopt a strategic approach to manage workforce displacement. Include members of the local workforce in labour planning, supported by investment in local training to address skills gaps. Secure commitments through a Skills and Employment Plan, embedded in the DCO or Section 106 agreement.	EN-1 Paragraph 5.13.11

8g	Employment levels and reducing inequalities by creating opportunities for those furthest from the workforce and for vulnerable groups	Positive	Develop and secure a comprehensive Skills and Employment Plan via DCO requirement or Section 106 agreement. Engage with the Regional Skills Coordination Function (RSCF) to align with Suffolk's skills ecosystem. Share detailed workforce and job information early; fund targeted interventions to create a pipeline of trained local workers. Work with supply chains and contractors to recruit and train local people ahead of construction. Embed social value in supply chain contracts and promote diversity and inclusion. Commit to apprenticeship and "earn and learn" opportunities to support regional growth sectors.	EN-1 Paragraph 5.13.4 EN-1 Paragraph 5.13.11
8h	Workforce availability to regional businesses due to workforce displacement and churn	Negative	Develop strategies to control workforce displacement in partnership with the Councils. Undertake detailed scenario-based workforce modelling to assess cumulative effects and worst-case demand. Embed commitments in a comprehensive Skills and Employment Plan, secured through a DCO requirement or Section 106 agreement. Include clear measures for: local recruitment and training pipelines; supply chain engagement strategies; contractual social value requirements. Quantify and mitigate indirect impacts on SMEs caused by wage inflation and capacity diversion.	EN-1 Paragraph 5.13.4 EN-1 Paragraph 5.13.11
Operational Phase Impacts				

8i	Cumulative operational employment opportunities	Neutral	Include operational employment within cumulative socio-economic assessment. Commit to long-term supplier frameworks for maintenance services to embed local businesses in the supply chain. Support skills retention and workforce development for operational roles through collaboration with Suffolk's Regional Skills Coordination Function. Secure these commitments in a Skills and Employment Plan via DCO requirement or Section 106 agreement	EN-1 Paragraph 5.13.11
Decommissioning Phase Impacts				
8j	Investment in local businesses, including additional spend by non-homebased workforce	Positive	Work collaboratively with the Council to develop strategies that encourage non-homebased workers to spend locally. Engage with local businesses early to maximise supply chain participation during decommissioning	
8k	Workforce availability to regional businesses due to workforce displacement and churn	Negative	Develop strategies to control workforce displacement in partnership with the Councils. Undertake detailed scenario-based workforce modelling to assess cumulative effects and worst-case demand. Embed commitments in a comprehensive Skills and Employment Plan, secured through a DCO requirement or Section 106 agreement. Include clear measures for: local recruitment and training pipelines; supply chain engagement strategies; contractual social value requirements.	EN-1 Paragraph 5.13.4 EN-1 Paragraph 5.13.11

			Quantify and mitigate indirect impacts on SMEs caused by wage inflation and capacity diversion.	
8l	Employment opportunities	Positive	Develop and secure a comprehensive Skills and Employment Plan via DCO requirement or Section 106 agreement. Engage with the Regional Skills Coordination Function (RSCF) to align with Suffolk's skills ecosystem. Share detailed workforce and job information early; fund targeted interventions to create a pipeline of trained local workers. Work with supply chains and contractors to recruit and train local people ahead of construction. Embed social value in supply chain contracts and promote diversity and inclusion. Commit to apprenticeship and "earn and learn" opportunities to support regional growth sectors	EN-1 Paragraph 5.13.4 EN-1 Paragraph 5.13.11

Policy Context

National Policy

A Green Future: Our 25 Year Plan to Improve the Environment

- 10.8 Actions we will take include:
- 10.9 “Working with National Park Authorities and AONB Partnerships and Conservation Boards to deliver environmental enhancement, including through demonstrator projects, and engaging with communities through their statutory management plans.”

National Policy Statements

Overarching National Policy Statement for Energy EN-1, November 2023

- 10.10 Generic socio-economic impacts of energy NSIPs are covered in Section 5.13 of Overarching National Policy Statement for Energy (EN-1).
- 10.11 EN-1 sets out that the construction, operation and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels.
- 10.12 Paragraph 5.13.4 notes socio-economic impacts may include the creation of jobs and training opportunities, the provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities, and effects on tourism. There may be impacts from a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure. This could change the local population dynamics and could alter the demand for services and facilities in the settlements nearest to the construction work (including community facilities and physical infrastructure such as energy, water, transport and waste). There could also be effects on social cohesion depending on how populations and service provision change as a result of the development.
- 10.13 Paragraph 5.13.4 also covers potential cumulative impacts of development: if development consent were to be granted for a number of projects within a region and these were developed in a similar timeframe, there could be some short-term negative effects, for example a potential shortage of construction workers to meet the needs of other industries and major projects within the region.
- 10.14 Paragraph 5.13.6 states socio-economic impacts may occur in isolation or be linked to other impacts, for example the visual impact of a development is considered in under landscape and visual impact assessment but may also have an impact on tourism and local businesses.

- 10.15 Paragraph 5.13.11 notes decision-makers should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.

National Planning Policy Framework, December 2024

- 10.16 (190) “When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:
- 10.17 a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- 10.18 b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- 10.19 c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.”

Local Policy

Babergh & Mid Suffolk Joint Local Plan – Part 1, November 2023

- 10.20 Babergh & Mid Suffolk Joint Local Plan - Part 1 Policy LP12 titled “Policy LP12 - Tourism and Leisure” supports tourism development in the countryside on the condition that development “Respect the character of the landscape by having regard to landscape guidance that supports the development plan” amongst other requirements to protect the countryside.”

Other Relevant Local Policy

Suffolk County Council Energy and Climate Adaptive Infrastructure Policy

- 10.21 “Skills and growth - The Councils will continue working actively with the energy and water sectors, (developers, owners or operators and associated supply chains), Government, Local Enterprise Partnerships, and regulators, to facilitate the delivery of the policy, that seeks to ensure the use of best available techniques, to maximise the development of skills, employment, and educational inspiration in Suffolk. The objective being to create a relevantly skilled talent pool, that can take advantage of the opportunities

presented by a succession of energy generation, connection, and climate adaptive projects.

- 10.22 The Councils expect that individual promoters will contribute to the delivery of these goals in Suffolk, looking to align the achievement of local priorities with their own, going beyond the minimum measures necessary to mitigate the clearly defined impacts of their project. This process should result in measurable outcomes that, for example, deliver social value.
- 10.23 The Councils expect to have comprehensive and effective engagement with developers and their supply chain partners, to maximise the local business opportunity, skills inspiration, and employment benefits. Wherever appropriate, the Councils and developers should promote synergies between projects that enhance these benefits, deliver growth, and attract inward investment.”²⁹

Suffolk County Council Energy and Climate Adaptive Infrastructure Policy, Socio-economic Effects Supplementary Guidance

- 10.24 “Project promoters are expected to support the delivery and use of local and regional supply chains by:
- 10.25 Supporting the increase and acceleration of inward investment of Tier one and Tier two contractors who may be working on multiple projects locally, recognising the project’s regional role as part of Suffolk’s energy cluster.
- 10.26 Delivering opportunities for the growth of non-engineering or non-construction related businesses associated with the project, e.g. supporting the delivery of the project, including, but not limited to, catering, transport, and facilities management Identifying and developing opportunities for research, development, and innovation, across the energy and construction sectors in Suffolk, and the region.
- 10.27 Supporting the delivery of long term, sustainable opportunities, in the energy sector and related sectors, across Suffolk and the region.
- 10.28 Recognising that it is essential to differentiate between the construction and civils opportunities of the project, and the mechanical and electrical engineering opportunities, during the construction cycle.
- 10.29 Recognising that the mechanical and electrical engineering opportunities of the construction cycle, are likely to support and enhance the long term, permanent staffing, and regional legacy benefits of the project.
- 10.30 Project promoters should deliver and enhance existing and emerging skills and educational initiatives by:

²⁹ <https://www.suffolk.gov.uk/asset-library/energy-and-climate-adaptive-infrastructure-policy.pdf>

- 10.31 Establishing with Suffolk County Council an agreed governance framework for the project's skills and educational enhancement, through Suffolk County Council's Regional Skills Coordination Function.
- 10.32 Ensuring alignment with skills and educational initiatives in Suffolk, the Suffolk Social Value Skills Ask4 and, where appropriate, the wider region.
- 10.33 Coordinating, and assisting contractors to develop, initiatives to ensure sufficient supply of skills and capabilities being available at the right time, to enable both project delivery, and the growth of the energy sector in Suffolk.
- 10.34 Promoting and securing inclusive growth, by working to ensure provision of opportunities that align with the regional need.
- 10.35 Ensuring that skills and educational initiatives are fully inclusive, recognising and responding to the diverse needs of Suffolk's communities; taking action to create access and remove barriers to opportunities for those groups that require it."³⁰

Relevant Representation

- 10.36 Suffolk County Council's comments on Economy, Skills, and Tourism can be found between paragraphs 48 – 62 in its Relevant Representation **[RR-3520]**.

³⁰ <https://www.suffolk.gov.uk/asset-library/nsip-socioeconomic-effectnsips.v6.pdf>

Local Impact Assessment

Construction Phase Impacts

Positive

Supply chain and economic development

- 10.37 While the overall impact of the proposal on supply chain and economic development is considered by the Councils as neutral, the Councils accept that the construction of the Norwich to Tilbury Grid Network Reinforcement project could have some minor positive impacts on the local supply chain through investment in local businesses to support delivery of the installation of the project. However, given the relatively short construction period of the project, the benefits on the local supply chain are not expected to have a long-term impact unless consideration is given to the wider network projects and how local supply chain can support all of these. There are, in addition to Norwich to Tilbury, further grid reinforcement and inter connector projects in planning that are expected to be constructed prior to 2030. Therefore, a developed local supply chain with experience in the construction of these installations can expand to take advantage of these projects and be in a position to export their expertise to similar largescale project opportunities nationally. To maximise these opportunities, the Councils expect the Applicant to work with local stakeholders to develop programmes that will support local businesses to grow and offer their services to supply the promoters project and other related projects within and outside the region.
- 10.38 The Norwich to Tilbury project is expected to create some indirect (supply chain-related) and induced (spending-related) employment during construction. However, these benefits will likely be limited and dispersed unless proactive measures, such as local procurement, workforce accommodation planning, and coordination with local service providers, are implemented. Currently, the application does not address the level of local economic integration required to maximise these impacts.
- 10.39 Norwich to Tilbury's Environmental Statement does not apply any multiplier to model indirect or induced economic effects, nor does it define the spatial geography of these benefits or propose measures to localise them within Suffolk. While the ES assumes a peak construction workforce of approximately 1,720 FTE, with around 90% drawn from outside the local area, this significantly constrains the scale of induced spend likely to be captured in Mid Suffolk and Babergh. Without targeted interventions, such as a Local Procurement and Social Value Strategy, workforce accommodation planning, and structured engagement with Suffolk SMEs,

the opportunity for meaningful supply chain integration and economic uplift will remain limited and dispersed.

- 10.40 However, to achieve any growth the Applicant must be willing to engage collaboratively, as early as possible, with the economic development agencies within Suffolk, including the relevant local authorities. This will assist in the development of programmes that will support local businesses to grow and offer their services to supply the Applicant's project and other related projects within and outside the region. As this project is one of a series of projects being brought forward by National Grid in the locality, there is a far greater opportunity than a single project would present. To ensure these opportunities are realised, the Applicant's commitments should be detailed in a Skills and Employment Plan secured by a DCO requirement or Section 106 agreement.
- 10.41 Although the Council considers that there could be a minor positive impact caused by additional spend by a majority non-homebased workforce, the Council considers it essential for the Applicant to work collaboratively with the Council to develop strategies to encourage workers to spend locally.

Employment, Skills and Education

- 10.42 The Councils anticipate potential positive employment, skills and education impacts through collaboration with the applicant. However, the Applicant expects a large proportion of the additional jobs created to be taken by those outside of the study area. The Council considers this to be unacceptable and expects the Applicant to develop a comprehensive Skills and Employment Plan, and to engage with the Regional Skills Coordination Function at the Council to address this.
- 10.43 There are opportunities for some positive employment, skills and education impacts, in terms of employment levels and reducing inequalities by creating opportunities for those furthest from the workforce and for vulnerable groups. To achieve such positive impacts, the applicant would need to identify the different skills required across their total workforce, and then the propensity and flexibility of the labour market within the Wider Study Area to fill these identified roles. In parallel, the applicant would also need to identify local supply chain companies that can become involved in the project.
- 10.44 To achieve this positive impact, the Applicant needs to work collaboratively with local stakeholders, share detailed skills and job information in advance and provide funding for several interventions that will ensure a pipeline of local people can be trained and enter the labour market at the right time

with the right skills to take up opportunities that the scheme will provide. This should be detailed within a Skills and Employment Plan, via the DCO.

- 10.45 The Councils consider that the Applicant needs to work with their associated supply chains, contractors and local partners to recruit and train local people ahead of the construction period which will ensure that they develop their skills and are enabled to move between roles and different types of contracts as the Councils see a range of energy infrastructure projects in the region. The project, as part of the wider energy infrastructure construction projects, is an opportunity to generate skills and employment outcomes and subsequently contribute to the achievement of both national and local policy objectives. This includes:
- 10.46 Providing new, additional employment opportunities for all (as required within EN-1, paragraph 5.13.4), but especially those who are currently unemployed or underemployed, thereby reducing in-work poverty and inequality which has risen sharply in the region.
- 10.47 Increasing skills attainment levels for school leavers and those in work through using net zero/clean growth as a catalyst to motivate the workforce to seek, and take advantage of, opportunities for professional development (in alignment with EN-1, paragraph 5.13.11).
- 10.48 Driving inclusive regional growth, reducing regional inequalities, and boosting local prosperity - by boosting productivity, pay, jobs and living standards by growing the local supply chain in sustainable industries (as described in EN-1, paragraph 5.13.4).
- 10.49 In order to achieve these outcomes, the Councils expect the applicant to work with local partners to:
- a. Embed social value in their associated supply chain, delivering change for local people around jobs, sustainability, health and well-being, inclusivity and equity.
 - b. Raise career aspiration through the creation of sustainable and progressive employment opportunities and contribute to a further enhanced integrated careers and advice system which connects and inspires young people into training for the careers available locally utilising local initiatives.
 - c. Be an advocate for a diverse, dynamic, and inclusive workforce.
 - d. Wherever possible, align, utilise and actively promote existing and integrated skills resources available in both counties, enhancing and enriching the local offer for all.

- 10.50 The benefits of apprenticeships for both an employer and apprentice are widely publicised. The project will provide many opportunities for local apprenticeship recruitment supporting regional growth sectors of construction and engineering and play an important part in mitigating any negative employment churn impacts in wider regional employment sectors.

Neutral

Supply chain and economic development

- 10.51 There will be a neutral impact on supporting and enhancing Suffolk's skills infrastructure and training offer, moving to positive if structured investment and governance is secured. Sea Link presents an opportunity to enhance Suffolk's existing skills ecosystem, but this potential will only be realised through proactive alignment with Suffolk's established skills infrastructure, strategic interventions, and legacy-focused investment. Without such commitments, the project risks increasing pressure on training providers already servicing multiple NSIPs.
- 10.52 Suffolk is home to a growing infrastructure ecosystem i.e. engineering and construction. Investments such as the East Coast College Lound Facility, the Sizewell C Asset Skills Enhancement Capability ("ASEC") Fund, and the SCC's Regional Skills Coordination Function ("RSCF") are building capacity to enable Suffolk's economic development. Norwich to Tilbury intersects this momentum but has not (based on the Environmental Statement) offered tangible and proportionate contributions to skills development, nor proposed integration with existing initiatives.
- 10.53 As Suffolk prepares for overlapping construction peaks from multiple NSIPs, the promoter has a critical role to play in ensuring that the skills infrastructure keeps pace with demand and that its investment delivers a long-term legacy beyond the temporary construction period.
- 10.54 SCC's Supplementary Guidance clearly states:
"Contributions should be sought to enhance the long-term capability of Suffolk's education and training infrastructure as part of delivering a long-term legacy for the region."

Employment, Skills and Education

- 10.55 The Councils consider that there will be only negligible positive impacts because of indirect and induced employment opportunities, particularly due to the linear nature of the project. However, there is the potential for a positive impact to be created if there is sufficient and early supply chain engagement.

Negative

Supply chain and economic development

- 10.56 The Councils consider there is a likely negative impact on workforce availability to regional businesses and supply chain due to workforce displacement and churn. Within the region, there are numerous energy infrastructure projects planned and expected to be in construction around the same period as the Applicant's development. These projects would likely require some of the skills and workforce needed for the construction of this project.
- 10.57 To mitigate this impact, the Applicant should work collaboratively with the Councils to ensure a strategic approach in order to help control the rate of workforce displacement. Labour required should also include members of the local workforce who might not have the necessary skills without some investment in training locally.

Employment, Skills and Education

- 10.58 The Councils consider there is a likely negative impact on workforce availability to regional businesses due to workforce displacement and churn.
- 10.59 Labour market churn occurs as workers move between jobs. While the Councils welcome, in principle, opportunities for individuals to access jobs with better pay and enhanced career paths, in this case the Councils consider labour market churn will have a damaging negative impact on the local economy. Given the relatively short construction period of this proposal combined with the fact there are no long-term operational roles, any employment churn, where skilled labour prematurely leaves their current local employment to work on the project, will have a damaging negative impact on the local economy.
- 10.60 If proactive and well-structured local employment strategies are implemented in partnership with the Councils, the project could deliver meaningful benefits. However, without targeted interventions, the actual employment gain for Suffolk residents is likely to remain minor due to workforce competition, high leakage of opportunities to non-local labour, and a limited skills pipeline for specialist trades.
- 10.61 Norwich to Tilbury's construction phase in Suffolk is expected to require a peak workforce of 1,720 FTE. However, based on the Environmental Statement's assumptions:
- i. Only 10% of the workforce is expected to be home-based.
 - ii. No specific employment or apprenticeship targets are proposed.

- iii. No outreach or intervention plans to increase local labour participation are included.
- 10.62 Suffolk has the foundations for a stronger local construction workforce offer. It benefits from:
 - i. A growing energy and infrastructure training ecosystem (e.g. East Coast College, Suffolk New College, and the Energy Skills Centre).
 - ii. A well-established Regional Skills Coordination Function (RSCF) mandated through Sizewell C.
 - iii. Known gaps in certain skill areas (e.g. civils, mechanical and engineering, logistics) which require proactive pipeline development.
- 10.63 In a region facing cumulative NSIP demand, passive assumptions of local employment delivery are insufficient. SCC's Supplementary Guidance clearly states that:
- 10.64 "Employment should always be referred to as an opportunity. It cannot be assumed that just because there is an opportunity that this will result in employment happening."
- 10.65 There are a significant number of NSIPs in Suffolk that will be requiring similar skilled workers at the same time, and the construction period for Norwich to Tilbury is predicted to coincide with that of Sizewell C Nuclear Power Station. This is likely to put pressure on the available workforce, potentially reducing opportunities to secure any skills and employment legacy from the construction workforces as the projects could be occurring in parallel. This is also likely to lead to high levels of workforce displacement and churn, impacting local businesses and the local supply chain. The Councils expect the Applicant to work with the Councils to develop strategies to control the rate of workforce displacement, and to quantify and mitigate the negative impacts of this displacement.
- 10.66 The cumulative impact assessment **[APP-281]** concludes effects are not significant as although the scale of construction employment generated is likely to be relatively large when compared with the pool of construction labour, that the demand on construction labour would be spread across the construction period (17.5.62-17.5.63). However, this conclusion does not fully address the risk of concurrent demand for specialist skills, nor does it explain how this finding was reached. Evidence from regional skills reports and NSIP labour forecasts suggests this assumption is flawed, as competition for roles such as electrical engineers, civil engineers, and welders is likely to be intense. The Applicant should confirm that current workforce data has been used in assessing worst-case scenarios, particularly given that Sizewell C's sister project, Hinkley Point C, has

increased its peak workforce numbers since the Environmental Statement was completed.

- 10.67 In addition to workforce pressures, cumulative impacts on local businesses and supply chains require closer assessment. High levels of workforce churn and displacement could negatively impact SMEs, as skilled staff are drawn away to NSIP contractors offering higher wages, an issue that local businesses are already reporting to feel the effects of. This risk is compounded by overlapping project timelines, which may limit the ability of local firms to compete for contracts or retain experienced staff. The Environmental Statement does not quantify these indirect effects and does not propose specific mitigation beyond generic commitments. The Councils expect the Applicant to model these risks and embed clear measures, such as supply chain engagement strategies and contractual social value requirements, within a Skills and Employment Plan secured through a control document.
- 10.68 The Councils therefore require the Applicant to undertake detailed scenario-based workforce modelling to accurately assess cumulative effects and ensure robustness. This modelling should clearly show total workforce numbers and timings, rather than stating FTEs across the project, to accurately reflect the situation. These measures should be embedded in a comprehensive Skills and Employment Plan and secured through an appropriate control document, in line with EN-1 paragraphs 5.13.4 and 5.13.11, which require Applicants to consider socio-economic impacts, cumulative effects, and provide positive provisions to mitigate impacts and deliver legacy benefits.

Operational Phase Impacts

Positive

Supply Chain and Economic Development

- 10.69 None identified.

Employment, Skills and Education

- 10.70 None identified.

Neutral

Supply Chain and Economic Development

- 10.71 None identified.

Employment, Skills and Education

- 10.72 The Applicant scoped out operational employment from the EIA due to limited numbers. However, the Councils consider that, in combination with

other projects in the region under construction at the same time as Norwich to Tilbury, the number of potential operational employment opportunities is sufficient to be scoped into the Assessment.

- 10.73 Norwich to Tilbury is likely to generate a small number of operational roles, Environmental Statement has scoped operational employment impacts out of the assessment. This is despite the Councils' view that these effects are relevant, especially when considered cumulatively with other NSIPs and the need to support long-term economic resilience in the local area.
- 10.74 The project is part of a growing cluster of energy assets, including Sizewell B and C, EA1N/2 substations, and LionLink, which collectively require a skilled operational and maintenance workforce. It is therefore short-sighted to treat operational employment in isolation and dismiss its cumulative regional importance.

Negative

Supply Chain and Economic Development

- 10.75 None identified.

Employment, Skills and Education

- 10.76 None identified

Decommissioning Phase Impacts

Positive

Supply Chain and Economic Development

- 10.77 Decommissioning of the Norwich to Tilbury grid reinforcement project could have some minor positive impacts on the local supply chain through investment in local businesses to support delivery of the decommissioning of the project. However, given the relatively short decommissioning period of the project, the benefits on the local supply chain are not expected to have a long-term impact.
- 10.78 There could be a minor positive impact caused by additional spend by a non-homebased workforce, but the Councils consider it essential for the Applicant to work collaboratively with the Councils to develop strategies to encourage workers to spend locally.

Employment, Skills and Education

- 10.79 The Councils anticipate potential positive employment, skills, and education impacts. To achieve this positive impact, the Applicant needs to work collaboratively with local stakeholders, share detailed skills and job information in advance, and provide funding for several interventions that will ensure a pipeline of local people can be trained and enter the labour

market at the right time with the right skills to take up opportunities that decommissioning of the project will provide.

Neutral

Supply Chain and Economic Development

10.80 None identified.

Employment, Skills and Education

10.81 None identified.

Negative

Supply Chain and Economic Development

10.82 The Councils consider there is a likely negative impact on workforce availability to regional businesses and supply chain due to workforce displacement and churn. This is already being experienced in the county due to existing NSIPs.

Employment, Skills and Education

10.83 The Councils consider there is a likely negative impact on workforce availability to regional businesses due to workforce displacement and churn.

Comments on Application Documents

10.84 No comments at this deadline.

Required Mitigation

- 10.85 While the positive benefit to local supply chains and businesses from this project on its own may be limited and transient, the significant number of large-scale grid projects in planning within the local area and region, opens some opportunity for investing in local supply chain and businesses that can support the development of these projects. Therefore, the Councils expect the applicant to provide a positive strategy, with key targets for financial investment contribution towards the growth of local supply chains and businesses, enabling these businesses to play key roles in supporting this and other scale grid developments, regionally and nationally. The applicant would be expected to work with the Councils on the structure on how the financial investment would be used in terms of local business targets and schemes to develop local supply chain.
- 10.86 The project will have an impact on local labour markets and workforce availability, further exacerbated by the currently extremely low unemployment rate locally and nationally. Whilst the Councils question the home-based worker numbers that have been presented (see above), it is still expected that a number of workers will prematurely leave their current employment and this level of churn within the workforce will have a major significant negative impact. To mitigate this effect, the applicant is expected, through the project, to create employment for those currently economically inactive, as well as to train, attract and employ those entering work and those that are under employed and therefore not impacting upon existing employment numbers. The applicant should also support those that are transferring from other sectors for better employment. The applicant is expected to ensure it is an exemplar for inclusion and diversity within its workforce to again ensure it is attracting labour from as many sources as possible beyond the currently employed labour market. The Councils expect the applicant to:
- a. Deliver and fund, in collaboration with the Councils and local partners, activities that develop both local talent pools and local people so that they are enabled to take up opportunities of recruitment into skilled roles across the project;
 - b. Work collaboratively with the Councils to ensure that where possible skills training, aimed at creating wider and deeper local talent pools from which to draw from, also has a long-term demand within the region thus ensuring a greater opportunity for sustainable employment;

- c. Set an ambition for 5% of the roles required by the project to be filled through ‘earn and learn’ positions (the majority of which will be apprenticeships but may also include graduates on formalised training schemes and sponsored students as per the definition of the ‘5% club’ including a commitment to a minimum number of apprenticeship opportunities to be provided to local people;
 - d. Create tangible mechanisms for ensuring that the skills base developed for the construction of the project is as transferable as possible to other key construction project being delivered regionally;
 - e. Aim to increase the size and diversity of the labour market pool;
 - f. Put into place clear plans (e.g., commitments within contracts) to drive the behaviours of their associated supply chain(s) to achieve skills and employment outcomes; and
 - g. Incorporate social value measures within all activity and use as a tool to quantify the success of any and all interventions and to drive commitment and delivery of the associated supply chain to recruit locally and provide apprenticeship opportunities where feasible.
- 10.87 Clearly set out via a Skills Plan, incorporating, supply chain skills plans, a strategic approach to developing and supporting the project’s workforce requirements. The strategic approach should take into account each distinct phase of the project, feedback from employment monitoring measures and be reflective of the Councils’ local economics, in particular local opportunity that meets skills legacy for the region.
- 10.88 A Section 111 legal agreement should be entered into that would provide workforce skills training.

11 Flood and Water Environment

Lead Authorities	Suffolk County Council
Supporting Authorities	Babergh District Council; Mid Suffolk District Council

Summary

- 11.1 Suffolk County Council is the Lead Local Flood Authority (“**LLFA**”). The Sequential Test is carried out by the decision maker, the Secretary of State in this case. Babergh District Council and Mid Suffolk District Council are, respectively, responsible for carrying out the Sequential Test on applications made pursuant to the Town and Country Planning Act 1990 (as amended) and have engaged with the applicant on this basis throughout the pre-submission stage.

Table 9: Summary of Impacts – Flood and Water Environment

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
9a	Surface Water Run-off	Negative	Production of a Construction Surface Water Management Plan	Suffolk Flood Risk Management Strategy Appendix A, Sustainable Drainage Systems (SuDS): A Local Design Guide in March 2023.
9b	Habitat loss for temporary ordinary watercourse crossings	Negative	Minimise the number and length of crossing point. Reinststate the lost vegetation once the crossings have been removed.	Policy for working on Watercourses in Suffolk Policy Appendix B to the Suffolk Flood Risk Management Strategy
9c	Displacement of fluvial flood water	Negative	Relocation of works outside of flood zones 2 and 3 (including an allowance for climate change)	EN-1 and EN-5
Operational Phase Impacts				
9d	Surface Water Run-off	Negative	Production of a Surface water drainage strategy for the extension of the Bramford Substation	National standards for sustainable drainage systems (SuDS):- Standards 1 to 6 Suffolk Flood Risk Management Strategy Appendix A, Sustainable Drainage Systems (SuDS): A Local Design Guide in March 2023.
9e	Displacement of fluvial flood water	Negative	Relocation of works outside of flood zones 2 and 3 (including an allowance for climate change)	EN-1 and EN-5
Decommissioning Phase Impacts				

9f	Surface Water Run-off	Negative	Production of a Surface Water Management Plan for Decommissioning	National standards for sustainable drainage systems (SuDS):- Standard 7: design of drainage for construction, operation, maintenance, decommissioning and structural integrity. Suffolk Flood Risk Management Strategy Appendix A, Sustainable Drainage Systems (SuDS): A Local Design Guide in March 2023.
9g	Habitat loss for temporary ordinary watercourse crossings	Negative	Minimise the number and length of crossing point. Reinstate the lost vegetation once the crossings have been removed.	Policy for working on Watercourses in Suffolk Policy Appendix B to the Suffolk Flood Risk Management Strategy

Policy Context

National Policy

A Green Future: Our 25 Year Plan to Improve the Environment

- 11.2 (5) “Reducing risks from flooding and coastal erosion
- 11.3 The Environment Agency will use its role in statutory planning consultations to seek to make sure that new developments are flood resilient and do not increase flood risk.”

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 11.4 (5.8.13) “A site-specific flood risk assessment should be provided for all energy projects in Flood Zones 2 and 3 in England or Zones B and C in Wales. In Flood Zone 1 in England or Zone A in Wales, an assessment should accompany all proposals involving:
- i. sites of 1 hectare or more
 - ii. land which has been identified by the EA or NRW as having critical drainage problems
 - iii. land identified (for example in a local authority strategic flood risk assessment) as being at increased flood risk in future
 - iv. land that may be subject to other sources of flooding (for example surface water)
 - v. where the EA or NRW, Lead Local Flood Authority, Internal Drainage Board or other body have indicated that there may be drainage problems.”

National Planning Policy Framework, December 2024

- 11.5 (170) “Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.”
- 11.6 (181) “When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

- 11.7 a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;
- 11.8 b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;
- 11.9 c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;
- 11.10 d) any residual risk can be safely managed; and
- 11.11 e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.”

National Standards for Sustainable Drainage

- 11.12 These national standards provided information relating to Sustainable Drainage Systems (“**SuDS**”).³¹

CIRIA SuDS Manual C753

- 11.13 Incorporates the interdisciplinary nature of SuDS, providing a nationally recognised manual for industry practices and guidance.

Local Policy

Babergh & Mid Suffolk Joint Local Plan – Part 1, November 2023

- 11.14 Babergh & Mid Suffolk Joint Local Plan Policy LP15 titled “Environmental Protection” seeks to minimise impacts upon the water environment in accordance with the following criteria:
- 11.15 “(1) Development proposals must demonstrate appropriate consideration of the following:
- 11.16 (4) WATER
- 11.17 a. Comply with the relevant SCC Construction Surface Water Management Plan.
- 11.18 b. Development proposals will need to demonstrate it protects and enhances groundwater, surface water features and must not lead to a deterioration in the quality of the environment to help achieve the objectives of the Water Framework Directive.”
- 11.19 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP25 titled “Energy Sources, Storage and Distribution” states that “Renewable, decentralised

³¹ <https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds>

and community energy generating proposals will be supported including where:

- 11.20 “a. The impact on (but not limited to) landscape, highway safety, ecology, heritage, residential amenity, drainage, airfield safeguarding and the local community has been fully taken into consideration and where appropriate, effectively mitigated;
- 11.21 c. The impact of on and off-site power generation infrastructure being acceptable, having regard to other policies in this Plan”
- 11.22 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP26 titled “Water Resources and Infrastructure” states that development will be supported and includes the following criteria:
- 11.23 (6) “The proposal will not result in any adverse effect (either through construction and / or operation) on the integrity of the Protected Habitats Sites and designated AONBs.”.
- 11.24 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP27 titled “Flood Risk and Vulnerability” includes the following criteria:
- 11.25 (1) The Strategic Flood Risk Assessment, as a starting point, has been used to assess whether the proposal is at risk of flooding and any impact of the proposal on flood risk. Other available flooding evidence should also be considered where it is relevant and/or is more up to date;
- 11.26 (2) In areas at medium or high risk from flooding, it has been soundly demonstrated that the new development or intensification of development, can be made safe for its lifetime without increasing flooding elsewhere. This includes the ‘sequential test’ where needed the ‘exception test’ and also a site specific flood risk assessment.
- 11.27 (3) Mitigation is provided against existing and potential flood risks throughout the life of the development (including fluvial, surface, coastal and sewer flooding) through application of a sequential approach to flood risk, the implementation of Sustainable Drainage Systems (SuDS), and risks to ground or surface water quality.
- 11.28 (4) Above ground, appropriate SuDS are incorporated within new developments wherever possible, and take opportunities to provide multifunctional benefits, including biodiversity, landscape, amenity and water quality enhancement.
- 11.29 (5) Proposals are submitted appropriate to the scale of development detailing how on-site surface water drainage will be managed so as to not cause, or increase flooding elsewhere. This includes the cumulative impact of minor developments.

- 11.30 (6) Opportunities to provide betterment of greenfield runoff rates to reduce the overall risk of flooding, have been provided wherever possible.
- 11.31 (7) In circumstances requiring surface water management measures (including rain water harvesting and greywater recycling), adequate mitigation which avoids any risks and/or detrimental impacts are provided to the Lead Local Flood Authority.
- 11.32 (8) Further indicative details of long-term maintenance, management and where appropriate adoption by an appropriate body are provided at application stage; and
- 11.33 (9) There is no unacceptable impact upon areas identified as vulnerable to coastal erosion Neighbourhood Plans

Other Relevant Local Policy

Suffolk SuDS Guide

- 11.34 Suffolk County Council published the Suffolk Flood Risk Management Strategy Appendix A, Sustainable Drainage Systems (SuDS): A Local Design Guide in March 2023.³²

Relevant Representation

- 11.35 Suffolk County Council's comments on Flood and Water Environment can be found in paragraph 63 in its Relevant Representation **[RR-3520]**.

³² <https://www.suffolk.gov.uk/asset-library/2023-sf3967-scc-suffolk-flood-risk-appendix-a2.pdf>

Local Impact Assessment

Construction Phase Impacts

Positive

11.36 None identified.

Neutral

11.37 None identified.

Negative

11.38 Construction activities will result in surface water run-off.

11.39 Habitat loss for temporary ordinary watercourse crossings.

11.40 The location of some works within flood zones risks the safety of the development and has the potential to increase flood risks elsewhere.

Operational Phase Impacts

Positive

11.41 None identified.

Neutral

11.42 None identified.

Negative

11.43 Operational activities will result in surface water run-off.

11.44 Habitat loss for temporary ordinary watercourse crossings.

11.45 The location of some works within flood zones risks the safety and resilience of the development and has the potential to increase flood risks elsewhere.

Decommissioning Phase Impacts

Positive

11.46 None identified.

Neutral

11.47 None identified.

Negative

11.48 Decommissioning activities will result in surface water run-off.

11.49 Habitat loss for temporary ordinary watercourse crossings.

Comments on Application Documents

- 11.51 The Councils do not consider good practice measure W07 to be the correct interpretation of relevant policy, where it refers to parts of the development being laid out in accordance with the sequential test. The sequential test applies to the whole development where any built or access / egress element would be affected by flooding from any source, having regard to climate change (NPPF para 175).
- 11.52 The Councils query whether there is any scope for the Little Wenham cable sealing end compound to be located outside of flood zone 3 plus climate change to mitigate the risk of safety and resilience to this part of the development and reduce the impact of increasing flood risk elsewhere.
- 11.53 The Councils query the statement at 4.10.5 “Due to the nature of the third-party infrastructure works no operational effects on surface water flood risk are anticipated, and further assessment has therefore been screened out” and request further clarity on this matter.

Required Mitigation

- 11.54 The LLFA considers that temporary drainage for construction shall be provided for approval in the form of a construction surface water management plan (“**CSWMP**”).
- 11.55 The CSWMP shall demonstrate that the surface water run off during construction is managed to ensure no off-site flooding in the 1:100-year rainfall event. The CSWMP will ensure that only clean water is discharged.
- 11.56 Any surface water drainage must be in accordance with National standards for Sustainable Drainage Systems (“**SuDS**”) and the SCC SuDS guidance.
- 11.57 The LLFA requires that any permanent or temporary works to an ordinary watercourse are done in accordance with the LLFA requirements and, subject to them gaining consent under the s23 of the Land Drainage Act as amended by the Flood and Water Management Act.
- 11.58 The Councils consider it appropriate for consideration to be given to the possible relocation of the Wenham sealing end compound to land outside of flood zone 3 and 2 in order to secure the operational safety and resilience of this infrastructure and to avoid increasing flood risk elsewhere.

12 Highways

Lead Authorities	Suffolk County Council
Supporting Authorities	Babergh District Council; Mid Suffolk District Council

Summary

- 12.1 Suffolk County Council is the Local Highway Authority (“**LHA**”) for the county of Suffolk. SCC have outlined the local highway context to assist readers with an understanding and appreciation of the local area in regard to traffic and transport.
- 12.2 SCC’s highway network concerns largely focus on:
- i. Network Resilience
 - ii. Network Management
 - iii. Road Users
 - iv. Route Selection
 - v. Site Access Points
 - vi. Junction Capacity
 - vii. Abnormal Indivisible Loads
 - viii. Environmental Assessment Methodology
 - ix. Diversion Routes
 - x. Damage through Exceptional Use
 - xi. Cumulative Effects
 - a. Intra-Project Cumulative Effects
 - b. Inter-Project Project Cumulative Effects
 - c. Successive Inter-project Cumulative Effects

Table 10: Summary of Impacts – Highways

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
10a	Impacts of construction traffic including AILs and in-combination effects Impacts of construction on Public Rights of Way including diversions, closures and amenity	Negative	Requirement requiring a Detailed Construction Traffic Management Plan, and a Detailed Abnormal Indivisible Loads Management Plan. A PROW strategy will be required. Further assessment work required on the impacts of traffic and transport. Local highway improvements. Commitments required for monitoring and controls within the Construction Traffic Management Plan to limit impacts and achieve sustainable travel patterns. Appropriate highway mitigation works where appropriate.	NPS / Green Future / NPPF / SCLP
10b	Permanent or temporary loss of vegetation for highway access	Negative	LEMP. Use of coppicing / cutting rather than removal.	
10c	AIL access from port to site. Lack of resilient routes without temporary infrastructure	Negative	Provision of long-term route by investment in permanent improvements to highway structures.	NPS EN-1
Operational Phase Impacts				
10d	Impacts of traffic associated with operation and maintenance	Neutral	Minimal traffic impacts	NPS / Green Future / NPPF / SCLP
10e	AIL access from port to site. Lack of resilient routes without temporary infrastructure	Negative	Provision of long-term route by investment in permanent improvements to highway structures	NPS EN-1

10f	Long-term impacts on Public Rights of Way including diversions, closures and amenity	Negative	Robust controls within the PRoW Management Plan. PRoW enhancement where required	NPS / Green Future / NPPF / SCLP
Decommissioning Phase Impacts				
10g	Impacts of decommissioning traffic	Negative	Requirement requiring a Detailed Decommissioning Traffic Management Plan, a Detailed Port Traffic Management Plan, and a Detailed Abnormal Indivisible Loads Management Plan. A PROW strategy will be required.	NPS / Green Future / NPPF / SCLP

Policy Context

National Policy

Road Traffic Regulation Act 1988

- 12.3 The Road Traffic Regulation Act 1988 places a duty on Local Highway Authorities who must (in light of studies into crashes) take such measures as appear to the authority to be appropriate to prevent such accidents, including the dissemination of information and advice relating to the use of roads, the giving of practical training to road users or any class or description of road users, the construction, improvement, maintenance or repair of roads for the maintenance of which they are responsible and other measures taken in the exercise of their powers for controlling, protecting or assisting the movement of traffic on roads, ...

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 12.4 (4.1.17) “The Secretary of State should consider the guidance in the NPPF, the Planning Practice Guidance: Use of Planning Conditions, and TANs, or any successor documents, where appropriate.”
- 12.5 (5.14.5) “If a project is likely to have significant transport implications, the applicant’s ES (see Section 4.3) should include a transport appraisal. The DfT’s Transport Analysis Guidance (TAG) and Welsh Government’s WelTAG provides guidance on modelling and assessing the impacts of transport schemes.”
- 12.6 (5.14.6) “[...] Applicants should consult with National Highways and Highways Authorities as appropriate on the assessment and mitigation to inform the application to be submitted.”
- 12.7 (5.14.7) “The applicant should prepare a travel plan including demand management and monitoring measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by active, public and shared transport to:
- i. Reduce the need for parking associated with the proposal
 - ii. Contribute to decarbonisation of the transport network
 - iii. Improve user travel options by offering genuine modal choice”
- 12.8 (5.14.9) “If additional transport infrastructure is needed or proposed, it should always include good quality walking, wheeling and cycle routes, and associated facilities (changing/storage etc.) needed to enhance active transport provision.”

- 12.9 (5.14.11) “Where mitigation is needed, possible demand management measures must be considered. This could include identifying opportunities to:
- i. Reduce the need to travel by consolidating trips
 - ii. Locate development in areas already accessible by active travel and public transport
 - iii. Provide opportunities for shared mobility
 - iv. Re-mode by shifting travel to a sustainable mode that is more beneficial to the network
 - v. Retime travel outside of known peak times
 - vi. Reroute to use parts of the network that are less busy”
- 12.10 (5.14.12) “[...] All stages of the project should support and encourage a modal shift of freight from road to more environmentally sustainable alternatives, such as rail, cargo bike, maritime and inland waterways, as well as making appropriate provision for and infrastructure needed to support the use of alternative fuels including charging for electric vehicles.”
- 12.11 (5.14.14) “The Secretary of State may attach requirements to a consent where there is likely to be substantial HGV traffic that:
- i. control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements
 - ii. make sufficient provision for HGV parking, and associated high quality drive facilities either on the site or at dedicated facilities elsewhere, to support driver welfare, avoid ‘overspill’ parking on public roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions
 - iii. ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force”
- 12.12 (5.14.16) “Applicants should consider the DfT policy guidance “Water Preferred Policy Guidelines for the movement of abnormal indivisible loads” when preparing their application.”
- 12.13 (5.14.18) “A new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and the Secretary of State should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development and by enhancing active, public and shared transport provision and accessibility.”

- 12.14 (5.14.19) “Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the Secretary of State should consider requirements to mitigate adverse impacts on transport networks arising from the development, as set out below.”
- 12.15 (5.14.20) “Development consent should not be withheld provided that the applicant is willing to enter into planning obligations for funding new infrastructure or requirements can be imposed to mitigate transport impacts [...].
- 12.16 (5.14.21) “The Secretary of State should only consider refusing development on highways grounds if there would be an unacceptable impact on highway safety, residual cumulative impacts on the road network would be severe, or it does not show how consideration has been given to the provision of adequate active public or shared transport access and provision.”

National Planning Policy Framework, December 2024

- 12.17 (109) “Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well designed, sustainable and popular places. This should involve:
- a) making transport considerations an important part of early engagement with local communities;*
 - b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places;*
 - c) understanding and addressing the potential impacts of development on transport networks;*
 - d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated;*
 - e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and*
 - f) identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains.”*
- 12.18 (114) “Planning policies and decisions should recognise the importance of providing adequate overnight lorry parking facilities, taking into account any

local shortages, to reduce the risk of parking in locations that lack proper facilities or could cause a nuisance. Proposals for new or expanded distribution centres should make provision for sufficient lorry parking to cater for their anticipated use.”

12.19 (115) “In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;

b) safe and suitable access to the site can be achieved for all users;

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code48; and

d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach.”

12.20 (116) “Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.”

12.21 (117) “Within this context, applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”

- 12.22 (118) “All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored.”

Local Policy

Babergh & Mid Suffolk Joint Local Plan – Part 1, November 2023

SP08 – Strategic Infrastructure Provision

- 12.23 “The Councils will work with the relevant partners in supporting and enabling the delivery of key strategic infrastructure projects affecting both the plan area and beyond, which include:
- 12.24 Infrastructure for transport (including sustainable transport modes) along the strategic transport corridors (including the delivery of the ISPA Transport Mitigation Strategy) to avoid and mitigate any adverse effects, and achieve net environmental gains;
- (1) All development will also need to make provision for appropriate contributions towards community infrastructure.
- (2) The required infrastructure will be provided through a combination of Community Infrastructure Levy (CIL), Planning Obligations, other Developer Contributions and where appropriate, funding assistance from the Councils / other provider organisations.”

Policy LP23 - Sustainable Construction and Design

- 12.25 “(1) All new development is required to minimise its dependence on fossil fuels and to make the fullest contribution to the mitigation of climate change through adopting a sustainable approach to energy use.
- 12.26 (4) Non-residential development of 1,000sqm and above must achieve a minimum of BREEAM ‘Very Good’ standard or equivalent. Developers will be expected to provide certification evidence of the levels for BREEAM at design stage and on completion of development. All new developments will also be expected to meet the higher water efficiency standards as set out in 2b), unless it is convincingly demonstrated that it is not possible.”

Policy LP29 - Safe, Sustainable and Active Transport

- 12.27 1) All developments will be required to demonstrate safe and suitable access for all and must prioritise sustainable and active transport and maximise the opportunities to utilise these modes in accordance with the transport hierarchy. Where possible, active travel is to be tied in with the green infrastructure network to support net environmental gains.

- 12.28 2) Development will be expected to contribute to the delivery of sustainable transport strategies for managing the cumulative impacts of growth, whilst protecting and enhancing the Public Rights of Way network
- 12.29 3) All development should be informed by the relevant parking guidance, with adequate access for servicing and emergency vehicles.
- 12.30 5) Development proposals that are expected to, or likely to cause a significant increase in transport movements must:
- Be supported by a transport statement and if appropriate a transport assessment; and
 - Provide a travel plan informed by the relevant County / National Guidance to mitigate the highway impact of development and maximise sustainable transport modes.
- 12.31 Significant impacts on highway safety or the function of the highway network must be mitigated. Impact on highway safety must not be unacceptable and the residual cumulative impacts on the road network must not be severe.
- 12.32 6) Significant impacts on highway safety or the function of the highway network must be mitigated. Impact on highway safety must not be unacceptable and the residual cumulative impacts on the road network must not be severe.

Policy LP30 - Managing Infrastructure Provision

- 12.33 1. Planning proposals will need to have regard to the Councils Infrastructure Delivery Plan (a living document that will be reviewed and updated during the plan period) and any responses to the proposals from infrastructure providers. All new development must be supported by, and have good access to, all necessary infrastructure. Planning permission will only be granted if it can be demonstrated that there is, or will be, sufficient infrastructure capacity to support and meet the necessary infrastructure requirements arising from the proposed development.
- 12.34 2. Development proposals must consider all of the infrastructure implications of a scheme, including existing commitments to infrastructure provision at the time of application submission and determination, and cumulative impacts if the proposal forms one of a number of growth projects in a locality and/or infrastructure catchment area.
- 12.35 3. Applicants must demonstrate that adequate consideration has been given to the timing and level of infrastructure provision to the satisfaction of the relevant LPA and infrastructure providers. As such, development may need to be phased either spatially or sequentially to ensure the provision of

infrastructure in a timely manner. Restrictions on planning permissions and/or planning obligations may be used to secure a satisfactory phasing arrangement

Neighbourhood Plans

Copdock and Washbrook Neighbourhood Plan (2025)

Policy C&W14 - Sustainable Construction Practices

- 12.36 This policy only applies to non-residential development. Proposals that incorporate current best practice in energy conservation will be supported where such measures are designed to be integral to the building design and minimise any detrimental impact on the building or its surroundings. Development proposals should demonstrate how they:
- i. maximise the benefits of solar gain in site layouts and orientation of buildings;
 - ii. incorporate best practice in energy and water conservation and be designed to achieve maximum achievable energy and water efficiency;
 - iii. avoid installing new fossil fuel-based heating systems;
 - iv. incorporate sustainable design and construction measures and energy efficiency measures including, where feasible, ground/air source heat pumps, solar panels; and
 - v. incorporate measures to manage surface water run-off, and manage water resources sustainably in a manner that will deliver net-positive benefits to the wider area. These could include sustainable drainage systems where easily accessible maintenance can be achieved such as wetland and other water features which can help reduce flood risk whilst offering other benefits including water quality, amenity/ recreational areas, and biodiversity benefits; and rainwater/stormwater harvesting and greywater recycling to reduce potable water use

Policy C&W17 - Public Rights of Way

- 12.37 Measures to improve and extend the existing network of public rights of way will be supported particularly if their value as biodiversity corridors is recognised and protected and efforts are made to enhance biodiversity as part of the proposal

Sproughton Neighbourhood Plan (2023)

- 12.38 Proposals for new development must reflect the local characteristics in the Neighbourhood Plan area and create and contribute to a high quality, safe and sustainable environment.
- 12.39 Planning applications should, as appropriate to the proposal, demonstrate how they have taken the Design Guidance and Codes document into

account and how they satisfy the requirements of the Development Design Checklist in Appendix 4 of this Plan.

12.40 In addition, proposals will be supported where, as appropriate to the proposal, they

(E) do not locate sensitive development where its users and nearby residents would be significantly and adversely affected by noise, smell, vibration, lighting (including illuminated signs), or other forms of pollution from existing sources, unless adequate and appropriate mitigation can be implemented

(H) where appropriate, incorporate sustainable drainage systems including, where feasible, rainwater and storm water harvesting and not result in water run-off that would add to or create surface water flooding

Policy SPTN20 - Public Rights of Way

12.41 Measures to improve and extend the existing network of public rights of way will be supported if

- i. existing or new public rights of way are connected with neighbouring parishes to extend and develop the public rights of way with the Gipping Valley
- ii. they lead to development of new bridleways to support the local equestrian community with the local and neighbouring parishes
- iii. their value as biodiversity/wildlife corridors is recognised and protected and efforts are made to enhance biodiversity as part of the proposal
- iv. comprehensive signage is provided to encourage community and visitor use of the public rights of way within the parish

Botesdale & Rickinghall Neighbourhood Plan (2020)

Policy B&R15 – Design Considerations

12.42 Proposals for new development must reflect the local character in the Neighbourhood Plan area and create and contribute to a high quality, safe and sustainable environment.

12.43 Planning applications should, as appropriate to the proposal, demonstrate how they have taken the Design Guidance and Codes document into account and how they satisfy the requirements of the Development Design Checklist in Appendix 4 of this Plan.

- i. Incorporate sustainable design and construction measures and energy efficiency measures including, where feasible, ground/air source heat pumps, solar panels and grey / rainwater harvesting

- ii. Not locate sensitive development where its users and nearby residents would be significantly and adversely affected by noise, smell, vibration, or other forms of pollution from existing sources, unless adequate and appropriate mitigation can be implemented

Policy B&R21 – Public Rights of Way

- 12.44 Development which would adversely affect the character or result in the loss of existing or proposed rights of way, will not be permitted unless alternative provision or diversions can be arranged which are at least as attractive, safe and convenient for public use. This will apply to rights of way for pedestrian, cyclist, or horse rider use. Improvements and additions to such rights of way shall be delivered as an integral part of new development to enable new or improved links to be created within the settlement, between settlements and/or providing access to the countryside or green infrastructure sites as appropriate.

Mendlesham Neighbourhood Plan (2022)

Policy MP11 - Public Rights of Way and countryside access

- 12.45 New housing and business developments shall, where possible, encourage usage of, and provide linkage to, the network of existing paths and bridleways in and around Mendlesham.
- 12.46 Development proposals for new housing and business developments shall, where possible, demonstrate that they have maximised opportunities to promote safe walking, cycling, access to community services and the countryside via Public Rights of Way.
- 12.47 Any proposed diversion of a Public Right of Way within a development site should not result in an adverse impact on residential amenity or the safety of the general public

Needham Market Neighbourhood Plan (2022)

Policy NM9 – Reducing and Managing the Impact of Traffic

- 12.48 Otherwise acceptable development proposals will be supported which promote or introduce measures to minimise the effects of through traffic in the town centre. Support will be given for measures that:
- a. reduce the need for traffic from the employment areas, including HGVs to travel through the town centre, and
 - b. improve accessibility by modes other than the car between the town centre and the employment areas (See Policy NM3)

Policy NM10 – Encouraging safe walking and cycling

- 12.49 Development should preserve existing Public Rights of Way and where possible enhance Public Rights of Way through the improvement of existing routes, or the creation of new routes and connections.
- 12.50 New footways and cycleways should connect to the town centre to enable easy access to facilities and services, to existing cycleways and should form part of a safe, accessible and coherent network in and around the town.
- 12.51 Proposals for new development should demonstrate how they:
- promote connections with other parts of the existing cycle and footpath networks; and
 - contribute to the delivery of public transport connections, clearly marked on-street cycling, and walking facilities for the town, including the provision of cycle parking in the town centre, that favour young families and older people and that offers good access.

*Stowupland Neighbourhood Plan (2019)**SNP13 - Public Rights of Way*

- 12.52 Existing Public Rights of Way in the parish will be protected. Where rerouting is essential to accommodate sustainable development any loss of amenity value will be minimised and mitigation measure will be taken to ensure that the network is not adversely affected or reduced.
- 12.53 Opportunities will be sought to enhance the network of Public Rights of Way through the creation of new links, improved maintenance and waymarking, and making use of developer contributions, agricultural schemes and local partnership initiatives.

*Wetheringsett cum Brockford Neighbourhood Plan (2024)**WCB14 - Safe and healthy access*

- 12.54 Development which is likely to affect an existing Public Right of Way should take account of its route and incorporate it into the scheme, preferably in a wide and open green corridor. Where Public Rights of Way are impacted, appropriate diversions or new routes should be provided that are more or at least, equally safe, accessible, and convenient for users.
- 12.55 Development proposals should give consideration to both the levels of traffic generated and the wider impacts of this traffic. Measures should be included that address and mitigate potential impacts upon highway and pedestrian safety.

- 12.56 Developments that would result in impacts that cannot be mitigated, and which would result in unacceptable increases in traffic generation, or which would be detrimental to highway safety will not be permitted.

Other Relevant Local Policy

Suffolk County Council Local Transport Plan (LTP), 2025-2040

- 12.57 The fourth Local Transport Plan for Suffolk supports four objectives
- i. Promoting and supporting the health and wellbeing of all people in Suffolk
 - ii. Strengthening Suffolk's Economy
 - iii. Protecting and enhancing Suffolk's Environment
 - iv. Providing value for money for the Suffolk taxpayer
- 12.58 The Suffolk Climate Emergency Plan is effective to 2030 and provides an important milestone during the life of our Local Transport Plan. The Suffolk Climate Emergency Plan recognises transport contributed 30% of CO2 emissions in 2021 and provides the Low Carbon Transport theme.
- 12.59 Suffolk is host to consented nationally significant energy projects including Sunnica Energy Farm (solar) on its boundary with Cambridgeshire; East Anglia ONE, East Anglia ONE North, East Anglia TWO and East Anglia THREE off the coast of east Suffolk; and Sizewell C nuclear power station on Suffolk's east coast. The construction of these projects is beneficial for Suffolk's economy, and effective and efficient transport planning for material and personnel is essential to prevent potentially negative impacts on communities and natural environments near the project areas.
- 12.60 Further NSIPs are either in the examination process, such as this project and SeaLink, or at an advanced stage on preparation such as Lion Link.
- 12.61 The travel and transport related challenges set by the nationally significant infrastructure projects and important facilities like the Port of Felixstowe, must be managed appropriately to ensure their economic benefits are felt by Suffolk's residents, whilst their substantial demands on transport infrastructure are not.
- 12.62 The LTP sets out four priority themes:
- i. Decarbonisation of Transport
 - ii. A strong, sustainable and fair economy
 - iii. Health, wellbeing and social inclusion
 - iv. Creating better places

Decarbonisation of transport

- 12.63 Applicants are encouraged to provide robust Travel Plans to:
- i. Avoid trips
 - ii. Shift modes of transport to support active travel and public transport
 - iii. Improve fuels by supporting electric vehicles Improve fuels by supporting electric vehicles
 - iv. Improve fuels by supporting electric vehicles

A strong, sustainable and fair economy

- 12.64 A strong, sustainable and fair economy objectives are:
- 12.65 Collaborate with local planning authorities to secure investment and promote Suffolk's unique character
- 12.66 Promote transport infrastructure that unlocks inclusive economic growth
- 12.67 Improve network resilience to support economic growth
- 12.68 Freight can be moved by sea, railway, and highway, so there is opportunity to reduce the proportion of road traffic freight, particularly for abnormal indivisible loads.
- 12.69 SCC promotes suitable routes through its recommended lorry route network³³
- 12.70 Suffolk Growth reports on the economic impact of tourism in Suffolk, given Suffolk is a tourist destination. The tourism industry (in 2019) contributed over £2.1 billion to the Suffolk economy, was linked to over forty thousand jobs and generated more than thirty-six million trips to, from and within Suffolk. Much of this is focussed on East Suffolk.
- 12.71 Where transport mitigation is identified the legacy benefits of these should be captures, subject to the Suffolk ratepayers not incurring long term maintenance liabilities.
- 12.72 SCC strongly supports NSIPs providing resilient network access to key energy facilities, noting that neither this nor other recent applications have considered that any commitment beyond temporary fixes to the network are considered necessary. As a result, substations and other strategically important energy sites will not be accessible for AILs beyond the construction phase.

³³ <https://www.suffolk.gov.uk/roads-and-transport/lorry-management/lorry-route-plan-review-in-suffolk/recommended-lorry-route-network-map>

Health, wellbeing and social inclusion

- 12.73 Air quality should be improved and transport related noise pollution reduced where this poses a risk to human health
- 12.74 Applicants are strongly encouraged to ensure that HGVs are compliant with the latest air quality controls.
- 12.75 HGV movements should be restricted to avoid trips overnight or during weekends, particularly in rural areas with low baseline noise.
- 12.76 Promotion of access to the natural environment and leisure use of Public Rights of Way contributes to positive physical and mental health outcomes and reduces health inequalities.
- 12.77 Improve road safety by adopting Vision Zero

Creating better places

- 12.78 Objectives are:
 - i. Improve access to passenger transport services and promote projects that improve punctuality and reliability
 - ii. Deliver transport schemes that have a positive impact on our natural and built environments
 - iii. Improve urban and rural rights of way and promote access to Suffolk's countryside
 - iv. Ensure heavy goods and large vehicles are on the most suitable roads
 - v. Reflect road user hierarchy when resourcing maintenance activities
- 12.79 Disruption to public transport should be avoided by the applicant, particularly in rural areas where services are infrequent and poor reliability would have a greater proportional impact on sections of the community.
- 12.80 Closure and diversion of Public Rights of Way shall be minimised by the applicant to avoid impacts on recreational users but also those for whom the routes are key transport access routes.

Area Transport Plan

- 12.81 Area transport plans for Suffolk's fifteen main towns provide a greater degree of detail for transport improvements in their respective areas and deliver projects contributing to our Local Transport Plan themes.³⁴

³⁴ <https://www.suffolk.gov.uk/roads-and-transport/transport-planning/implementation-plans>

Suffolk County Council Energy and Climate Adaptive Infrastructure Policy, Traffic and Transport Supplementary Guidance Document

- 12.82 SCC has published guidance on the transport aspects relevant to NSIPs.³⁵
- 12.83 The Applicant has been advised of this but has not included it within the documents referred to in the application.

Relevant Representation

- 12.84 Suffolk County Council's comments on Highways can be found between paragraphs 64 – 91 in its Relevant Representation [RR-3520].

³⁵ <https://www.suffolk.gov.uk/asset-library/TransportTraffic-InfraPolicy.v4.2.pdf>

Local Highway Context

General Description of Network

- 12.85 The description below describes elements of the local highway network managed by SCC that are either traversed by the project or within sufficient proximity to it that they are likely to be affected by its construction or operation. The description runs from north to south.

National speed limit

A143 – A140 roundabout to Lion Road junction

- 12.86 There are roundabouts at the junctions with the A140 and the B1077. The A140 roundabout has a very heavy traffic flow as this is the main arterial road from Ipswich to Norwich. Driver delay at this junction is noticeable at peak times.
- 12.87 The B1077 roundabout is well used by traffic accessing both the local golf club and the town of Diss to the north. The rest of the A143 to the Lion Road junction has sweeping bends and several junctions to both the north and south which access local roads. 1.4km from the B1077 is a railway bridge, which is important to note as the A143 is part of the mobile crane AIL route.
- 12.88 There are two public rights of way which cross the A143, located between the B1077 roundabout and Crossing Road. The already high traffic flows and speeds make crossing difficult for pedestrians, and an increase in construction traffic would only compound that issue.

Lion Road (Palgrave) – junction with A140 to RG-B062 and RG-B063

- 12.89 National speed limit with sweeping bends. There are scattered dwellings with private accesses along this road. This is the main road to Palgrave from the A143 and has an hourly bus service running along it, which turns left off and right on to the A143. There are no footways located along the section that will be used by construction traffic, however there are two public rights of way which run perpendicular to this road, located approximately 275m apart. This could result in pedestrians walking along the road and verges between these links.

A143 – Lion Road junction to B1113 junction

- 12.90 The village of Wortham is bisected by the A143, with a speed limit of 30mph, with dwellings and businesses on both sides of the road. A footway runs along the north side of the road for the length of the village, with no footways on the south. There is a primary school on the south side of the road, opposite the junction with Church Lane. The north side of the road has local amenities, including a post office, tearoom and homeware shop, which are located towards the eastern end of the village.

- 12.91 The rest of the A143, from Wortham to the junction with the B1113, is national speed limit and consists of mostly straight sections of road with sparse sweeping bends. There are multiple junctions to the north and south of the road which access local roads. To the southeast of the village of Botesdale, at the junction with the B1113 heading north, there is a shared use cycleway / footway which crosses the A143, however this appears to be in poor condition which suggests it is not widely used. There are several public rights of way and bridleways that cross the A143 to the south of Botesdale, and as stated previously, the already high traffic flows and speeds make crossing difficult for pedestrians, and an increase in construction traffic would only compound that issue.

B1113 Finningham Road – A143 junction to Finningham Crossroads (Wickham Road)

- 12.92 This road is national speed limit from the A143 junction to the parish boundary of Finningham, where the speed limit becomes 30mph. There are several public rights of way along the length of this road, particularly around the areas of Rookery Farm and Willow Farm. There is only a single footway on this road, located in the parish of Finningham and not interacting with any public rights of way. This runs from the S-bend 170m north of the parish boundary to the junction with Gislingham Road.
- 12.93 The northern most section of this road is narrow and has a sharp S-bend which is difficult to navigate. It is understood that NG are proposing carriageway widening along this section in order to have 2 HGVs able to pass. This section also has junctions to local roads and farms, plus the local parish church.
- 12.94 After this section the road opens up into open countryside with some sweeping bends and long straight sections. There are scattered dwellings, with multiple junctions to local roads on both sides. There is a sharp bend with a junction and several dwellings located approximately 1.9km north of Finningham, after which the road has more sweeping bends and less straight sections, including an S-bend approximately 170m north of the Finningham parish boundary.
- 12.95 The final section to the crossroads with Wickham Road is 30mph and fairly straight, with junctions and accesses on the eastern side and a public right of way exiting onto the road on the western side, opposite the junction with Gislingham Road. 95m north of the crossroads is a farm / field access, at which there is a long history of drainage issues. The ditches to the north are frequently blocked, resulting in backed up water sitting in the carriageway. This has also caused extensive damage to the highway, both from the standing water breaking away the carriageway, and also verge overrun opposite the access where vehicles are avoiding the water. Due to there not

being a footway in this location it is not uncommon for pedestrians to walk along the eastern verge in order to access the public right of way and playing field. Vehicles also seem to go above the posted speed limit along this section, likely as a result of the good forward visibility.

Wickham Road (Finningham) – B1113 crossroads to RB-B080

- 12.96 The junction with the B1113 is wide and has a short footway on the northern side, which then abruptly ends and continues on the southern side of the road, forcing pedestrians to cross over. The road narrows after the junction to approximately 5.5m on average, making 2 way HGV movements achievable but difficult. There are a large number of dwellings along both sides of the road up to the junction with Gislingham Road to the north. The aforementioned footway along the southern side of the road only extends for approximately 60m before stopping. There is a history of verge overrun and carriageway slipping into the ditch on the southern side of the road approximately 20m to the west of the Gislingham Road junction.
- 12.97 From the Gislingham Road junction heading east the speed limit becomes derestricted with bends, before heading under a railway bridge with no listed height limit. There is a priority system in place under this bridge, with priority given to vehicles heading westbound. The road to the junction with Eastlands Lane is straight with excellent forward visibility, and an average width of approximately 5.5m. There is a small bridge between the Eastlands Lane junction and the proposed access RG-B080.

Eastlands Lane (Finningham)

- 12.98 This is a single track, derestricted road which accesses a farm and several public rights of way. The proposed access is 140m north of the junction, opposite a concrete laydown area used for agriculture. The route to the proposed access crosses a small bridge, the capacity of which is yet to be established. There is proposed widening of the carriageway from the junction with Wickham Road up to the proposed access, however this does not include widening of the bridge. Instead a priority system is proposed for vehicles to cross, with southbound traffic having the right of way.
- 12.99 This road is mainly used by the farm located at the end, plus there is a gated pedestrian crossing at the railway line located at Eastlands Farm which is part of the bridleway. There is a public right of way within the proposed construction route and a bridleway located to the north of the proposed access. It can therefore be reasonably assumed that non-motorised users will be accessing the road in this location.

Thornham Road (Gislingham) – RG-B076 to RG-B078 (under railway bridge)

- 12.100 This short section currently national speed limit, however for the duration of the works there is a proposed 30mph speed limit for the length of this primary access route. The road is narrow and passes under a railway bridge with a posted height limit of 4.8m. There is proposed road widening at 2 locations along this road, one on each side of the bridge, in order to allow a temporary priority system to be in effect.
- 12.101 There is a campsite located 200m east on the opposite side of the road to proposed access RG-B078. There are no footways or public rights of way crossing the access route, however this is the main road from the campsite to the village of Gislingham and as such could see non-motorised users.

A1120 (northern section) – A14 junction to RG-B093 and RG-B094

- 12.102 From the junction with the A14 to the village of Stowupland the speed limit is derestricted. At the village boundary the speed limit changes to 30mph and there is a junction with the B1115. This junction is heavily used and sees queues of traffic attempting to turn right out onto the A1120 at all times of the day.
- 12.103 The A1120 through Stowupland has a footway along the northern side for the length of the village. There is a signalised pedestrian crossing located at the co-op petrol station, approximately 100m north east of the B1115 junction. There are a large number of dwellings along both sides of the road, plus various local amenities on the north side including a primary school, high school, pub and village hall.
- 12.104 Upon leaving the village the road continues as a 30 with several bends and junctions, including a sharp bend at the junction with Saxham Street, which is well signposted and has good visibility. The road then becomes derestricted and heads south to the proposed access points. Approximately 100m north of the proposed accesses a public right of way crosses the road. Another right of way lays approximately 180m to the south of the proposed access. While this right of way itself is not impacted by the primary access route, there is potential for pedestrians to manoeuvre along the A1120 between the public rights of way.

A1120 (southern section) – A14 junction to Needham Road junction

- 12.105 The A1120 in this location is dual carriageway with varying speed limits. It is derestricted from the A14 junction to the roundabout with Gateway 14 where it becomes 30mph. After the roundabout the speed limit changes to 50mph for approximately 500m where it becomes 40mph to the Needham Road junction. There is a long bridge crossing the railway line and the River Gipping approximately 450m north east of the Needham Road junction.

- 12.106 There is a shared use cycleway and footway on the northbound side of the dual carriageway from the Gateway 14 roundabout to the Needham Road junction. This include signalised pedestrian crossings at the roundabout and the junction.

Mill Lane (Stowmarket) – A1120 junction to RG-B095

- 12.107 From the roundabout with the A1120 heading east to Clamp Farm is heavily industrial in nature and has numerous building projects being undertaken at present. It is also important to note that this section of road has not been adopted by Suffolk County Council at the time of writing and is therefore still designated as a private street.
- 12.108 The road from Clamp Farm to the proposed access point is derestricted and rural in nature, with multiple twisting bends, scattered dwellings with private access and junctions to local roads. The S-bends at Clamp Farm and The Hayloft are very sharp with poor visibility, making 2-way HGV movements in these locations trickier than usual. Also at The Hayloft is a public right of way which crosses the road.

Needham Road / Stowmarket Road (Stowmarket) – A1120 junction to RG-B097

- 12.109 The first 250m of this link is 40mph, opening up into a derestriction for the remainder of the length to the proposed access. The route is open with sweeping bends and good forward visibility. Approximately 850m east of the Needham Road junction there is a 7.5 tonne weight limit (except for loading), and also at this location is a triangular horse warning sign, suggesting there is higher than usual risk that horse riders are using this road There are accesses on both sides of the road to various businesses, plus dwellings at the eastern end of the link before the proposed access. There is a shared cycleway and footway along the north of the road which is mostly separated from the road by a verge, but there are several locations with no delineation, making it a less desirable walking route for pedestrians. There are also several public rights of way that exit onto the southbound carriageway where there is no footway, and there are no formal crossing points along the road. The number 88 bus runs along this road approximately every 40 minutes Monday to Friday

Bramford Road and Loraine Way (Bramford) – A14 junction to Bullen Lane

- 12.110 From the A14 junction the speed limit is 50mph, dropping down to 40mph at the village of Bramford. There is a long sweeping bend immediately off the A14 junction, after which the road becomes mostly straight with good forward visibility. There are several junctions on both sides of the road to local roads, plus business and dwellings with accesses along both sides of

the road. The junction with Tye Lane has a cycleway crossover and is part of the Regional Cycle Route 48.

- 12.111 The road crosses over the rail line and the River Gipping on exiting the A14, which is important to note as this is a mobile crane AIL route. There is a footway on the eastern side of the road from Broomvale House to the junction with Pound Lane. At this point the footway continues on the western side of the road, but there are no formal crossing points. The footway only runs along the western side for 150m before stopping. There are no pedestrian amenities again until the junction with Bronze Barrow Way, where the footway restarts on the eastern side of the road.

Bullen Lane (Bramford) – Junction with Loraine Way to substations

- 12.112 Bullen Lane is derestricted from the junction with Loraine Way. There are several dwellings in close proximity to the junction with accesses crossing the footway onto the road. There is proposed junction widening at this location, plus a proposed construction lay-down area with access opposite the dwellings. There is a history of drainage issues at this location, with works to improve the drainage system having previously been undertaken by Suffolk Highways.
- 12.113 The rest of the road to the proposed access JC-B0001 is narrow and winding, with insufficient width for 2-way HGV traffic. There are localised areas of widening proposed to be undertaken by NG to help mitigate this, however there are several public rights of way that lead onto this road, suggesting it is popular with pedestrians. The lack of footway along this road already makes this a less than desirable route, and the increase in construction traffic will not improve the situation.

A1214 – Copdock roundabout to A1071 junction

- 12.114 This is a very highly trafficked dual carriageway with good visibility, and one of the main routes into and out of Ipswich. It is derestricted for approximately 150m from the A14 junction, before becoming a 40. There is one roundabout approximately 460m north of the A14 junction which is partially signal controlled. This roundabout contains exits for local amenities such as supermarkets, hardware shops, takeaway restaurants and the local park and ride. All to the west. The eastern arm of the roundabout leads to more supermarkets and Suffolk One college. There is a signalised pedestrian crossing to the south of the roundabout.
- 12.115 The next section of footway along this road is located approximately 300m north of the roundabout, where the park and ride buses exit onto the A1214. The junction with the A1071 is signalised and contains both pedestrian and cycle crossing facilities.

A1071 – A1214 junction to JC-B006

- 12.116 The A1071 has a 40mph speed limit for approximately 1km from the junction with the A1214. After this the speed limit is derestricted. The road is mostly straight until Hurdle Makers Hill, where there is a sharp bend and the road generally becomes more winding to the proposed access JC-B006.
- 12.117 Between the A1214 junction and the roundabout with the B1113 are two signalised junctions, one to the south approximately 120m from the A1214 junction and one to the north approximately 300m from the roundabout. After this second junction the road travels over the A14, which is important to note as this is an AIL route for both the mobile crane and the transformer. There is a footway running along the north of the road.
- 12.118 Following the B1113 roundabout the road becomes rural and, as stated above, mostly straight until Hurdle Makers Hill. There is no footway, however there are several bus stops and public rights of way on both sides of the road

B1070 – A12 junction to JC-B022

- 12.119 The slips on and off the A12 in this location are very short, however these fall under the jurisdiction of National Highways. The ownership of Suffolk County Council starts approximately 45m from the junction with the A12. At this point the road is narrow and loops to the northwest before joining the main road. A footway runs on the south side of the road approximately 75m east of the junction, before then crossing over at the junction with the use of a pedestrian island. The footway then runs along the eastern side of the road and is not separated from the carriageway.

AIL Specific Roads

B1113 – A1071 junction to Bullen Lane

- 12.120 This route is an AIL specific route for the transformer delivery to Bramford Substation from Ipswich Dock.
- 12.121 From the junction with the A1071 it is 40mph and has a 7.5 tonne weight limit (except for loading). The speed limit becomes 30mph south of Sproughton and continues through the village, becoming 40mph again at the northern end.
- 12.122 The road through Sproughton in particular is narrow, which is made worse by a large number of vehicles parking along both sides of the road. There are numerous dwellings with private accesses along this road, plus footways along the length of the village with scattered crossing points for pedestrians.

- 12.123 It is important to note that this is the same proposed route for the Bramford to Twinstead AIL transformer delivery, which has been met with opposition from residents of Sroughton.

Port of Ipswich to A14

- 12.124 Any AILs leaving the western dock of the Port of Ipswich to access the A14 need to be aware of the bridge known as Ostrich Creek. This bridge has a weight restriction for special order movements and requires overbridging for AILs, which causes significant disruption to the highway network, especially as this is a key route into Ipswich.
- 12.125 AILs leaving the eastern dock are required to travel through the town, which causes disruption to local traffic and pedestrians. This will also require a significant amount of street furniture being taken down and re-erected, and also crossing of the Orwell Bridge which comes under the purview of National Highways.
- 12.126 Both of these routes are fully urban in their nature with heavy traffic flows, high pedestrian and high cycle usage
- 12.127 Liaison with National Highways is required with these loads as SCC does not have jurisdiction of the A14 and as such cannot comment on this road.

A140 – A14 junction to A143 junction

- 12.128 Whilst this road has not been specifically identified as being a construction route, it is highly probable that construction traffic and mobile crane AILs will be using it to access the project as it is the main spinal road between Ipswich and Norwich and runs roughly parallel to the project.
- 12.129 The road is mostly straight with a variety of speed limits, the main being 50mph. The villages the road passes through have a limit of 30mph. There are dwellings, businesses and local road junctions along the length of the road on both sides. Footways are located alongside the road in several locations, however there are no formal crossing points.
- 12.130 Important locations to note along this road are:
- Brockford bridge. This has a weight restriction for heavy AILs and requires overbridging for AILs passing over. This causes significant delays to traffic and has knock on effects to the local roads as drivers try to find routes around.
 - Stoke Ash crossroads. There are already significant driver delays at this crossroads, in particular turning out of Workhouse Road onto the A140. Increased construction traffic will cause more anxiety and driver delay at this crossroads, and could lead to serious accidents as drivers become impatient.

- iii. A1120 crossroads. This location is very similar to the Stoke Ash crossroads in that there is significant driver delay for vehicles turning onto the A140.

Sustainable Transport

- 12.131 On the B class roads provision of footways is at best intermittent and usually absent as are crossings, even informal ones comprising just dropped kerbs. This creates isolation and severance between and within communities if traffic increases.
- 12.132 North of Stowmarket the pylon route crosses open countryside where there are very few footways alongside roads, however there are numerous PRoWs along this route. PRoW often start and finish at roads. Where they cross the road, this is not always immediately opposite each other and hence some use of the road network by walkers is necessary to rejoin the PRoW.

Local Impact Assessment

Construction Phase Impacts

Positive

12.134 None identified.

Neutral

12.135 None identified.

Negative

Network Resilience

12.136 The Councils have raised concerns regarding the resilience of the highway network. The proposals rely on the A140 and A143 as the HGV routes, and many will also use the A14 to access. The main issues for network resilience on account of the proposed project are:

- i. Closure of the A14 Orwell Bridge due to collisions or high winds resulting in traffic being diverted through Ipswich,
- ii. Closure of the A14 or the A12 (north and south of the A14) and lack of suitable diversions,
- iii. Capacity of junctions on the strategic road network, particularly if delivery of multiple NSIPs coincide,
- iv. Delays on the Major Road Network due to increased volume of traffic.
- v. Restrictions placed on the ability to maintain the highway network during normal working hours due to the higher volume of construction movements,
- vi. Lack of laybys or other suitable parking, rest, or stopover facilities east of the A140 and A143. The concerns raised at previous examinations have been experienced with complaints from local residents about antisocial use of laybys and from hauliers regarding lack of areas to take legal breaks.

12.137 It is forecast that the HGV movements associated with Norwich to Tilbury will peak at around 440 in August 2028, as shown in Image A16.4.20 of Document: 6.16.A4 Environmental Statement Appendix 16.4 - Traffic and Transport Construction Effects [APP-275], however it is not clear if this number is for one way or two way movements.

Network Management

12.138 Impacts on network management during the construction phase will include:

- i. The intended DCO powers in article 11 may inhibit the authority in performing its duties as the local highway authority by removing control on the highway within the ‘works’ or associated with implementation of the traffic regulations in article 49.
- ii. The presence of construction traffic on the network for 7 days a week will hamper routine highway maintenance or increase delays and disruption. The authority may also incur increase costs if forced for operational or safety reasons to undertake more work outside normal working hours. Whilst HGV movements are restricted in Requirement 7 it should be made clear this is for two way movements not just for deliveries.

Road Users

12.139 Key issues facing road users include:

- i. Delay to public transport and other road users including emergency services and public services.
- ii. Safety, fear, intimidation and severance as construction traffic impacts pedestrians and cyclists where provision of sustainable transport infrastructure or alternatives are limited.
- iii. Loss of amenity both on rights of way but also highways used to link or access these.
- iv. Lack of breaks in construction with seven days a week working

Route Selection

12.140 SCC is concerned that the applicant has not yet completed an assessment of potential access routes to the substation and convertor station but acknowledges that they are working with SCC to do so.

Site Access Points

- 12.141 Whilst generic accesses are shown in the Design and Layout Plans no topographic surveys have been undertaken to show that the 2-D layouts work in practice, for example the vertical alignment of the existing highway does not compromise visibility or not features such as service would hinder construction. The highway boundary should be clearly shown as should any land proposed as highway to be adopted by the authority.
- 12.142 The visibility splays are likely to require removal or coppicing of vegetation to achieve. SCC's preference is for the latter for temporary accesses subject to suitable maintenance by the applicant.
- 12.143 The Applicant has assumed that where speed limits are present vehicles comply with these and hence are appropriate for design purposes.

Experience has shown that this is not always the case and where reduced speed limits are used for design purposes this should be supported by survey data or physical measures showing it is effective.

Junction Capacity

- 12.144 The LHA considers that the following are significant junction within the applicant's study area.
- i. A140 – Stoke Ash Crossroads
 - ii. A140 / A143 roundabout
 - iii. A1214 / A14 roundabout at Copdock
- 12.145 The applicant has shared junction modelling with SCC which is being reviewed.

Abnormal Indivisible Loads

- 12.146 As LHA is committed to maintaining its stock of bridges to enable use by normal highway traffic as far as reasonably practical with the available funding. This excludes AILs >44 tonnes in weight.
- 12.147 SCC understands that details of the AIL movements remains to be confirmed but are assumed to comprise of:
- i. Cable drum movements (will require police escort)
 - ii. Transformers (will require police escort)
 - iii. Other AILs likely to be cranes, piling rigs. No dimensions given at this stage and not clear if they will require an escort
 - iv. Port not yet confirmed but anticipated to be Ipswich or Harwich
- 12.148 The overarching National Policy Statement for Energy (EN-1) identifies Traffic & Transport, including abnormal loads generated during the construction phase, as an impact where the Secretary of State recognises the need for appropriate mitigation to ensure satisfactory arrangements in consultation with network providers and the responsible police force. SCC expects this principle to be reflected in the identification and securing of appropriate developer funded highway and police resources.
- 12.149 The nature of the local highway network required police escort particularly where:
- i. The roads are narrow, or the geometry requires a load to move into the oncoming lane. The movement of wide and long loads is problematic on the existing constrained local road network, particularly on B class roads where the road widths are in places less than 5.5m wide; the width considered necessary for two HGVs to pass (Manual for Streets)

on a straight road. Where wide or long loads straddle centrelines, particularly those where no overtaking restrictions are present require escort by the police.

- ii. Special order Loads and others where deemed necessary by the constabulary. For SZC a matrix was developed to formalise this.
- iii. Special restrictions apply to structures such as prevention of other vehicles using the road when loads are passing over bridges (e.g. A140 Brockford Street).

- 12.150 Thus, NSIP developments create heightened demand for police escorted Abnormal Indivisible Loads (AILs) during construction. Suffolk Constabulary does not have a dedicated AIL team, and escorts are currently provided on an overtime basis when capacity allows. Therefore, where sustained demand is identified a bespoke solution - such as a dedicated AIL team - may be necessary, subject to appropriate lead-in time and developer funding.
- 12.151 AIL special order routes from the Strategic Road Network or port to the site must be surveyed to prove there is a viable route to the converter station and substation. Reliance on the ESDAL notification system may result in loads being refused, for example if a highway structure has an STGO or Special-Order weight restriction.
- 12.152 SCC provides details of how it expects this process to be undertaken to applicants.
- 12.153 Despite advice provided to the Applicant by SCC no assessment has been undertaken on the capacity of structures to carry the special-order loads between the SRN or a port and the site.
- 12.154 Work undertaken by SZC has resulted in restrictions being placed on structures along the A140 corridor between A140/A14 Beacon Hill Interchange and A140/A143 Stuston Roundabout.
- 12.155 The Applicant is strongly recommended to engage with SCC to determine a program of reviews, inspections and assessments to identify feasible routes for AIL to this project.
- 12.156 SCC expects the Applicant to work in partnership with other developers during the structural review and commit to assisting with long term maintenance of AIL routes to energy sites in Suffolk.
- 12.157 The Councils note that the by scoping out all transport issues from the operational and decommissioning phases, the Applicant considers that it is unlikely that any future special-order movements will be required after

completion. The Councils consider that this is unwise and does not consider movements required, particularly during decommissioning.

Environmental Assessment Methodology

- 12.158** In addition to issues around the scope of the assessment and junction modelling discussed in this section, SCC has other concerns over the assessment methodology used with the application.
- 12.159 Typically, throughout Suffolk the local roads connect nodes of settlement resulting in significant differences to the character of the highway, for example sections of open road with few junctions, dwellings or businesses between clusters of houses. Services such as schools and community centres are located off, but close to, routes but away from parts of the settlement proposed for construction traffic requiring local residents to cross these routes.
- 12.160 SCC raised concerns regarding the cumulative impact of NSIPs, including Bramford to Twinstead, on the transport network including areas outside the scope considered by the Applicant.
- 12.161 Traditional assessments for DCOs such as the IEMA guidance are useful tool for assessing the construction traffic impacts albeit the focus is on regionally significant impacts. As a result, the fine detail of local impacts such as the small communities in Suffolk can, in SCC's opinion, be lost. Also, that whilst small in terms of national scale this impact can have a major impact on such small communities. An example would be the further expansion of infrastructure in and around Bramford. The rules used within the IEMA assessment should be applied flexibly acknowledging the variability of transport data although data should be used in preference to engineering judgment.

Diversion Routes

- 12.162 The diversion routes in 2.5 Access Rights of Way and Public Rights and Navigation Plans [APP-034] and [APP-035] have not been agreed with the Highway Authority. Some, such as diversion onto Wickham Lane, Wickham is unsuitable due to the acute angle of vehicles turning into and out of Wickham Lane, in addition to the fact that Wickham Lane is not the same road category as Wickham Road.

Damage Through Exceptional Use

- 12.163 Condition surveys will be undertaken by the contractor both prior to the commencement of construction and subsequently at a point close to the completion of construction to identify existing highway defects and any changes following completion of the proposed project. The methodology

and scope of surveys will be agreed between the contractor and SCC prior to commencement of construction.

- 12.164 Any damage (the scope of which will be agreed with SCC and the contractor) to the highway caused by construction traffic will be repaired by the contractor or a financial contribution made to SCC to cover the cost of remedial work.
- 12.165 The Highway Authority may also accrue additional costs if the volume of construction traffic requires routine and planned maintenance works to be undertaken overnight to avoid disruption. The Highway Authority would look to recover these additional costs.

Cumulative Effects

Intra-Project Cumulative effects

- 12.166 The Applicant considers that no permanent effects on residential properties (in terms of physical changes or disruptions to residential communities) within the study area are anticipated during the construction phase that would affect the social environment or community cohesion in these settlements. Hence, health and wellbeing from construction activities was deemed to have a Minor adverse (not significant) effect upon residential receptors. The assessment methodology focusses on large scale regional impacts and in SCC's view underestimates the impacts on individuals and small communities typical in this part of Suffolk.
- 12.167 The following PAR links have been considered by the applicant to have a Moderate Adverse effect on non-motorised users, however no mitigation has been suggested:
- i. Link PAR 11 - Lion Road
 - ii. Link PAR 13 - Wickham Road
 - iii. Link PAR 16 - A1120 Church Road / A1120 Bell's Lane
 - iv. Link PAR 20 - B1113 Bramford Road / B1113 Loraine Way
 - v. Link PAR 24 - B1070 (A12 access)
 - vi. Link PAR27 - Birchwood Road
 - vii. Link PAR28 - Wick Road / Grove Hill
 - viii. Link PAR33 - Old Ipswich Road
 - ix. Link PAR34 - Turnpike Close
- 12.168 The intra-project cumulative impact assessment **[APP-282]** in Table A17.1.1 states that there will be some adverse impact on transport users

- 12.169 Whilst noise and vibration and impacts including severance, pedestrian delay, fear and intimidation are minor the combination of all these impacts could have a significant effect upon transport users. No mitigation has been confirmed at this stage.

Inter-Project Cumulative effects

- 12.170 SCC is disappointed that the applicant has not considered Traffic and Transport in their inter-project cumulative assessment **[APP-284]** with regards to the Bramford to Twinstead project which may still be being constructed when this project is planned to commence. Key areas of cumulative interproject impact are considered to be:
- i. The area around the Bramford substation. Both projects will be connecting into the substation, which is only accessed via one narrow road. Mitigation has been proposed by the Norwich to Tilbury project for junction and carriageway widening, however the increased traffic will still have an adverse impact on local residents and the village of Bramford in general.
 - ii. The length of the A140, from the A14 to the A143. Whilst not a specific construction route for this project, it is highly likely that workers will be using this road on their way to one of the projects access points. This is in addition to this road being used as an AIL route. As this is one of the main key routes through Suffolk, other NSIP projects also use this road for AIL and HGV movements. An example is the East Pye Solar Farm proposed in Norfolk, which has the A140 as a potential AIL route.
 - iii. Future projects which may interact with this project include EcoPower and elements of the Suffolk Water Recycling and Treatment Centre, which are both currently at the pre-app stage. Whilst the overlap of these projects with Norwich to Tilbury will be less than those of Bramford to Twinstead, there is still potential for an even more significant increase in traffic along the A140 and A143 corridors.
- 12.171 Experience from data with SZC and EA2 is that significant pressure is being put on the capacity of laybys and rest areas for HGVs leading to complaints from both local residents and hauliers. There is a shortage of welfare facilities for HGV drivers, and the Applicant is strongly recommended to provide such facilities and parking for legal breaks at all large site compounds.
- 12.172 There is a strong likelihood that the proposed peak construction date (August 2028) for this project will occur whilst the Bramford to Twinstead project is still in its construction phase.

- 12.173 The proposed project, in combination with Bramford to Twinstead and proposed NSIPs, will:
- i. result in a significant increase in HGV movements on the A140 and A143
 - ii. exacerbate pre-existing issues along the A140 route.
 - iii. Increase HGV movements resulting in increased delay and reduced residual capacity on the A140, A143 , A1214 and A1120.
 - iv. increase HGV movements along the A140 and A143, reducing the attractiveness of the route for users of sustainable transport, particularly cycling, as well as increasing severance in communities along the route.
 - v. reduce the attractiveness of core strategic routes, such as the 140, A1120 and A143, due to delays and longer journey times causing local traffic to switch to minor, less suitable roads.
 - vi. increase wear and deterioration of roads and structures due to the additional traffic.

Successive Inter-project Cumulative effects

- 12.174 It is likely least some of the proximal NSIPs will be delivered at the same time with overlapping cumulative transport impacts there will also be a cumulative impact through repeated successive projects impacting on specific geographical area.
- 12.175 Examples would be:
- i. Long durations of construction traffic on local roads from successive projects (e.g. A140, B1115, A1071)
 - ii. Repeated closures, traffic restrictions and diverted traffic
 - iii. Prolonged environmental impacts from construction traffic noise and vibration from successive 7-day week worked projects
 - iv. Disruption to Public Rights of Way network including repeated closure, diversion or loss of amenity benefits.

Operational Phase Impacts

Positive

- 12.176 None identified.

Neutral

- 12.177 None identified.

Negative

- 12.178 ALL movements causing disruption if no resilient route has been provided.

Decommissioning Phase Impacts

Positive

- 12.179 None identified.

Neutral

- 12.180 None identified.

Negative

- 12.181 There are potential impacts from decommissioning traffic, port traffic, abnormal indivisible loads, and upon PRow.

Comments on Application Documents

- 12.182 In what follows, SCC as the Local Highway Authority for Suffolk provides comments on relevant application documents including control documents. The purpose of this section is to illustrate where improvements to these documents should be made to address the concerns raised in the preceding sections of this chapter in relation to the assessments and mitigation measures currently included in the application.

Construction Traffic Management and Travel Plan [APP-309]

Working Hours

- 12.183 Working hours set out in the Outline CTMP are proposed to be 7 days a week. This will not allow a respite for local communities or the highway network. SCC considers that core working hours should be restricted to weekdays and Saturday mornings (excluding Bank Holidays) and that working on Saturday afternoons, Sundays, and Bank Holidays should be generally excluded but with the ability for that restriction to be varied for particular activities or particular locations with the approval of the discharging authority.

Average Vehicle Occupancy

- 12.184 The OCWTP (OCTMP Appendix B) **[APP-311]** paragraph 5.2.1 proposes a minimum car share occupancy of 1.3, which SCC welcomes as an achievable and realistic target.

HGV Movements

- 12.185 The Applicant proposes HGV deliveries on six days a week, excluding Sundays and bank holidays (para. 2.3.2). It is recommended that the wording be altered to HGV movements to clearly include trips that are not deliveries such as removal of spoil from site. Also, if working hours are restricted on Saturday afternoons (as above) so too should be HGV deliveries.
- 12.186 The OCTMP para. 5.4.14 **[APP-309]** states that “The number of HGV movements has been calculated and assessed using a comprehensive trip generation and distribution approach which is summarised within Section 6.2 of the Transport Assessment (document reference 7.11)”, however this section of the TA is blank.

Network Peak and Construction Workers Peak

- 12.187 Paragraph 5.4.13 states that construction worker LGVs are to arrive outside the existing network peaks of 0800-0900 and 1700 – 1800, however SCC is

concerned that as this is also what other NSIPs propose, new network peaks could be created outside of the existing peaks.

Definitions

12.188 It is noted in the Glossary of the OCTMP **[APP-309]** that the definition of HGV in terms of weight is that which “exceeds limits set out in terms of weight (>44 tonnes)”. SCC would consider an GV to be any commercial vehicle exceeding 3.5 tonnes, which would be commensurate with other NSIPs.

12.189 It is also noted that there is no definition for LGVs.

Management Structure and Reporting

12.190 The roles and responsibilities set out in Table 3.1 in the OCTMP must ensure that the applicant keeps overall control of the implementation and that monitoring is not fragmented across several elements of the works.

Controls

- 12.191 SCC would consider the appropriate controls reasonable
- i. HGV routes
 - ii. HGV timing
 - iii. Daily HGV cap
 - iv. Peak hour cap
 - v. With the following measured and reported
 - vi. Worker numbers
 - vii. Worker car occupancy (or worker trips)

Required Mitigation

- 12.192 In summary, the proposed application will in the construction phase:
- i. result in a significant increase in HGV movements on the A140 and A143, particularly when considered in combination with other concurrent NSIPs.
 - ii. increase HGV movements resulting in increased delay and reduced residual capacity on the A140, A143, A1120, A1214,
 - iii. add to delays where predicted future growth scenarios indicate congestion will be significant, particularly in peak periods, most noticeably to the east of Ipswich.
 - iv. increase HGV movements along the A140, A143, A1120, A1214, reducing the attractiveness of the routes for users of sustainable transport, particularly cycling, as well as increasing severance in communities along the route.

13 Landscape and Visual

Lead Authorities	Babergh District Council; Mid Suffolk District Council
Supporting Authorities	Suffolk County Council

Summary

- 13.1 The Project affects two National Character Areas within Suffolk and five East of England Landscape Typologies. Despite the scale of the project, it does not appear as though the effects of the Project on national or regional landscape character have been assessed. The Councils question the judgement of this approach considering this is a proposal of at least regional scale if not national and is identified as having significant negative operational landscape and visual effects along the whole length.
- 13.2 The Project runs through one National Landscape (Dedham Vale National Landscape) and the Stour Valley Project Area.

Key Issues

- 13.3 The Councils consider that the key issues for landscape and visual matters that will need to be addressed by the Applicant during examination are focused on appropriate and effective mitigation and compensation, including consideration of change requests put forward by SCC and BMSDC in August 2024 and are. These include:
- i. Proportionate, landscape scale compensation in the Waveney Valley and south of Diss following the decision not to provide undergrounding of the high voltage electricity line through the Waveney Valley
 - ii. Exploration of further options to mitigate the adverse impacts of the scheme around Mellis and Gislingham
 - iii. Opportunity for restoration of the historic landscape and for Biodiversity Net Gain at the poplar plantation west of Wickham Skeith
 - iv. Exploration of further options to mitigate the adverse impacts of the scheme in the Gipping Valley, through potential changes in alignment or undergrounding of the 400kV line, as well as further rationalisation of the existing 132kV and 33kV networks, south-east of Stowmarket in particular, as part of this project
 - v. Positive strategic placemaking around Bramford substation
 - vi. Effects of undergrounding on the Dedham Vale National Landscape

- vii. Consideration of additional sections of Horizontal Directional Drilling (“**HDD**”) to avoid/retain sensitive landscape features
 - viii. Comprehensive mitigation and screen planting around Cable Sealing End (“**CSE**”) compounds
- 13.4 Detailed comments on these key issues have been provided in Suffolk County Council’s Relevant Representations [**RR-3520**], Babergh District Council’s Relevant Representation [**RR-0314**] and Mid Suffolk District Council’s Relevant Representation [**RR-2540**].
- 13.5 While the Councils welcome the positive steps that have been taken to reduce the landscape impacts of the proposal, there remain several outstanding areas of concern with the current proposals, the most important of which are briefly touched upon below.

Waveney Valley

- 13.6 The withdrawal of the Waveney Valley Alternative is likely to result in long-term major adverse impacts and effects on landscape and visual amenity. Based on the comments provided in the Relevant Representations [**RR-3520**], the Councils would expect to see an appropriate package of compensation for the significant impact on the valley floor, where the powerline crosses, and for the effects on the open access land at Wortham Ling. Paragraphs 13.5.10 and 13.5.22 [**APP-229**] state that no additional mitigation is proposed within the VRA. The Councils do not understand this to mean that no additional mitigation is required.
- 13.7 The Councils consider that direct mitigation, in this area, such as planting to reduce visual effects, would be a) unlikely to be effective and b) likely to be damaging to the character of the area which consists of open heathland of Wortham Ling and sparsely wooded valley floor near the Waveney River. Rather, a package of measures would need to follow the next stage of the mitigation hierarchy (as set out in the Glossary to NPS EN-1) and compensate the harm of the project. A detailed rationale for this approach in the Waveney Valley west of Diss is set out in **Annex B** of this LIR.
- 13.8 The Councils are also concerned about the alignment of the routing between RG85 and RG87 in the vicinity of the Angles Way long-distance path on the Norfolk-Suffolk border and seek changes in this location to minimise impacts on users of this recreational route.

Mellis Common

- 13.9 Given the assessed long-term significant adverse visual effects on Mellis Common, the Councils consider that changes to the design of the powerline should be considered to reduce the adverse effects on this area.

- 13.10 The alternative of pylon towers of a lesser height should be explored and assessed, both in terms of effects on Mellis Common and on the areas of the tower locations. Photomontages demonstrating the visual effects of the alternative towers would likely be required.
- 13.11 In addition, the alignment in the vicinity of Burgate Road should be adjusted from RG108 southwards to avoid unnecessarily crossing and recrossing this road, which is well-used for recreational purposes.

Gipping Valley

- 13.12 The Councils request that the alignment is moved to the west of Creeting Hall by changing the alignment between RG161 and RG168. This would also result in reducing the adverse effects to the setting for the Grade II* Listed Creeting Hall.
- 13.13 The southern valley sides of the Gipping River retain a more intact landscape pattern and provide an important setting for the valley as well as for Stowmarket and Needham Market. Located on these southern slopes south of Stowmarket is the significant cultural heritage site of Badley Hall Farm and St Mary's Church cluster. SCC considers that it would be appropriate and reasonable to compensate for the impacts of the new 400kV powerline through a comprehensive scheme of undergrounding of the 132kV and other lower voltage lines in this area.

Positive strategic placemaking around Bramford substation

- 13.14 The Councils considers it essential that the Applicant should focus on strategic positive placemaking around Bramford substation, to address the significant adverse effects on landscape character and visual amenity in this area, resulting from high voltage electricity transmission infrastructure converging. This should include rationalisation and/or undergrounding of power lines, as well as strategic planting and placemaking at a landscape scale. The cumulative effects of the proposed reinforcement of the Bramford to Twinstead line must also be addressed in this context and acknowledged on the Norwich to Tilbury plans and drawings as well as in the assessments.

Dedham Vale AONB

- 13.15 The proposed route crosses highly sensitive landscapes, in particular the Dedham Vale AONB ("DVAONB") and there will be inevitably detrimental impacts upon the statutory landscape area and its setting as a result. A map showing the AONB is appended at **Appendix 27**.

Route alignment, Micro-siting and Limits of Deviation (LoD)

- 13.16 The Councils have concerns about the proposed Limits of Deviation (“**LoD**”) as described in section 13.9 of ES Chapter 13 – Landscape and Visual [APP-226]. The lateral and longitudinal LoD for pylons and overhead lines could, in combination and on their own, significantly alter the resulting landscape and visual effects for the worse. The Councils disagree with the Applicant, that the movement of pylons within a localised area would not be able to make the effects worse, simply because both locations would be in a category of major adverse effects. The Councils consider that at this point a finer assessment grain is required.
- 13.17 The Councils request that the final alignment, including the micro-siting of towers in sensitive key locations, is agreed with the relevant Local Planning Authority or that the limits of deviation are reduced and/or more tightly controlled in these key locations.
- 13.18 The Councils request that the pylon positions in key locations will be as shown on consented plans, unless otherwise agreed with the relevant planning authority and, where applicable, Historic England. In particular, crossing the Waveney Valley, Wortham Ling, around Mellis Common, north of Gislingham, at Wickham Skeith and through the Gipping Valley any changes and deviation should only be made in agreement with the relevant local planning authority and, where applicable, Historic England.

Approach to rationalisation of the UK Power Networks 132kV pylons and of UKPN Low Voltage 24/11 kV/33 kV and Openreach wood pole infrastructure

- 13.19 As the rationalisation and/or undergrounding of 132kV powerlines and of low voltage infrastructure along the reinforcement route from Norwich to Tilbury is expected to form an essential part of the mitigation and compensation for the scheme, the Councils consider that further technical clarity and certainty are required, in particular, regarding how this work would be managed contractually, and how it would be controlled.

Table 11: Summary of Impacts – Landscape and Visual

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
11a	Vegetation loss	Negative	Reinstatement and mitigative planting. Landscape scale restoration scheme.	NPS / NPPF / BMSDC
11b	Construction activities	Negative	Reinstatement and mitigative planting. Landscape scale restoration scheme.	NPS / NPPF / BMSDC
11c	Overhead powerline	Negative	Reinstatement and mitigative planting. Landscape scale restoration scheme.	NPS / NPPF / BMSDC
11d	CSE compounds	Negative	Reinstatement and mitigative planting. Landscape scale restoration scheme.	NPS / NPPF / BMSDC
11e	Accesses, visibility splays and haul roads	Negative	Reinstatement and mitigative planting. Landscape scale restoration scheme.	NPS / NPPF / BMSDC
11f	Work compounds	Negative	Reinstatement and mitigative planting. Landscape scale restoration scheme.	NPS / NPPF / BMSDC
11g	Effects of special qualities of DVNL	Negative	Reinstatement and mitigative planting. Landscape scale restoration scheme.	Green Future / NPS / NPPF / BMSDC
Operational Phase Impacts				
11h	Rationalisation/ Undergrounding of other overhead power lines	Positive		NPS / NPPF / BMSDC
11i	Adverse effects of special qualities and views within DVNL will gradually	Neutral		Green Future / NPS / NPPF / BMSDC

	become less pronounced			
11j	Vegetation loss		Adaptive aftercare and ongoing management of planting to ensure that the planting can fulfil its potential and, over time lessen some effects.	NPS / NPPF / BMSDC
11k	Construction activities	Negative	Adaptive aftercare and ongoing management of planting to ensure that the planting can fulfil its potential and, over time lessen some effects.	NPS / NPPF / BMSDC
11l	Overhead powerline	Negative	Adaptive aftercare and ongoing management of planting to ensure that the planting can fulfil its potential and, over time lessen some effects.	NPS / NPPF / BMSDC
11m	CSE compounds	Negative	Adaptive aftercare and ongoing management of planting to ensure that the planting can fulfil its potential and, over time lessen some effects.	NPS / NPPF / BMSDC
11n	Accesses, visibility splays and haul roads	Negative	Adaptive aftercare and ongoing management of planting to ensure that the planting can fulfil its potential and, over time lessen some effects.	NPS / NPPF / BMSDC
11o	Work compounds	Negative	Adaptive aftercare and ongoing management of planting to ensure that the planting can fulfil its potential and, over time lessen some effects.	NPS / NPPF / BMSDC
Decommissioning Phase Impacts				
11p	Landscape character and views would be returned to pre-construction (except for lost tree coverage)	Positive		NPS / NPPF / BMSDC
11q	Vegetation loss	Negative	Reinstatement of any vegetation affected by the decommissioning	NPS / NPPF / BMSDC

			works with suitable aftercare and management.	
11r	Construction activities	Negative	Reinstatement of any vegetation affected by the decommissioning works with suitable aftercare and management.	NPS / NPPF / BMSDC
11s	Overhead powerline	Negative	Reinstatement of any vegetation affected by the decommissioning works with suitable aftercare and management.	NPS / NPPF / BMSDC
11t	CSE compounds	Negative	Reinstatement of any vegetation affected by the decommissioning works with suitable aftercare and management.	NPS / NPPF / BMSDC
11u	Accesses, visibility splays and haul roads	Negative	Reinstatement of any vegetation affected by the decommissioning works with suitable aftercare and management.	NPS / NPPF / BMSDC
11v	Work compounds	Negative	Reinstatement of any vegetation affected by the decommissioning works with suitable aftercare and management.	NPS / NPPF / BMSDC
11w	Effects of special qualities of DVNL	Negative	Reinstatement of any vegetation affected by the decommissioning works with suitable aftercare and management.	Green Future / NPS / NPPF / BMSDC
11x	Cables left in situ	Negative	It may not be possible to reinstate trees over cables, resulting in vegetation pattern within corridor being permanently altered.	NPS / NPPF / BMSDC

Policy Context

National Policy

A Green Future: Our 25 Year Plan to Improve the Environment

- 13.21 As noted in the summary of Chapter 2 Recovering Nature and Enhancing the Beauty of Landscapes: “Conserve and enhance the natural beauty of our landscapes by reviewing National Parks and Areas of Outstanding Natural Beauty (AONBs) for the 21st century, including assessing whether more may be needed.”

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 13.22 Regarding the Mitigation Hierarchy, EN-1 notes that:
- 13.23 (4.2.11) “Applicants must apply the mitigation hierarchy and demonstrate that it has been applied. They should also seek the advice of the appropriate SNCB or other relevant statutory body when undertaking this process. Applicants should demonstrate that all residual impacts are those that cannot be avoided, reduced or mitigated.”
- 13.24 (4.2.12) “Applicants should set out how residual impacts will be compensated for as far as possible. Applicants should also set out how any mitigation or compensation measures will be monitored and reporting agreed to ensure success and that action is taken. Changes to measures may be needed e.g. adaptive management. The cumulative impacts of multiple developments with residual impacts should also be considered.”
- 13.25 (5.4.29) “It is vital that applicants consider the need for compensation as early as possible in the design process as ‘retrofitting?compensatory measures will introduce delays and uncertainty to the consenting process.”
- 13.26 As noted later, in the glossary of EN-1, the Mitigation Hierarchy is defined as “A term to incorporate the avoid, reduce, mitigate, compensate process that applicants need to go through to protect the environment and biodiversity.”
- 13.27 The Councils do not consider that compensation for residual landscape and visual impacts and effects resulting from the overhead line and/or cumulative effects has been sufficiently addressed within the submission.
- 13.28 (4.3.4) “To consider the potential effects, including benefits, of a proposal for a project, the applicant must set out information on the likely significant environmental, social and economic effects of the development, and show how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, following the mitigation hierarchy [...]”.

- 13.29 The application does not demonstrate, how the residual significant adverse landscape and visual effects of the pylons and overhead line will be compensated for along the length of the project.
- 13.30 (4.6.1) “Environmental net gain is an approach to development that aims to leave the natural environment in a measurably better state than beforehand. Projects should therefore not only avoid, mitigate and compensate harms, following the mitigation hierarchy, but also consider whether there are opportunities for enhancements.”
- 13.31 (4.7.5) “To ensure good design is embedded within the project development, a project board level design champion could be appointed, and a representative design panel used to maximise the value provided by the infrastructure. ...”
- 13.32 The Councils would support the principle of a Design Champion (para 4.7.5, Overarching National Policy Statement for Energy (EN-1), November 2023) being engaged sufficiently early in the development of the project to oversee the design process, primarily within highly sensitive landscapes and around substation and Cable Sealing End Compounds, where positive placemaking will be essential. Further, there would be opportunities for the Design Champion to contribute to back-checking of various alignment alternatives and to the integration of the proposals into the landscape at the detailed design, construction, and operational stages of the project, including micro-siting of pylons. As this this work will need to straddle both engineering and landscape disciplines, two key leads may be required to work in close collaboration.
- 13.33 The skillset required of a Design Champion has not been clearly defined within the National Infrastructure Strategy. The Institution of Civil Engineers (“ICE”) and the National Infrastructure Commission Design Group (“NICDG”) have produced a useful working paper ‘Defining and developing the design champion role’ (August 2022), in this respect.
- 13.34 (5.10.4) “Landscape effects arise not only from the sensitivity of the landscape but also the nature and magnitude of change proposed by the development, whose specific siting and design make the assessment a case-by-case judgement.”
- 13.35 (5.10.6) “Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.”

- 13.36 The Councils' position is that the route alignment does not minimise harm to the landscape and to visual receptors in all areas, nor that the project provides adequate compensation for residual impacts and effects.
- 13.37 (5.10.7) "National Parks, the Broads and AONBs have been confirmed by the government as having the highest status of protection in relation to landscape and natural beauty. Each of these designated areas has specific statutory purposes. Projects should be designed sensitively given the various siting, operational, and other relevant constraints. For development proposals located within designated landscapes the Secretary of State should be satisfied that measures which seek to further purposes of the designation are sufficient, appropriate and proportionate to the type and scale of the development."
- 13.38 (5.10.12) "Outside nationally designated areas, there are local landscapes that may be highly valued locally."
- 13.39 County, district and local level landscape designations, were not government policy in the late 1990s and 2000s, and Valued Landscape Assessments have not been carried out at a district wide level to replace local landscape designation. The Councils have concerns that this may result in the value of local landscapes not being fully recognised and, therefore, in harm to landscape and visual receptors not being minimised.
- 13.40 (5.10.14) "The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project."
- 13.41 (5.10.26) "Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function – for example, electricity generation output. There may, however, be exceptional circumstances, where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the Secretary of State may decide that the benefits of the mitigation to reduce the landscape and/or visual effects outweigh the marginal loss of function."
- 13.42 (5.10.27) "Adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within its development site and wider setting. The careful consideration of colours and materials will support the delivery of a well-designed scheme, as will sympathetic landscaping and management of its immediate surroundings."

- 13.43 (5.10.28) “Depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines may mitigate the impact when viewed from a more distant vista.”
- 13.44 (5.10.33) “For development proposals located within designated landscapes the Secretary of State should be satisfied that measures which seek to further purposes of the designation are sufficient, appropriate and proportionate to the type and scale of the development. The Secretary of State should ensure that any projects consented in these designated areas should be carried out to high environmental standards, including through the application of appropriate requirements where necessary.”
- 13.45 (5.10.35) “The scale of energy projects means that they will often be visible across a very wide area. The Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project.”
- 13.46 The Councils consider that the significant adverse landscape and visual effects at a wide scale need to be offset through landscape enhancement or compensation at a strategic scale.

National Policy Statement for Electricity Networks Infrastructure (EN-5), November 2023

- 13.47 (2.2.6) “[...] locational constraints identified above do not, of course, exempt applicants from their duty to consider and balance the site-selection considerations set out below, much less the policies on good design and impact mitigation detailed in sections 2.4-2.9.”
- 13.48 (2.2.8) “There will usually be a degree of flexibility in the location of the developments²³ associated substations, and applicants should consider carefully their location, as well as their design.”
- 13.49 (2.2.9) “In particular, the applicant should consider such characteristics as the local topography, the possibilities for screening of the infrastructure and/or other options to mitigate any impacts. (See Section 2.10 below and Section 5.10 in EN-1).”
- 13.50 (2.2.10) “As well as having duties under Section 9 of the Electricity Act 1989, (in relation to developing and maintaining an economical and efficient network), applicants must take into account Schedule 9 to the Electricity Act 1989, which places a duty on all transmission and distribution licence holders, in formulating proposals for new electricity networks infrastructure, to “have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of

architectural, historic or archaeological interest; and ...do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.”

- 13.51 (2.2.11) “Depending on the location of the proposed development, statutory duties under Section 85 of the Countryside and Rights of Way Act 2000, Section 11A of the National Parks and Access to the Countryside Act 1949 (as amended by Section 62 of the Environment Act 1995), and Section 17A of the Norfolk and Suffolk Broads Act 1988 may be relevant. Applicants should note amendments to each of these provisions contained in Section 245 of the Levelling Up and Regeneration Act 2023.”
- 13.52 (2.2.12) “Transmission and distribution licence holders are also required under Schedule 9 to the Electricity Act 1989 to produce and publish a statement setting out how they propose to perform this duty generally.”
- 13.53 (2.9.7) “While the government does not believe that the development of overhead lines is incompatible in principle with applicants’ statutory duty under Schedule 9 to the Electricity Act 1989, to have regard to visual and landscape amenity and to reasonably mitigate possible impacts thereon, in practice new overhead lines can give rise to adverse landscape and visual impacts.”
- 13.54 (2.9.8) “These impacts depend on the type (for example, whether lines are supported by towers or monopole structures), scale, siting, and degree of screening of the lines, as well as the characteristics of the landscape and local environment through which they are routed.”
- 13.55 (2.9.9) “New substations, sealing end compounds (including terminal towers), and other above-ground installations that serve as connection, switching, and voltage transformation points on the electricity network may also give rise to adverse landscape and visual impacts.”
- 13.56 (2.9.10) “Cumulative adverse landscape, seascape and visual impacts may arise where new overhead lines are required along with other related developments such as substations, wind farms, and/or other new sources of generation.”
- 13.57 (2.9.11) “Landscape and visual benefits may arise through the reconfiguration, rationalisation, or undergrounding of existing electricity network infrastructure. Though mitigation of the landscape and visual impacts arising from overhead lines and their associated infrastructure is usually possible, it may not always be so, and the impossibility of full mitigation in these cases does not countermand the need for overhead lines.”

- 13.58 (2.9.12) “However, in nationally designated landscapes (for instance, National Parks, The Broads and Areas of Outstanding Natural Beauty) even residual impacts may well make an overhead line proposal unacceptable in planning terms. (See Section 2.9.20 below for guidance on this case).”
- 13.59 (2.9.13) “Where possible, applicants should ensure that the principles detailed in Sections 2.11.16-2.11.19 [sic] below are embodied in the design of their proposed overhead line route and its associated infrastructure. Applicants should also offer proposals (for instance those detailed in Section 2.10 [sic] below) for additional mitigation.”
- 13.60 (2.9.14) “Where the nature or proposed route of an overhead line will likely result in particularly significant landscape and visual impacts, as would be assessed through landscape, seascape and visual impact assessment, the applicant should demonstrate that they have given due consideration to the costs and benefits of feasible alternatives to the overhead line. This could include – where appropriate – re-routing, underground or subsea cables and the feasibility e.g. in cost, engineering or environmental terms of these. Applicants should note the position on nationally designated landscapes at section 2.9.20 below.”
- 13.61 (2.9.15) “The ES should set out details of this consideration, including the applicant’s rationale for eschewing feasible alternatives to the overhead line, and the mitigation cost-calculation methodology that this rationale may rely upon.”
- 13.62 (2.9.16) “The Holford Rules – guidelines for the routing of new overhead lines – were originally set out in 1959. These guidelines, intended as a common-sense approach to overhead line route design, were reviewed and updated by the industry in the 1990s, and they should be embodied in the applicants’ proposals for new overhead lines”
- 13.63 (2.9.17) “In brief, the Holford Rules state that applicants should:
- i. avoid altogether, if possible, the major areas of highest amenity value, by so planning the general route of the line in the first place, even if total mileage is somewhat increased in consequence;
 - ii. avoid smaller areas of high amenity value or scientific interest by deviation, provided this can be done without using too many angle towers, i.e. the bigger structures which are used when lines change direction;
 - iii. other things being equal, choose the most direct line, with no sharp changes of direction and thus with fewer angle towers;

- iv. choose tree and hill backgrounds in preference to sky backgrounds wherever possible. When a line has to cross a ridge, secure this opaque background as long as possible, cross obliquely when a dip in the ridge provides an opportunity. Where it does not, cross directly, preferably between belts of trees;
 - v. prefer moderately open valleys with medium or moderate levels of tree cover where the apparent height of towers will be reduced, and views of the line will be broken by trees;
 - vi. where country is flat and sparsely planted, and unless specifically preferred otherwise by relevant stakeholders, keep the high voltage lines as far as possible independent of smaller lines, converging routes, distribution poles and other masts, wires and cables, so as to avoid a concentration of lines or ‘wirescape’ and
 - vii. approach urban areas through industrial zones, where they exist; and when pleasant residential and recreational land intervenes between the approach line and the substation, carefully assess the comparative costs of undergrounding.”
- 13.64 (2.9.18) “The Horlock Rules – guidelines for the design and siting of substations – were established by National Grid in 2009 in pursuance of its duties under Schedule 9 to the Electricity Act 1989. These principles should be embodied in applicants’ proposals for the infrastructure associated with new overhead lines.”
- 13.65 (2.9.19) “In brief, the Horlock Rules state that applicants should:
- i. consider environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects in order to keep adverse effects to a reasonably practicable minimum.
 - ii. 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.
 - iii. protect as far as reasonably practicable areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and ground water sources and nature conservation areas.
 - iv. take advantage of the screening provided by land form and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum.

- v. keep the visual, noise and other environmental effects to a reasonably practicable minimum.
 - vi. consider the land use effects of the proposal when planning the siting of substations or extensions.
 - vii. consider the options available for terminal towers, equipment, buildings and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum.
 - viii. use space effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation.
 - ix. make the design of access roads, perimeter fencing, earth-shaping, planting and ancillary development an integral part of the site layout and design, so as to fit in with the surroundings.
 - x. in open landscape especially, high voltage line entries should be kept, as far as possible, visually separate from low voltage lines and other overhead lines so as to avoid a confusing appearance.
 - xi. study the inter-relationship between towers and substation structures and background and foreground features so as to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal towers on prominent ridges should be minimised by siting towers against a background of trees rather than open skylines.
- 13.66 (2.9.20) “Although it is the government’s position that overhead lines should be the strong starting presumption for electricity networks developments in general, this presumption is reversed when proposed developments will cross part of a nationally designated landscape (i.e. National Park, The Broads, or Area of Outstanding Natural Beauty).”
- 13.67 (2.9.21) “In these areas, and where harm to the landscape, visual amenity and natural beauty of these areas cannot feasibly be avoided by re-routing overhead lines, the strong starting presumption will be that the applicant should underground the relevant section of the line.”
- 13.68 (2.9.22) “However, undergrounding will not be required where it is infeasible in engineering terms, or where the harm that it causes (see section 2.11.4) is not outweighed by its corresponding landscape, visual amenity and natural beauty benefits. Regardless of the option, the scheme through its design, delivery, and operation, should seek to further the statutory purposes of the designated landscape. These enhancements may go beyond the mitigation measures needed to minimise the adverse effects of the scheme.”

- 13.69 (2.9.23) “Additionally, cases will arise where – though no part of the proposed development crosses a designated landscape – a high potential for widespread and significant adverse landscape and/or visual impacts along certain sections of its route may result in recommendations to use undergrounding for relevant segments of the line or alternatively consideration of using a route including subsea cabling.”
- 13.70 (2.10.6) Additionally, there are more specific measures that might be taken, and which the Secretary of State could mandate through DCO requirements if appropriate, as follows:
- i. landscape schemes, comprising off-site tree and hedgerow planting, are sometimes used for larger new overhead line projects to mitigate potential landscape and visual impacts, softening the effect of a new above ground line whilst providing some screening from important visual receptors. These may be implemented with the agreement of the relevant landowner(s), or the developer may compulsorily acquire the land or land rights in question. Advice from the relevant statutory authority may also be needed; and
 - ii. screening, comprising localised planting in the immediate vicinity of residential properties and principal viewpoints can also help to screen or soften the effect of the line, reducing the visual impact from a particular receptor.”

National Planning Policy Framework, December 2024

- 13.71 (187) “Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 13.72 a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- 13.73 b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;”

Local Policy

Babergh and Mid Suffolk Joint Local Plan – Part 1, November 2023

- 13.74 Babergh & Mid Suffolk Joint Local Plan – Part 1, Policy SP09 titled “Enhancement and Management of the Environment” and requires proposals to:
- 13.75 (1) “The Councils will require development to support and contribute to the conservation, enhancement and management of the natural and local

environment and networks of green infrastructure, including: landscape, biodiversity, geodiversity and the historic environment and historic landscapes”

- 13.76 Babergh & Mid Suffolk Joint Local Plan – Part 1, Policy SP10 titled “Climate Change” requires proposals to mitigate and adapt to climate change by:
- 13.77 (c) “Applying existing and innovative approaches to sustainable design and construction”
- 13.78 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP17 titled “Landscape” seeks to protect and enhance landscape character including the requirement for a Landscape & Visual Impact Assessment for larger developments “to identify ways of avoiding, reducing and mitigating any adverse effects and opportunities for enhancement”.
- 13.79 Babergh & Mid Suffolk Joint Local Plan – Part Policy LP18 titled “Area of Outstanding Natural Beauty” refuses major development within AONBs “other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest.”
- 13.80 Babergh & Mid Suffolk Joint Local Plan – Part Policy LP24 titled “Design and Residential Amenity” states that “All new development must be of high-quality design, with a clear vision as to the positive contribution the development will make to its context.” The policy gives guidance on how this should be achieved and what standards proposals must meet.
- 13.81 Babergh & Mid Suffolk Joint Local Plan – Part Policy LP25 titled “Energy Sources, Storage and Distribution” states that “Renewable and low carbon, decentralised and community energy generating proposals will be supported subject to:
- 13.82 (a) “The impact on (but not limited to) landscape, highway safety, ecology, heritage, residential amenity, drainage, airfield safeguarding and the local community has been fully taken into consideration and where appropriate, effectively mitigated;”
- 13.83 (c) “The impact of on and off-site power generation infrastructure being acceptable, having regard to other policies in this Plan”
- 13.84 (d) “The provision of mitigation, enhancement and compensation measures when necessary”
- 13.85 (3) “Where proposals for renewable and low carbon energy impact on nature conservation sites, the Areas of Outstanding Natural Beauty, or the setting of heritage assets (including conservation areas), the applicant must be able to convincingly demonstrate that potential harm resultant from development can be effectively mitigated and that there are no alternative

sites available within the District or for community initiatives within the area which it is intended to serve. This includes providing underground power lines and cabling.”

Other Relevant Local Policy

13.86 None identified.

Relevant Representation

13.87 Suffolk County Council’s further comments on Landscape and Visual can be found between paragraphs 92 – 197 in its Relevant Representation **[RR-3520]**. Babergh District Council’s Relevant Representation **[RR-0314]** and Mid Suffolk District Council’s Relevant Representation **[RR-2540]** also contains the Councils’ comments on Landscape and Visual Matters.

Evidence Base

Comments on the Landscape and Visual Assessment

Landscape assessment

Landscape designations

- 13.88 In relation to local landscape designations, paragraph 13.2.9 of Document 6.13.A2 Environmental Statement Appendix 13.2 Landscape Baseline and Assessment **[APP-228]** states, ‘There are no locally designated landscapes within the 3 km Study Area² without reference to the fact that the districts through which the Project line passes no longer designate landscapes locally, in keeping with National policy from the late 1990s and 2000s. It is concerning that judgements may be being made regarding landscape value and sensitivity based on an assumption that because there are no designations, the landscape lacks value. A caveat to the statement in the documentation needs to be made that recognises that fact.
- 13.89 Whilst nationally protected landscapes such as AONBs and their settings, have the benefit in landscape and visual terms of undergrounding, the remaining rural landscapes along the route are not identified as a constraint when it comes to alignment, even though some of these are of strong and distinctive local character, and could be identified as being ‘Valued Landscapes²’ as, in fact, the Waveney Valley has been (see Appendix 22 to this LIR). Neighbourhood policies with regards to Areas of Local Landscape Sensitivity (ALLS), should be considered in the ES.
- 13.90 While undergrounding through the DVAONB and a section of the Stour Valley (which provides the setting of the DVAONB) and careful design, micro-siting and screening of the sealing end compounds would significantly reduce the landscape and visual impacts during the operational phase of the development, it is acknowledged that replacement planting would take years to become effective and, in some areas, where cables are present, it would not be possible to re-establish trees. Given current and emerging climate change impacts, establishment of planting may be challenging, making it necessary that the design of planting schemes will be climate adaptive.

Landscape value

- 13.91 The Councils welcome the inclusion of landscape value criteria as part of the landscape value assessment methodology, as identified in Table A13.1.4 Factors contributing to landscape value **[APP-227]**, and that they are based on The Landscape Institute’s *Technical Guidance Note (TGN)*

02/21 Assessing landscape value outside national designations (Landscape Institute, 2021).

- 13.92 However, there remain some concerns that this value assessment has been carried out solely at a character type level/district level rather than at a study area/setting level, looking at the details of the landscape value within the Order Limits and their setting. As a result, they do not necessarily address the value of the key characteristics of the landscapes in the study area that are directly affected. This could result in the downplaying of specific qualities and value related to the development corridor itself, particularly of river valleys.
- 13.93 There are further concerns that the detailed assessments identified in Annex A to Appendix 13.2: Landscape Baseline and Assessment **[APP-228]** appear to undervalue factors, particularly in relation to ‘*Distinctiveness*’, ‘*Perceptual*’ and ‘*Functional*’ criteria. For instance, for the Ancient Plateau Claylands, the Councils query the identification of the cultural value, distinctiveness and perceptual character of the landscape as **low-medium** as this appears to ignore the historic landscape character detailed in the Suffolk Landscape Character Assessment, including:
- i. The Field pattern of ancient enclosure.
 - ii. Dispersed settlement pattern of medieval origin with medieval greens or tyes
 - iii. The two largest surviving greens in Suffolk – Mellis Green (218 acres or 88ha) and Wortham Long Green (102 acres or 41ha)
- 13.94 The enclosure of the large greens has left a very distinct landscape with very straight ‘surveyors’ roads
- 13.95 The area has a rich store of traditional timber-framed buildings of medieval and Tudor date
- 13.96 Although agricultural intensification in the 20th century has thinned out the historical field patterns, enough remains to give a distinctive character to the landscape.
- 13.97 In addition, Mellis was the home of Roger Deakin, nature writer and best-selling author of ‘*Waterlog*’ co-founder of Common Ground in the 1970s and champion of local distinctiveness. The Roger Deakin Award was set up in his honour by the Society of Authors.

Visual assessment and its presentation

Study Area/Theoretical visibility of Project/ZTV

- 13.98 The Councils note that within Suffolk there appears to be only one viewpoint outside the 3km study area (VP3.20) and that none were considered at a

greater distance of up to 5 km from the scheme. The Councils consider that there is potential for significant visual effects beyond the 3 km study area, for example where there are particularly sensitive visual receptors and where topography allows more far-reaching views, and that there may also be additional viewpoints closer to the scheme that should have been assessed.

- 13.99 Figure 13.10 - Landscape and Visual - ZTV of Bramford Substation extension **[APP-246]** shows that theoretical visibility of the whole structure of the substation is extensive and goes way beyond the 3 Km study area in several places, especially to the west/south-west/north-west.
- 13.100 The Councils consider that visual assessment should extend into sensitive areas beyond the 3Km line to demonstrate the effects are minor.
- 13.101 The ZTV of the Wenham Grove CSE Compound (Figure 13.11 - Landscape and Visual -ZTV of Wenham Grove CSE Compound **[APP-247]**) is largely contained within the 3 KM study area. However, the top half of the structure is theoretically visible within the Dedham Vale National Landscape.
- 13.102 Figure 13.12 - Landscape and Visual - ZTV of East Anglia Connection Node (EACN) **[APP-248]**, shows that the whole structure of the EACN is theoretically visible from within the Essex section of Dedham Vale National Landscape, however not from within Suffolk.
- 13.103 Figure 13.9 - Landscape and Visual - ZTV of Proposed 400kV Overhead Line by Project Section proportions of structures visible version **[APP-245]** indicates relatively widespread theoretical visibility of the whole pylon structure and overhead line both within the 3 km study area and beyond 5Km, including from villages, the PROW network, National Cycle Network routes in this area, from the rural lanes and road network. This highlights how widespread the potential significant negative landscape and visual effects of the scheme are and suggests that some visual assessment needs to extend beyond the 3Km study area.

Number of viewpoints

- 13.104 The Councils welcome the 206 viewpoint assessments that have been carried out over the whole project length which is a considerable increase on the number presented in the PEIR (89 viewpoints), but note that, when applied over the 184km of the project, this still only translates to just over one viewpoint per km and inevitably leaves considerable gaps. (In comparison, National Grid's Bramford to Twinstead project had an average of 5.3 viewpoints per km.) Such gaps in the provision occur in VRAs B1 Wortham, VRA B3 Mellis, VRA B4 Finningham and Gislingham, VRA B6 Stowupland, VRA B11 Barking and Willisham (long-distance VPs) and VRA

C4 Chattisham (long-distance VPs). The shortfall is particularly noticeable from beyond 1.5 Kms and is in danger of undervaluing the significance of the effects, particularly on the PROW network.

Value of Views

- 13.105 The value of the views has been judged largely on identified viewpoints and promoted views in tourist-focussed documents. However, the Councils consider that the ES should demonstrate how the assessment has considered sensitive viewpoints identified in Neighbourhood Plans, and that the value of views should be judged by how they relate to the LCA. The value of view indicators as presented in the assessment downplay the subtle character of East Anglian landscapes and appear concentrated on topography, woodland and water. This approach pre-determines visual value based on certain characteristics and not others.

Visual Receptors and Groupings

- 13.106 The LVIA groups the visual receptors into Visual Receptor Areas. These Visual Receptor Areas have been identified based on geographical location, shared landscape characteristics and a similarity in the nature of views.
- 13.107 The Councils understand that, as the Project area is so large, the Visual Receptor Areas are a pragmatic way of organising the data, but fear clarity and detail around individual receptors has been lost as a result.

Viewpoint map

- 13.108 SCC considers the base map used for the viewpoint map to be at an unsuitable scale. It would have been helpful if Figure 13.7 - Landscape and Visual - Visual Receptors and Viewpoints, (Doc Ref 6.13.F7, [APP-243]) had used the same base map as Figure 4.1 – Project Description - Proposed Project Design (Doc Ref: 6.4.F1, A [APP-133]) and indicated the viewing direction with a cone.
- 13.109 The location maps on the viewpoint assessment pages alleviate the coarseness of the viewpoint map to some extent; however, the scale of the viewpoint map suggests a density in viewpoints that is not matched in the field.

Arrangement and presentation of visualisations

- 13.110 The Councils welcome the clear presentation of the viewpoints. It is useful to have the viewpoint analysis next to the viewpoint photographs and visualisations. This has been further improved by the revised layout of the viewpoint assessment pages with clear location maps with recognizable reference points, and bigger and clearer viewpoint numbers, title and viewing directions.

- 13.111 However, the sequence of the viewpoint assessment pages remains confusing, as there is no consistent sequence from north to south along the alignment. It appears that viewpoints that were added later are presented later in the document, and therefore fall outside the geographical sequence, which makes reviewing more difficult.

Comments on Visual effects assessment

- 13.112 The assessment acknowledges that at Year 1 of operation, there would ‘...be significant adverse visual effects on visual receptors within most of the VRAs which are directly affected by the Project’. This is related to the introduction of the proposed overhead line, CSE compounds, substations or substation extensions into close to medium distance views.
- 13.113 The Councils acknowledge that by Year 15 of operation effects on some visual receptors in proximity to CSE compounds, substations and substation extensions would reduce as a result of landscape mitigation within Environmental Areas. However, this recognises that the significant adverse visual effects caused by pylons and overhead lines are not mitigatable and would not reduce.
- 13.114 The Councils consider that sequential effects and night-time working have not been sufficiently addressed in the viewpoint analysis.
- 13.115 For viewpoints and visual receptors in particularly sensitive locations and/or in close proximity to the route, the potential changes within the proposed Limits of Deviation could result in significant changes in visual effects. These potential changes in effects should have been discussed or at least highlighted.

Assumptions used in the ES in relation to Limits of Deviation and Order Limits

- 13.116 The Flexibility assumptions in Table 13.7 [APP-226] present the lateral, longitudinal and vertical Limits of Deviation (“LoD”) in the route alignment, LoD for substations and CSE compounds, underground cables and removal of 132kV, 33kV and 11kV overhead lines.
- 13.117 The assessment concludes in paragraphs 13.9.4 - 13.9.10 that the flexibility within the Limits of Deviation would not result in change to the level or significance of effects on landscape character or visual receptor areas (“VRA”). This is backed up with Table 13.8 Effects on visual receptors at viewpoints in relation to flexibility within the LoD.
- 13.118 The Councils consider that changes within the Limits of Deviation could potentially lead to very different outcomes for individual visual receptors, vegetation losses and local landscape character. Especially in the areas where the effect would remain major and significant (adverse), the effect

could be made worse within this category. To give two examples, at Blood Hill, south of Offton, between The Clamps and Bleak Hall, (RG197 – RG200) the proposed LoD could result in worse visual effects for Bleak Hall and additional vegetation loss at The Clamps. If use was made of the longitudinal LoD at JC12 south of Burstall Lane, the effects could be worse for adjacent residential receptors.

Baseline surveys in relation to landscape and visual amenity

Hedgerow surveys

- 13.119 Vegetation loss assumptions are shown on the Tree and Hedgerows to be Removed of Managed Plans **[APP-048 – APP-055]**. These show the locations of trees and hedgerows, but do not identify them. There is a welcome differentiation between Veteran trees and other trees (without indication of their quality or condition). There is no differentiation of Important Hedgerows under the 1007 Hedgerow Regulation and other hedges. The Councils consider that plans need to be provided, at a suitable scale, that present the full picture of existing vegetation, its quality, and required management/removal with quantifications.
- 13.120 The Councils welcome the quantifications presented in the Arboricultural Impact Assessment (“**ArbIA**”) **[APP-236]**, helpfully divided into the project sections.
- 13.121 The loss of hedges is quantified in Table 8.23 in Chapter 8 Ecology and Biodiversity Revision B, where they are listed as Habitats of Principal Importance. According to the table 30.14 km of hedgerow are to be temporarily lost and 1.13 km are permanently lost. The table does not separate out Important Hedgerows under the 1997 Hedgerow Regulations.
- 13.122 Table A8.3.10 in Annex E of the Hedgerows Regulations Report (Final Issue A) **[APP-161]** provides a useful overview by project section of surveyed hedges and whether and why they may be considered important. It stops short, however, to provide the length for these hedges the species composition and the length that will require management or removal. Annex A. Figures lists only ‘Potentially important hedgerows that were not chosen for survey’ but not the hedges that were surveyed and does not show their locations. The Councils consider that this information needs to be supplied. If this data has been shared, the Councils would welcome, if this data was made more easily accessible.
- 13.123 There should be a clear listing of the length of each hedge and of the length that is permanently or temporarily lost, how many kilometres will be coppiced and how many kilometres of hedgerow will be retained through HDD and/or Traffic Management measures. This should be done for each

section of the scheme to inform the mitigation requirements in different areas and needs to include hedge losses to all enabling works, such as haul roads, site compounds, access points (including visibility splays) and all works associated with the removal and undergrounding of section of 132kV power lines and other required associated works that need to be undertaken by Third Parties the enable the Scheme.

- 13.124 Any important hedgerows that are to be removed should be listed in a Schedule (Removal of Important Hedgerows) in the DCO and identified on an appropriate plan.
- 13.125 No work should be allowed to commence until full and complete hedgerow and tree surveys have been carried out. This is necessary to inform the baseline against which Biodiversity Net Gain and the success of the LEMP need to be assessed and to agree replacements as part of the landscaping scheme.
- 13.126 The Councils consider that important hedgerows for the purposes of this scheme should include:
- 13.127 Those meeting the Hedgerow Regulations (1997), including the criteria for Archaeology, History, Wildlife and Landscape as listed in Schedule 1 of the Regulations. If bat surveys identify 20 or more passes by bats the hedgerow should be considered important as a bat corridor.
- 13.128 All the hedgerows where one or more passes of a barbastelle have been recorded - due to the rarity of the species and margin for error in recording. The Regulations do not appear to set out a basis for a threshold of 5 passes.
- i. Those that perform an important visual function.
 - ii. To enable full understanding and assessment of locations of important hedges, and areas, where either Horizontal Directional Drilling (“HDD”) needs to be undertaken, or off-setting of residual impacts needs to be agreed, SCC would ask the Applicant to:
 - iii. Append a column which identifies, by reference to the Hedgerow Regulations (1997), why hedgerows are considered important.
 - iv. Display the above hedges on a colour – coded map of an appropriate scale, distinguishing between the different criteria. This should also include the additional hedgerows covered by points 2 (bat passes) and 3 (visual importance) above.
 - v. Confirm that the hedgerows in the DCO limits have been assessed against all the criteria in the hedgerow regulations, regarding, for example the presence of other protected species (Part II 6 (3)) and proximity to rights of way (Part II 8).

- vi. Provide photos of each of the hedgerows which fall within the definition of 1, 2 and 3 above as and in accordance with point C. This will provide a reference for the baseline.
- vii. Confirm which hedgerows the Applicant is proposing to HDD.

Trees

- 13.129 The Councils welcome the Arboricultural Impact Assessment (“**AIA**”) and Tree Survey in accordance with BS 5837:2012 Trees in relation to design, demolition and construction. This data should be used to inform the detailed design stage and micro-siting of all works, to further reduce impacts on trees, in particular irreplaceable habitats, such as veteran trees.
- 13.130 For the detailed design stage, there should be a clear, revised record and audit of how many trees are lost, how many need to be pruned or coppiced (please define these terms) and how many would be retained. The trees which are affected by such works will need to be clearly identified and shown on a suitably scaled plan. This needs to be done for each section/stage of the scheme to inform the mitigation requirements in different areas and needs to include the impacts and effects of all enabling works, such as haul roads, site compounds, access points and all works associated with the removal and undergrounding of section of 132kV power lines and other required associated works that need to be undertaken by Third Parties to enable the Scheme.
- 13.131 No works should be allowed to commence until a full Arboricultural Impact Assessment (including Tree Survey and Tree Protection Plan) and an Arboricultural Method Statement, (including location specific special construction method statements, where works are to be carried out within rootzones of trees that are to be retained) in accordance with BS 5837:2012 are submitted to and agreed with the relevant LPA in writing. The Councils consider that it is essential that this is secured in the DCO and welcomes that this is addressed in the Outline LEMP.
- 13.132 No article in the DCO should authorise any works to any ancient or veteran tree or to any tree subject to a tree preservation order. Such works, if demonstrated to be unavoidable, should be agreed with the relevant LPA on a case-to-case basis so that appropriate compensation can be agreed and secured.
- 13.133 The trees that are being lost should be appropriately evaluated by using an appropriate asset-based tree valuation system which calculates the replacement value of each tree and the benefits it provides in terms of carbon sequestration, carbon storage, air pollution removal and rainwater retention. This is to ensure that compensation measures are met for any

replacement planting for the loss of those ecosystem services. Suffolk County Council usually considers that any tree lost to the scheme needs to be replaced with three replacement trees.

Local Impact Assessment

Construction Phase Impacts

Positive

- 13.134 None identified.

Neutral

- 13.135 None identified.

Negative

- 13.136 Significant adverse landscape effects during construction are predicted for all of the LCAs and LCTs which would be directly affected by construction activity within the Order Limits of the Project as well as the surrounding landscape, up to approximately 1.5 km distance.
- 13.137 Significant adverse effects during construction are also predicted for visual receptors within all Visual Receptor Areas (“**VRA**”) that would be directly affected by construction activity within the Order Limits.
- 13.138 Significant adverse effects during construction are predicted on four special qualities of the Dedham Vale National Landscape. A further five special qualities would experience adverse effects below the significance threshold.
- 13.139 The Councils consider that the adverse effects, especially visual effects, could extend beyond 1.5km, especially in open and/or undulating landscapes, where multiple pylons and overhead line are visible.

Operational Phase Impacts

Positive

- 13.140 Rationalisation/ Undergrounding of other overhead power lines would have some positive effects.

Neutral

- 13.141 Adverse effects on special qualities and views within DVAONB would gradually become less pronounced, as land uses are largely restored and reinstatement planting matures, even though no trees could have been planted over the cables.

Negative

- 13.142 At the operational stage it is identified that significant landscape effects are predicted within 1.5km of the project line. However, many of the judgements suggest these impacts are moderate significant rather than major significant and only extend to 0.5km, which the Councils question, especially where multiple pylons of 50m height are visible in sequence and

coupled with the overhead line, and often in landscapes where intervisibility is high.

- 13.143 At Year 1 of operation, there would be significant adverse visual effects on visual receptors within most of the VRAs which are directly affected by the Project, around CSE compounds, in relation to overhead lines and the underground cable corridor, largely resulting from vegetation loss.
- 13.144 By year 15 some of the adverse visual effects would reduce, around CSE compounds and along the cable corridor, where the effects may fall below the significance threshold. However, the adverse visual effects of the proposed overhead line would remain unchanged.
- 13.145 The visualisations demonstrate that, within Suffolk, the landscapes affected by the Project are substantially undeveloped and rural, often with high intervisibility due to large scale flat or gently undulating landform and/or shallow river valleys. In these locations the scale of the pylons and overhead wires results in the effect of industrialising the countryside in places up to 2Km away. These are often landscapes without existing significant detractors.
- 13.146 At the operational stage impacts are likely to be major significant rather than moderate significant beyond 0.5Kms.
- 13.147 It is expected that, over time, the adverse effects on the special qualities of the Dedham Vale National Landscape would reduce to below the significance threshold.
- 13.148 Even where the effects are deemed not significant, the character of the landscape is changed over a much wider area, with proposed overhead lines reducing the provision of what GLVIA3 (Page 18. Para 2.11) describes as:
- i. Opportunities for aesthetic enjoyment
 - ii. A sense of place and a sense of history which contributes to individual, local, national and European identity.
 - iii. Inspiration for learning, as well as for art and other forms of creativity
- 13.149 The Residential Amenity Assessment **[APP-233]** and **[APP-234]** concluded that no instances have been found within Suffolk where effects on Residential Visual Amenity would be so great that the Residential Visual Amenity Threshold would be breached.

Decommissioning Phase Impacts

- 13.150 Decommissioning effects have not been assessed in ES Chapter 13 Landscape and Visual **[APP-226]**

Positive

- 13.151 Once completed, it would be expected that, over time, as mitigative planting re-establishes, the removal of the overhead infrastructure would result in beneficial effects for the landscape character of the affected LCTs and LCAs, as well as for visual receptors and the special qualities of the Dedham Vale National Landscape.

Neutral

- 13.152 None identified.

Negative

- 13.153 The Councils expect that during decommissioning the adverse effects could be comparable with those during construction.
- 13.154 If cables are left in situ, it may still not be possible to reinstate trees in those areas, which would leave the vegetation pattern within the corridor permanently altered.

Cumulative Effects*Intra-cumulative effects*

- 13.155 At paragraph 17.4.17 of ES Chapter 17 - Cumulative Effects **[APP-281]** the common receptors that have potential to give rise to intra-project cumulative effects and therefore included in the assessment are identified only as Land and Community Assets, Development Land and Businesses, and Pedestrians, Cyclists and Horse Riders and these only at Construction Stage. The Councils are concerned that no intra-project cumulative effects are identified at the Construction and Operational Stage for Agricultural and Soil, Landscape, Ecology and Historic receptors.
- 13.156 Significant cumulative effects at the Construction stage are identified on Pedestrians, Cyclists and Horse Riders in many Visual Receptor Areas (“VRA”) and yet Paragraph 17.4.21 **[APP-281]** identifies ‘... no additional mitigation measures were identified in addition to those already identified within the environmental topic assessments’. The decision-making assumptions that gave rise to these conclusions need clarifying. In these circumstances the Councils would argue that a compensatory sum should be provided as part of a side agreement for significant cumulative effects that cannot be further mitigated.
- 13.157 Paragraph 17.4.18 **[APP-281]** identifies that ‘No effects on common receptors during the operation (and maintenance) phase of the Project have been identified which could give rise to intra-project cumulative effects and are therefore not considered further.’ The Councils query this in relation to Agricultural and soil receptors, Landscape, Ecology and Historic receptors.

Inter-cumulative effects

- 13.158 A large number of significant landscape and visual effects associated with the Project have been identified, as reported in ES Chapter 13: Landscape and Visual **[APP-226]**. Based on the data available on the other developments, the assessment identified 47 shortlisted other development with the potential to contribute to significant inter-project effects on landscape and visual receptors during construction, and 34 during operation (and maintenance).
- 13.159 These other developments have the potential to contribute to major and significant inter-project effects on Landscape Character Types (LCT) or Visual Receptors Areas (VRA). Despite this, para 17.5.58 **[APP-281]** states ‘No additional mitigation measures beyond those proposed in Chapter 13: Landscape and Visual **[APP-226]** have been identified’. While the Councils agree that it would not be possible to mitigate these due to scale of the works and the height of the pylons, the Councils consider that significant compensation in the form of a funding package should be secured under a side agreement in partnership with the relevant authorities and environmental partners in order to create landscape enhancement elsewhere within the character area, district or county, on third party land.

Comments on Application Documents

Outline Landscape and Ecological Management Plan (oLEMP) and Appendices [AS-046]

- 13.160 SCC broadly welcomes the Outline LEMP.
- 13.161 SCC welcomes that the working swathe, will be reduced to 12m, when a hedgerow is being crossed (paragraph 8.3.2, Outline LEMP Doc Ref 7.4). It should also be anchored in the OLEMP, as well as the CoCP and REAC that the default for vegetation management for temporary visibility splays will be coppicing rather than removal of the hedgerows.
- 13.162 SCC welcomes that and Arboricultural Impact Assessment and Plan has been provided at submission, which greatly aids the understanding of the effects of the proposals on high category trees. It is noted that an Arboricultural Method Statement (“**ArbMS**”) (including Tree Protection Plan) will be produced following detailed design and agreed with the relevant LPAs prior to construction activity commencing.
- 13.163 Areas that have not yet been fully assessed, because the land could not be accessed (paragraph 7.2.1) will need to be assessed in due course.
- 13.164 The Councils welcome that Level 3 Protection for trees will be the default level of protection and that only with ArbCoW sign off may lower levels be implemented (paragraph 7.3.6).
- 13.165 The Councils welcome that all barriers and ground protection to protect trees will be installed prior to construction at each relevant location. The Councils would welcome further clarification with regards to tree and vegetation protection during pre-commencement works.
- 13.166 The Councils welcome Table 7.1 Mitigation hierarchy for veteran trees, but queries whether the measures described will be agreed with the relevant local authority.
- 13.167 The Councils welcome the proposed protection of hedgerows Section 7.6 including the 5m root protection buffer zone (paragraph 7.6.3) but would welcome further detail with regards to minimised working widths and baseline evidence (for example photographic and descriptive evidence following on from the General Approach, paragraph 7.1.3).
- 13.168 With regards to woodland and tree removal the Councils welcome the reference to the CoCP commitment in paragraph 8.2.3, which will provide further arboricultural surveys post detailed design and prior to construction to further reduce/minimise any required tree and hedgerow removal. The Councils consider that these surveys and any subsequent changes should be carried out prior to pre-commencement activities of the relevant phase.

- 13.169 Tree and hedgerow removals at bellmouths and the resulting visibility splays should be minimised. Where mature trees are present within the visibility splays and the access is temporary, traffic management should by default be considered in preference to tree removal. The Councils consider that this needs to be anchored into the Construction Traffic Management Plan (“**CTMP**”) and the Code of Construction Practice (“**CoCP**”).
- 13.170 Regarding the natural regeneration of woodland (paragraph 9.3.9) the Councils would welcome further clarification how and by whom the potential need of supplementary planting of saplings will be ascertained.
- 13.171 The Councils welcome the commitments by the Applicant with regards to External Lighting in the Outline CoCP [**APP-300**] and the Outline LEMP [**AS-046**] but considers that the occasions for nighttime working and working outside core hours, which require lighting, should be more clearly defined. SCC also considers that any permanent external lighting will need to be agreed with the relevant local authority as part of the Discharge of Requirements as part of the detailed design.

Post Construction Aftercare and Monitoring

- 13.172 Given the emerging changes in weather patterns and the resulting difficulties to establish new planting, the Councils consider that for trees a minimum of 10 years and for woodland planting a minimum of 15 years aftercare is more realistic than the standard 5 years of aftercare. For natural woodland regeneration even longer time scales may be required.
- 13.173 The Councils advocate that aftercare and management periods are extended, if mitigation goals are not achieved (dynamic aftercare).
- 13.174 It is noted that the proposals for management and aftercare for the natural regeneration of woodland are not covered by any requirements in the draft DCO.
- 13.175 This means, planting will need to reach agreed growth and survival rates in order to be moved forward into the next year of agreed aftercare. This may result in different duration of aftercare periods for different types of planting (hedge/scrub/trees/ woodland) or different areas within the scheme.
- 13.176 The rationale behind this is as follows: If the reinstatement planting cannot achieve a return to the baseline conditions which existed prior to the development, whether this is because certain elements of habitats cannot be reinstated (such as trees) or because implemented reinstatement planting has failed during the aftercare period, this will impact on, and reduce the percentage of BNG that is achieved elsewhere on site. In other words, more biodiversity measures would then need to be implemented to achieve 10% BNG.

- 13.177 The Councils therefore consider that the aftercare for reinstatement planting needs to be linked to considerations about BNG. This may result in extended aftercare periods, if successful establishment of the reinstatement planting is not achieved within five years. The success, or lack thereof, of the reinstatement planting needs to be considered, when the success of the biodiversity enhancement measures is evaluated, and management measures are reconsidered.
- 13.178 The Councils welcome that the Applicant has agreed to an adaptive aftercare for sites with reinstated woodland, trees and hedgerows (**[AS-046]**, paragraphs 10.1.1-10.1.2). However, five years of aftercare is considered insufficient, as set out above, and it should be made clear that the aftercare period itself may need to be extended, if planting does not thrive.
- 13.179 Any tree or shrub that is removed, dies, or becomes seriously damaged or diseased during the aftercare period, must be replaced with suitable replacement plants or trees to the specification agreed in writing with the relevant LPA during the next available planting season (ideally the following November/December). Paragraph 10.1.2 **[AS-046]** should include this need for agreement.
- 13.180 The proposals should allow for the costs of annual monitoring inspections by and reports to the LPAs for the life span of the project or at least for the first 15 years, and longer if mitigation goals are not being achieved (dynamic aftercare).
- 13.181 The baseline to monitor against is the pre-construction baseline data.

Appendices of the Outline Landscape and Ecological Management Plan (oLEMP)
[APP-322 – APP-327]

7.4 Outline Landscape and Ecological Management Plan Appendix A - Arboricultural Impacts Plan (Final Issue A) [APP-322]

- 13.182 Figure 7.4.1- Outline Landscape and Ecological Management Plan – Arboricultural Impacts Plan does not appear to provide any additional information to that contained in Figure A13.6.1- Landscape and Visual Impacts Plan in Document 6.13.A6 Environmental Statement Appendix 13.6 - Arboricultural Impact Assessment AIA (Final Issue A) **[APP-236]**.
- 13.183 While the Councils accept that, given the size of the project, it would be unreasonable to address Category C and U trees individually it is unclear how their combined areas are shown in the figures (they are not listed in the key).

- 13.184 The Councils further query on what basis surveyed trees were labelled with their identification reference, as many are not, regardless as to whether they are to be retained or removed.

7.4 Outline Landscape and Ecological Management Plan Appendix B - Ancient Woodland and Veteran Tree Strategy (Final Issue A) [APP-323]

- 13.185 The Councils broadly welcome the strategy, including the proposed mitigation measures for affected ancient woodlands, set out in Table 3.5; the approach to the Mitigation hierarchy set out in Table 5.1, which includes measures for compensation.
- 13.186 The Councils consider that the remediation works, specified in Section 5.7 should also be agreed with the relevant local authority.
- 13.187 The Councils welcome the proposed monitoring measures set out in section 5.8, including the development of a monitoring programme. SCC considers this should be agreed with the relevant local authority or ecological working group.
- 13.188 The Councils welcome the 30-year monitoring period for veteran trees.

7.4 Outline Landscape and Ecological Management Plan Appendix C - Planting Schedules (Final Issue A) [APP-324]

- 13.189 The Councils consider the proposed plant sizes are broadly acceptable but suggests reserving light standards for key locations, where the plants can be closely monitored and a heightened maintenance regime is realistic (for example watering). The Councils do not recommend anything bigger than a light standard for any location.
- 13.190 With regards to the species selection, these seem broadly acceptable, except that some of the chosen species in the woodland mix are woodland edge rather than woodland species, for example *Prunus avium*. The percentages may also require slight adjustments, and the same mixes for the types of planting may not be suitable across the whole length of the project. SCC would be happy to engage further with the Applicant in this matter in due course.
- 13.191 The Councils welcome site-specific mixes for grassland and emergent/marginal planting.

7.4 Outline Landscape and Ecological Management Plan Appendix D - Outline Landscape Proposals (Final Issue A) [APP-325]

- 13.192 Within the context that the location of the CSE compound remains unchanged under the current proposals, the Councils provide the following comments on the Wenham Grove CSE Compound Landscape Proposals [APP-325].

- 13.193 The Councils welcome that the cable corridor now is proposed to head east rather than west at the very beginning of the undergrounding from the CSE compound. This is likely to result in the loss of fewer field trees in this area.
- 13.194 The Councils query why the proposed woodland planting along the western side of the compound is not continuous and wider, given that the DCO boundaries are further to the west.
- 13.195 The gradient for the elevated landform to the south-east of the compound needs to be further reviewed. The Landscape proposals state that this will be no higher than three meters; the oLEMP **[AS-046]** states that the maximum gradient will be 1 in 3. SCC is concerned that steep slopes such as this would not allow for naturalised edges.
- 13.196 With regards to the access road, the Councils query why the hedge is not continued along the western side of the track, from where it enters the Environmental area in the south to join up with the proposed native woodland.
- 13.197 The Councils also query the strip of land between the Environmental Area and the access track towards the south-east and why no measures are proposed here. This could be an opportunity for additional tree belt planting.

7.2 Outline Code of Construction Practice, Final Issue A, August 2025 [APP-100]

Comments on Table 6.1 Mitigation measures/environmental commitments

Commitment Reference	SCC comment
B03	Last bullet point: Protection of Vegetation should be in accordance with BS 5837:2012 or its updated version. The protective fencing must be shown (at least indicatively) on the Trees and Hedgerows to be Removed or Managed Plans [APP-048 – APP-055] and should be shown on Works Plans and Detailed Design drawings.
B07	CEZ need to be established prior to pre-commencement works to be fully effective.
B13	As for B03: Query whether Reinstatement planting plan is best place to show CEZ and protective measures.
LV03	Would welcome if temperature of light (Kelvin levels) could be agreed with relevant authority.
LV09	Query, how this aligns with B07, B13 and LV10.

T01	The Councils consider that the Applicant needs to consider vegetation, in particular trees, when making the CTMP, as the CTMP is pivotal in minimising vegetation losses. This can be achieved through sensitive location and rationalisation of accesses, haul roads and access tracks, and by including traffic management measures as the first choice before considering vegetation management or removal.

- 13.198 With regards to 7.2 Site checks and reporting, the Councils consider that site checks by the relevant authorities should be enabled and accommodated.

7.2 Outline Code of Construction Practice Appendix C - Outline Soil Resource Plan (Final Issue A) [APP-303]

- 13.199 Stockpile heights greater than 3m for topsoil and 5m for subsoil need to be agreed with the relevant discharging authority (paragraph 1.9.21).
- 13.200 There appear no provisions for reinstating soils in the same location they were taken from. This is important, especially for peaty soils or woodland soils and therefore needs to be specified.

3.1 Draft Development Consent Order (Final Issue A) [APP-056]

- 13.201 As best practice, the DCO needs to contain a Schedule of Important Hedgerows that are affected by the scheme.
- 13.202 Ancient/veteran trees should be afforded at least the same protection as trees under tree preservation (Article 51).
- 13.203 The Councils are concerned about the wide-ranging operations categorised as 'pre-commencement operations'. In order to prevent unnecessary vegetation losses, it will be necessary that up-to-date Trees and Hedgerows to be Removed and Managed Plans, based on the approved final detailed design, area available prior to and adhered to during pre-commencement.
- 13.204 The Councils will continue to provide comments on draft DCOs throughout the examination period.

Required Mitigation

Comments on Mitigation

Rochdale Envelope and micro-siting

- 13.205 The Councils welcome the application of the Rochdale Envelope but considers that this needs to be remembered both at the DCO decision making stage and throughout the detailed design stage and in all control documents. The Rochdale Envelope, presenting a reasonable worst-case scenario, requires that micro-siting and rationalisation of construction options are integral in further reducing harm to landscape features, landscape character and visual amenity at the detailed design stage, post-consent.

Types of mitigation

- 13.206 The Councils have concerns with regards to the terminology regarding different types of mitigation, presented in ES Chapter 13 [APP-226]. While the Councils agree with the definition given of embedded mitigation (paragraph 13.6.2), the councils note that the definition for standard mitigation (paragraph 13.6.5) does not use the term to describe mitigative planting, which would mitigate landscape and visual effects, but to describe management activities and techniques during construction to further reduce adverse effects. The definition for additional mitigation (paragraph 13.6.8) seems unhelpful and inappropriate, as mitigative planting, which is required to make the scheme acceptable, should not fall into this category.
- 13.207 Any planting for Landscape and Visual Mitigation (i.e. which is proposed in addition to reinstatement planting for vegetation that was removed to enable the scheme) with the purpose of screening or filtering views of CSE compounds and/or other elements of the scheme, is considered by SCC to be required and necessary to mitigate impacts and to minimise effects on visual receptors (application of the mitigation hierarchy), and to make the scheme acceptable in landscape terms. It stands side by side with reinstatement planting and planting for Biodiversity Net Gain and cannot be considered ‘additional’ or ‘above and beyond’ (paragraph 13.6.8).
- 13.208 Paragraphs 13.6.8 and 13.6.9 appear to contradict each other, the former stating the Landscape and Visual Impact Assessment (“LVIA”) has identified a requirement for further mitigation, while the latter negates this. The Councils disagree with paragraph 13.6.9 and consider that further mitigation in form of tree and hedge planting is required for this project.

Access Points, visibility splays, temporary access routes and work compounds

- 13.209 The Councils consider that proposed temporary access points and routes, as well as compound areas, need to be carefully considered, fully assessed and ground-truthed with regards to existing vegetation (trees, hedges and woodland) that may be affected and avoid vegetation losses, wherever possible. Visibility splays need to be fully considered in this context. The Councils consider it essential that temporary works, in particular, are rationalised and co-ordinated with the purpose to avoid and minimise impacts on vegetation. Temporary haul roads should not lead along narrow, tree-lined or wooded tracks. The default vegetation management for visibility splays should be hedge coppicing, not hedge removal.
- 13.210 No compounds or laydown areas shall be located within the National Landscape, except HDD compounds.
- 13.211 Where conflicts with mature vegetation of landscape, amenity or screening value are identified, alternatives should be actively sought by the Applicant. SCC welcomes that one particularly concerning example at Gisligham (Coldham Lane), has been removed from the scheme, but there may be others (for example the proposed access from High Road, Diss, Norfolk, leading to the Grade II Listed Farmhouse at Grove Farm, although the AIA predicts that no trees would be affected by the proposals).

Comprehensive mitigation and screen planting around Cable Sealing End (CSE) compounds

- 13.212 The Councils welcome the indicative landscape design around the new/extended National Grid permanent assets (i.e. CSE compounds and substations) (OLEMP Appendix D: Outline Landscape Proposals **[APP-325]**), designed to provide landscape and visual mitigation while also offering ecological value.
- 13.213 The Councils have provided comments on the landscape design around the Wenham Grove CSE compound in relation to Document 7.4 Outline Landscape and Ecological Management Plan Appendix D - Outline Landscape Proposals (Final Issue A) **[APP-325]** (see paragraphs 13.192 – 13.197 of this Local Impact Report).
- 13.214 The Councils consider that the planting around these new assets should be managed and maintained for 30 years or for the lifespan of the assets, whichever is longer.

Reinstatement and Biodiversity Net Gain (BNG) and landscape and visual mitigation

- 13.215 The Councils welcome the Applicant's commitment to a 10% minimum BNG, recognising that this is in fulfilment of the obligations with their regulator Ofgem.
- 13.216 The pre-requisite to achieving BNG is successful reinstatement planting.
- 13.217 With the current, justified focus on BNG and reinstatement, the third element of successful mitigation is in danger of being overlooked and ignored: planting for mitigating the landscape and visual effects of the development.
- 13.218 While reinstatement planting would form the basis for landscape and visual mitigation planting, and BNG measures could also achieve landscape and visual mitigation, the rationale and aims for this third element are distinct from the two others: Landscape mitigation seeks to conserve and enhance landscape features and the landscape character impacted by the development, while Biodiversity Net Gain is linked to the habitats impacted. Visual mitigation is required so that the visual effects of development are minimised, by helping to embed the development into the surrounding landscape with effective screen planting, where possible.
- 13.219 While the three types of planting are interlinked, the Councils do not consider that landscape and visual mitigation requirements are by default satisfied, once reinstatement planting and BNG goals are achieved. The Councils expects that full consideration is given to landscape and visual mitigation and, if required, to compensation measures. The Councils considers that landscape and visual mitigation planting offers additional opportunities to the overall BNG being achieved.

Mitigation Hierarchy

Compensation

- 13.220 Given the assessment that long-term significant adverse impacts and effects on landscape character and long-term significant adverse effects on visual receptor groups including residents, road users and recreational receptors are expected, the Councils welcome that the Applicant acknowledges the fourth column of the Mitigation Hierarchy, Compensation, in paragraph 9.7.30 of the Outline Landscape and Ecological Management Plan ("oLEMP") [AS-046] and the inclusion of compensation measures for veteran trees in [APP-323].
- 13.221 However, the Councils do not agree with the following paragraph 9.7.31 [AS-046], that off-site tree replacement alone and in itself equals landscape

compensation (see also Table 13.1 Engagement undertaken relevant to Landscape and Visual [APP-226]).

- 13.222 The Councils do not consider the proposed to be ‘compensation’ in Landscape and Visual Impact terms, as it is insufficient to compensate for the permanent significant adverse landscape effects caused by the construction of the pylons, overhead line and CSEs within Suffolk and does not address any of the significant permanent adverse visual effects that will occur.
- 13.223 There does not appear to be any compensation offered in relation to the residual negative landscape and visual effects of the pylons and OH line along the length of the project.
- 13.224 The Councils consider that residual adverse impacts, that cannot be mitigated, will need to be compensated, by means of wider landscape restoration and a coordinated Landscape, Ecology, Archaeology, and Rights of Way Masterplan, in particular, but not exclusively, in areas which are disproportionately affected by energy infrastructure, such as Bramford, Burstall, and the Gipping Valley, and in sensitive areas, such as the Waveney Valley.
- 13.225 The Councils consider that landscape compensation requires a more comprehensive and strategic approach, than that currently proposed, and that a significant strategic landscape compensation package should be put in place as part of the submission or as a side agreement to offset the landscape and visual harm across the route of the overhead line.
- 13.226 Overarching National Policy Statement for Energy Policy (EN-1) (2024), paragraph 4.3.4 states ‘To consider the potential effects, including benefits, of a proposal for a project, the applicant must set out information on the likely significant environmental, social and economic effects of the development, and show how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, following the mitigation hierarchy.’
- 13.227 It will be essential to agree an effective mechanism to mitigate/compensate for tree loss, both under the line and in the wider corridor, and a comprehensive programme of planting on a 3:1 ratio would form the starting point. The Council acknowledges that it would be difficult to plant such quantities of trees within the DCO boundary.
- 13.228 The Councils welcome the commitment by the Applicant to replacement tree planting at a ratio of 3 new trees for every tree lost as a result of the scheme (including offsite tree planting) and considers that these trees

could contribute to, and be part of, the enhancement of the landscape character and visual amenity, within a strategic scheme.

- 13.229 The offsite tree planting and wider landscape enhancement is expected to be secured outside the DCO boundary via a Section 106 agreement, or other similar agreement.
- 13.230 The Councils welcome the measures that have been taken to minimise the impacts of the project on the DVAONB but note that NGET accepts that there will still be residual adverse impacts on the natural beauty and special qualities of the DVAONB. In terms of the statutory duty to seek to further the purpose of the AONB designation, the Councils welcome the positive approach that NGET has taken to proposing a financial contribution to support appropriate enhancement measures within or benefiting the DVAONB, and expects to engage further with NGET, together with other partners, on the details of those measures and how they are best to be secured.

14 Legal

Lead Authorities	Suffolk County Council
Supporting Authorities	Babergh District Council; Mid Suffolk District Council

Summary

- 14.1 Whilst this chapter of the LIR does not include a local impact assessment, other chapters include commentary that relate to the draft Development Consent Order (“**dDCO**”) [**APP-056**]. This chapter therefore collates all such relevant information for the dDCO in one location.
- 14.2 Suffolk County Council has submitted previous comments on the draft Development Consent Order (“**dDCO**”) in its Relevant Representation [**RR-3520**] within paragraphs 198 – 247. This chapter is inclusive of these previous comments and expands on these in greater detail and includes new matters as they have arisen since this submission.

Commentary on the draft Development Consent Order

- 14.3 **Article 2(1) (interpretation)** – the definition of “maintain” includes the reconstruction or replacement of any part of the authorised development. SCC would like to know to what extent “reconstruction” and “replacement” have been assessed and where this is considered in the Environmental Statement.
- 14.4 **Article 2(1) (interpretation)** – the definition of “permit scheme” means a permit scheme in force on the date on which the Order is made. SCC consider the definition should allow for the situation where a permit scheme is updated after the date on which the Order is made. It would be strange for an extant permit scheme to control certain works in Suffolk and for a historic permit scheme to control others.
- 14.5 **Article 2(1) (interpretation)** – the definition of “pre-commencement operations” is wide-ranging and goes well beyond the Explanatory Memorandum’s (“EM”) description of these works as “*de minimis* or [having] minimal potential for adverse impacts” (paragraph 3.6.6) [APP-057]. SCC would like to know –
- 14.6 how each operation will be controlled (especially the “set up works associated with the establishment of construction compounds and temporary laydown areas” and “temporary accesses”);
- 14.7 which buildings are proposed to be demolished as part of the “pre-commencement operations”;
- 14.8 whether land used for temporary works will be reinstated to a condition suitable for its former use and, if not, why not;
- 14.9 the steps the applicant will take to avoid vegetation loss during pre-commencement operations generally and in, specifically, respect of “set up works associated with the establishment of construction compounds and temporary laydown areas” and “temporary accesses”;
- 14.10 the relevant paragraphs of the ES which deal with the assessment of each of the pre-commencement operations. (This request is made in the context of paragraph 3.6.7 of the EM which states: “The Environmental Statement does not indicate that the excluded works and operations would be likely to have significant environmental effects. For this reason, National Grid considers that the exclusion of these works and operations from the definition is appropriate”) [APP-057].
- 14.11 **Article 3(6) (development consent etc. granted by the Order)** – this provision states that the development consent granted by the Order allows works (including demolition of buildings or other structures) within the

Order limits to the extent they “relate to, are required by or are incidental to the carrying out of the authorised development”. This is a broad power which does not appear to have been included in the precedents cited by the applicant in paragraph 1.2.5 of the EM [APP-057]. It will be remembered that paragraph 1.2 of *Advice Note Fifteen: drafting Development Consent Orders* states: “A **thorough justification** should be provided in the Explanatory Memorandum **for every Article and Requirement**, explaining why the inclusion of the power is appropriate in the specific case. **The extent of justification should be proportionate to the degree of novelty and/ or controversy in relation to the inclusion of that particular power**”. [Emphasis added]. Contrary to the advice, here, no justification for this provision is included in the EM (see paragraph 1.2.5 of the EM [APP-057]). To allow SCC to understand the need for this provision, **SCC requests that the next draft of the EM is updated to include justification for this provision. It would also be helpful to know which buildings within SCC’s administrative are proposed to be demolished.**

- 14.12 Article 5 (limits of Deviation) - The Order Limits are generally 100 m wide for the proposed overhead line (50 metres either side of the centre line of the proposed overhead line). There are concerns regarding the lateral, longitudinal (horizontal) and vertical limits of deviation set out in Article 5 of the Draft DCO with regards to the potential worsening of temporary (construction) and permanent impacts on the setting and significance of heritage assets to those set out in the Applicant’s Environmental Statement assessments (which are based on the Works Plan (document 2.3), Figure 4.1 Proposed Project Design (document 6.4.F1) and 4.2 Project Design – Permanent Features (document 6.4.F2). The limits of deviation could bring pylons and overhead lines up to 50 metres closer to heritage assets (laterally) and allow movement anywhere along the line of the project (longitudinally), exacerbating their detracting visual impacts. Pylons may also be of an additional height of up to 6 metres from the pylon design heights set out in the Works Plan, and up to 18 metres for certain pylons where it is necessary to allow a change from proposed low height pylons to standard height pylons.
- 14.13 Article 5 also sets out horizontal limits of deviation for other permanent above ground structures, erections and apparatus including substations and sealing end compounds such that they may be located anywhere within the parameters shown by the pink dashed lines on the Works Plans. They may also be up to 10% above the maximum height shown on the table of parameters forming part of the Works Plans (and may also be any amount lower in height as the undertaker considers convenient).

- 14.14 The limits of deviation are of particular potential concern with regards to the following designated heritage assets which are in closest proximity to the Order Limits and where a mid-level of Less than Substantial Harm (LTSH) to their significance has been identified by the Applicant at the Operation and Maintenance phase of the project. NB These are provided as examples and are not intended to be an exhaustive list of all assets where there are potential concerns with regards to the limits of deviation. There is the potential for designated heritage assets that have been assessed as having a Low level of LTSH to their significance to experience a Mid-level of LTSH due to pylons, overhead lines and other permanent above ground structures being located in closer proximity within the lateral and longitudinal limits of deviation.
- 14.15 **Article 7 (consent to transfer benefit of Order)** – this article allows any or all of the benefits of the provision of the Order to be transferred, with the consent of the Secretary of State, to others. In the event of such a transfer, owing to its role in determining consents under the dDCO [APP-056], SCC requests that it is notified as soon as reasonably practicable and that article 7(5) of the dDCO is updated to reflect this.
- 14.16 **Article 10(2) (planning permission)** – this provides that any planning permissions or DCO which conflict with the authorised development can proceed without the risk of enforcement action being taken notwithstanding any incompatibility between the Project and the development authorised under that planning permission or DCO. It would be helpful if the applicant would confirm whether it has any specific planning permission or DCO in mind.
- 14.17 **Article 11(1) (street works)** – absent a suitable highways side agreement or protective provisions to protect SCC's highways interests, SCC considers art.11(1) should be subject to the street authority's consent.
- 14.18 The same point applies in respect of the following articles: 14(1) (power to alter layout, etc. of streets), 15(1) (permanent stopping up of streets and public rights of way), and 16(1)(a) (temporary closure of streets and public rights of way).
- 14.19 **Article 11(2) (street works)** – Under several of the draft DCO's articles (including article 11(2)), SCC is required to grant approval for certain street works, and provision is made to say that approval must not be “unreasonably withheld or delayed” and there is also a provision that it is deemed to be given after 28 days. In several cases this appears to be unprecedented in DCOs or not well preceded.

- 14.20 SCC will be receiving considerable numbers of requests for approval and will ensure that they are dealt with as quickly as possible. With the deeming provisions included there is no need to also say that the approvals must not be “unreasonably withheld or delayed”. These words should therefore be removed from article 11(2).
- 14.21 SCC request that the same amendment is made to the following articles: 14(4) (power to alter layout, etc. of streets), 15(2)(a) and (b) (permanent stopping up of streets and public rights of way), 16(2), 16(5)(b) (temporary closure of streets and public rights of way), 17(1)(b) (access to works), 20(3), 20(4)(a) (discharge of water), 49(2) (traffic regulation), 55(1) (procedure regarding certain approvals etc.).
- 14.22 **Article 11(3) (street works)** – provides that if a street authority fails to respond to an application for consent within 28 days of the application being made, that street authority is deemed to have given its consent.
- 14.23 While SCC will ensure that any application for consent will be dealt with as quickly as possible, it will be remembered that SCC will be receiving a considerable number of requests for approval across several nationally significant infrastructure projects which have already been consented³⁶. A 28-day decision-making period in this context is unrealistic and potentially detrimental to the effective consideration of applications.
- 14.24 Given the volume of work which will arise from the number of NSIPs being delivered in Suffolk, SCC considers 28 days is too short and requests that it is replaced with 56 days. SCC also considers that this period should be paused if the highway authority considers that additional information is reasonably required to make a decision.
- 14.25 SCC requests that 28 days is also replaced with 56 days in the following provisions: 14(5) (power to alter layout, etc. of streets); 16(8) (temporary closure of streets and public rights of way); 17(2) (access to works); 20(9) (discharge of water); 22(8) (authority to survey and investigate land), 49(10) (traffic regulation) and 50(5) (felling or lopping).
- 14.26 A similar point applies in respect of paragraph 1(1) (applications made under requirements) of Schedule 4 (discharge of requirements), which is mentioned below.

³⁶ For example: East Anglia ONE North Offshore Wind Farm Order 2022 (SI 2022/432), East Anglia TWO Offshore Wind Farm Order 2022 (SI 2022/433), Sizewell C (Nuclear Generating Station) Order 2022 (SI 2022/853), Sunnica Energy Farm Order 2024 (SI 2024/802), and National Grid (Bramford to Twinstead Reinforcement) Order 2024 (SI 2024 / 958). Forthcoming DCO applications for which SCC will be a host authority include National Grid Electricity Transmission's Sea Link application and National Grid Interconnector Holdings Limited's LionLink Interconnector application.

- 14.27 **Article 12(2)(d) (application of the permit schemes)** – this provision prohibits “**the relevant street authority**” from permitting certain works at a certain time but then says “**local highway authority**” may grant a permit for immediate works. Should those references be to the same body? If not, why not? Also, the term “local highway authority” is not used elsewhere in the dDCO (save in a single definition) and is not a defined term itself. In articles 12(3), (4) and (5) “**the relevant highway authority**” referred to and SCC wonders whether that term should also be used (whether once or twice) in article 12(2)(d). SCC would welcome the applicant’s explanation on this drafting point.
- 14.28 **Article 13(3) and (4) (application of the 1991 Act)** – SCC is concerned by the extent of disapplication proposed by article 13(3) and (4).
- 14.29 **Article 16 (temporary closure of streets and public rights of way)** – by article 16(1), the undertaker may, “for any reasonable time” divert traffic from the street or public right of way; and prevent all persons from passing along the street or PROW. SCC would welcome more information as to what “a reasonable time” might be.
- 14.30 In addition, SCC considers that article 16 should provide that any temporary diversion specified in column (4) of Part 1 or Part 3 of Schedule 8 must be open for use, and in the case of a street, must be completed to the reasonable satisfaction of the street authority, before the corresponding street or public right of way is temporarily stopped up, altered or diverted.
- 14.31 **Article 16(5)(b) (temporary closure of streets and public rights of way)** – this provision refers to the street authority’s ability to attach reasonable conditions to a certain consent. Other provisions which state conditions may be added to a consent include articles 20(3) (discharge of water) and 42(3)(a) (crown rights); however, other provisions which provide for consent are silent as to whether conditions can be added. Since there is no restriction on the imposition of conditions, SCC considers that can be added; however, for clarity and consistency, SCC considers each provision which provides for the grant of consent or approval should state explicitly that conditions may be attached to such consent or approval e.g. the following articles: 11(2) (street works), 14(4) (power to alter layout, etc. of streets), 16(2) (temporary closure of streets and public rights of way), 17(1)(b) (access to works), 22(5) (authority to survey and investigate the land), 49(2) (traffic regulation), and 50(4) (felling or lopping).
- 14.32 **Article 23 (removal of human remains)** – as drafted, this article raises significant concern for SCC’s Archaeological Service (“**SCCAS**”), particularly in respect of the way in which archaeological human remains will be treated. As drafted, the article poses a risk to archaeological

heritage assets and threatens to delay the project. SCCAS understands there are no records of any historic human remains or burial sites within the Order Limits in Suffolk. However, it is not uncommon for human remains to be encountered during archaeological fieldwork, and a project of this scale should anticipate the potential discovery of such remains during ongoing evaluation and mitigation.

- 14.33 SCCAS considers article 23 conflicts with archaeological best practice for dealing with human remains in archaeological contexts as it would lead to burial features being exposed for an extended period, constituting a risk of damage or harm.
- 14.34 For remains over 100 years old, it is usually standard archaeological practice that the terms of the Burial Act 1857 are followed; however, by article 23(17), section 25 of the Burial Act 1857 is disapplied in respect of a removal carried out in accordance with article 23.
- 14.35 SCCAS considers article 23 should be amended so that the removal of remains considered to be over 100 years old should be carried out in line with the Burial Act 1857, any issued burial license, the relevant detailed written scheme of investigation, and best practice documents.
- 14.36 SCCAS therefore recommends that article 23 is amended as follows –
- “(17) Subject to subject to paragraph (17)A,** section 25 of the Burial Act 1857 (offence of removal of body from burial grounds) does not apply to a removal carried out in accordance with this article.
- (17A) Subject to paragraph (17B), the disapplication mentioned in paragraph (17) does not apply to the removal of human remains where the undertaker is satisfied that the remains were interred more than 100 years ago.**
- (17B) A removal to which paragraph (17A) applies must also be carried out in accordance with any issued burial license, any relevant detailed written scheme of investigation approved in accordance with requirement 5 (archaeology), and best practice documents”.**
- 14.37 SCCAS requests that the Applicant engages with SCCAS in respect of the drafting of this article.
- 14.38 **Article 34(1) (time limit for exercise of authority to acquire land and rights compulsorily) –** SCC considers allowing the applicant seven years to issue ‘notices to treat’ or a ‘general vesting declaration’ to acquire the land or rights that is subject to the power of compulsory purchase is excessive.

Five years is the usual position and SCC considers the usual position should be adopted here, especially since (per article 34(4)) that period will not be affected by any legal challenge to the decision to grant development consent for the project. Moreover, per requirement 2(1) (time limits) the undertaker has five years to commence the authorised development and SCC would usually expect the period in article 34(1) to be same as the period included in the requirement. For example, in the National Grid (Bramford to Twinstead Reinforcement) Order 2024 (SI 2024/958), the time limit in the relevant provisions is the same i.e. 5 years (see article 32(1) (time limit for exercise of authority to acquire land and rights compulsorily)) and requirement 2(1) (time limits). The same applies to the recently made Sunnica Energy Farm Order 2024 (SI 2024/802) (see article 18(1) and requirement 2(1)) and the Sizewell C (Nuclear Generating Station) Order 2022 (SI 2022/853) (see article 31 and requirement 1), both of which are located in Suffolk.

- 14.39 **Article 49(5) (traffic regulation)** – this provision refers to the “instrument” made under paragraph (1), (2) or (3) of article 49. SCC considers it would be helpful if a copy of the made instrument were made available by the undertaker and sent to SCC. In the light of this, SCC would suggest a new article 49(13) is included as follows –

“(13) A copy of the instrument referred to in paragraph (5) must be held at the registered office address of the undertaker for inspection during normal working hours and, as soon as reasonably practicable after being made, a copy must be served on the highway authority”.

- 14.40 **Article 50 (felling or lopping)** – SCC is concerned that important hedgerows under the Hedgerow Regulations 1997 are included in this article without any provision for special consideration to minimise impacts, for example by using HDD or coppicing and temporary storage prior to replanting, instead of removal. In any event, SCC notes the following from *Advice Note Fifteen: drafting Development Consent Orders*: “...the Article should include a Schedule and a plan to specifically identify the hedgerows to be removed (whether in whole or in part). This will allow the question of their removal to be examined in detail. Alternatively, the Article within the DCO could be drafted to include powers for general removal of hedgerows (if they cannot be specifically identified) but this must be subject to the later consent of the local authority” (paragraph 22.1). For the avoidance of doubt, SCC considers there should be a schedule of all hedgerows which might be affected by the application. The schedule should list, amongst other things,

whether or not the hedgerow is important (for the purposes of the Hedgerow Regulations 1997) and their composition.

- 14.41 Regarding “a plan to specifically identify the hedgerows to be removed”, while the applicant has prepared “trees and hedgerows to be removed and/or managed plans” it is not clear those plans apply to all hedgerows or important hedgerows to be removed and SCC would welcome clarification on this point.
- 14.42 Regarding consent, only trees “within or overhanging the extent of the public highway” (and not included in the “trees and hedgerows to be removed and/or managed plans”) are subject to consent. Depending on the confirmation received in respect of the point mentioned above, SCC might seek the amendment of this article to include a more general consent provision.
- 14.43 **Schedule 3 (requirements) (paragraph 1 (interpretation))** – paragraph 1(1) defines “discharging authority” as “the body responsible for giving any consent, agreement or approval required by a requirement included in this Order ...”. The definition is circular and unhelpful. Requirement 4 (construction management plans) provides for the involvement of the “other discharging authority” in certain activities; however, it is not clear who that authority is. Requirements are the DCO equivalent of planning conditions³⁷ and one of the six tests for conditions is precision³⁸. SCC consider the inclusion of “discharging authority” in requirement 4 creates imprecision and requests that the applicant recasts requirement 4 so that the body they want to be involved in requirement 4 is named. A similar drafting approach has been followed in the National Grid (Bramford to Twinstead Reinforcement) Development Consent Order 2024 (SI 2024/958) and that drafting has already caused confusion post-consent. SCC is keen to avoid any confusion in respect of this Order.
- 14.44 Schedule 3 (requirements) (paragraph 1 (interpretation)) – paragraph 1(4) needs to be amended as follows –
- “Where an approval or agreement is required under the terms of any requirement or a document referred to in a requirement, or any requirement specifies “unless otherwise approved” or “unless otherwise agreed” by the relevant highway authority or the relevant planning authority, such approval or agreement may only be given where it has been demonstrated to the **satisfaction of the** relevant highway authority or the relevant planning authority that the

³⁷ Section 120(2)(a) Planning Act 2008.

³⁸ Circular 11/95: Use of conditions in planning permission (paragraph 14).

subject matter of the approval or agreement sought will not give rise to any materially new or materially different environmental effects from those identified in the Environmental Statement”.

- 14.45 This amendment is consistent with the drafting of the equivalent paragraph of the National Grid (Bramford to Twinstead Reinforcement) Order 2024 (SI 2024/958).
- 14.46 **Schedule 3 (requirements) (requirement 3(1) (stages of authorised development))** – requires that a written notice setting out the anticipated programme for the carrying out of pre-commencement operations must be given to the relevant planning authority no less than seven days prior to the date on which those pre-commencement operations are first carried out. This is included in the equivalent requirement of the National Grid (Bramford to Twinstead Reinforcement) Order 2024 (SI 2024/958). SCC's experience of discharging requirements under that Order has shown the time period to be too short. In the light of this, SCC requests that the 7-day period is increased to 35 days.
- 14.47 **Schedule 3 (requirements) (requirement 3(2) and (3) (stages of authorised development))** – provides for notice of the commencement and completion of each stage to be given to the relevant planning authority within 28 days of the event occurring. SCC does not understand why it should take a month for this information to be provided and considers it should be provided in less time. For example, 14 days is the period stated in the equivalent provision of the National Grid (Bramford to Twinstead Reinforcement) Development Consent Order 2024 (SI 2024/958).
- 14.48 **Schedule 3 (requirements) (requirement 5(1) (archaeology))** – the Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (“AMS-OWSI”) [APP-328] does not provide adequate or appropriate provision for archaeological evaluation and mitigation, and therefore, does not provide appropriate protection for the historic environment. As submitted, SCCAS do not agree with its contents.
- 14.49 For requirement 5 to be acceptable, the AMS-OWSI must be revised to meet appropriate standards and SCCAS are actively engaging with the applicant in this regard.
- 14.50 However, if the AMS-OWSI cannot be satisfactorily amended before the application is determined, SCCAS would recommend the following amendments to requirement 5 to secure the post-consent approval of documents –

“5(1)(a) No stage of the authorised development may commence until the Outline Archaeological Mitigation Strategy

and Outline Written Scheme of Investigation have been submitted to and approved by Suffolk County Council.

5(1)(b) No stage of the authorised development may commence until either a preservation in situ management plan, or a detailed written scheme of investigation of areas of archaeological interest relevant to that stage (if any), as identified within the **approved** outline archaeological mitigation strategy and outline written scheme of investigation or identified through evaluation work as set out in the **approved** outline archaeological mitigation strategy and outline written scheme of investigation, has been submitted to and approved by the relevant planning authority and, if relevant, Historic England.”

- 14.51 **Schedule 3 (requirements) (requirement 5(2) (archaeology)** – the development is expected to be delivered in stages, and each stage may involve multiple phases of archaeological work including evaluation and mitigation. Accordingly, Requirement 5(2) should be amended to refer to **“detailed written schemes of investigation” (DWSI)** (plural, rather than singular) to reflect that more than one DWSI will be produced for this scheme.
- 14.52 Using the plural recognises that each stage may require multiple DWSIs and ensures clarity for the applicant and discharging authority, and secures the appropriate level of archaeological investigation, recording, and mitigation for all parts of the authorised development.
- 14.53 **Schedule 3 (requirements) (requirement 5(3) (archaeology)** – paragraph (3) provides for a single DWSI, however, as discussed above, each stage is likely to have multiple DWSIs produced to deliver the appropriate level of archaeological investigation. SCCAS would therefore recommend this is reflected in paragraph 3 as follows –
- “(3) **Each** The detailed written scheme of investigation...”
- 14.54 **Schedule 3 (requirements) (requirement 5(4) (archaeology)** – the introductory words “For the avoidance of doubt” are unnecessary and should be omitted.
- 14.55 **Schedule 3 (requirements) (requirement 5(3) (archaeology)** – **recommended further provisions** – there must also be provision to secure full post-excavation analysis, timely publication, and deposit of complete physical and digital archives, with funding in place to deliver these stages. In the light of this, SCCAS recommend the inclusion of the following provisions in requirement 5 –

“5(5) No later than two years after the completion of the construction phase of work, an Updated Project Design must be submitted to and approved by the Local Planning Authority. The Updated Project Design must be in general accordance with the approved Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation, and relevant Detailed Written Schemes of Investigation, and set out scope for full post-excavation analysis, publication, and address the site-specific research agendas. Post-excavation analysis and publication must be carried out in accordance with the approved Updated Project Design.

5(6) The full archaeological archive, both physical and digital, must be deposited to the relevant archaeological archive repository, for that County, in accordance with the approved archaeological Updated Project Design.

- 14.56 This drafting is based on requirement 3(6) (archaeology and peat) of the Sizewell C (Nuclear Generating Station) Order 2022 (SI 2022/853) and so is a regime which the Secretary of State has already considered appropriate for Suffolk. SCCAS consider the regime should apply to the instant project also. For completeness, requirement 3(6) of the Sizewell Order states –

“Unless otherwise agreed with Suffolk County Council

(a) No later than two years following the completion of the fieldwork specified in each site-specific written scheme of investigation, a site-specific post excavation assessment for that site must be completed in accordance with the Overarching Written Scheme of Investigation and submitted to Suffolk County Council for approval.

(b) No later than one year following approval of the final site-specific post excavation assessment, an archaeological updated project design for all sites, must be submitted to Suffolk County Council for approval. The archaeological updated project design must be produced in general accordance with the Overarching Archaeological Written Scheme of Investigation, include details of the scope of post-excavation analysis and publication and have regards to the site-specific research agendas set out in the site-specific written schemes of investigation.

(c) Post-excavation analysis and publication must be carried out in accordance with the approved archaeological updated project design.

(d) The full archaeological archive must be submitted to the Suffolk County Council Archaeological Service (Archives) in accordance with the archaeological updated project design”.

- 14.57 **Schedule 3 (requirements) (requirement 5(2) (archaeology))** – this provision names “the relevant planning authority” as the discharging authority. In Suffolk, SCC should be the discharging authority because archaeology is a county function. This approach is precedented. For instance, requirement 3 (project wide: archaeology and peat) of the Sizewell C (Nuclear Generating Station) Order 2022 (SI 2022/853) names SCC as the approving authority for archaeological matters.
- 14.58 **Schedule 3 (requirements) (requirement 7 (construction hours))** – this provision needs significant reworking in order to allow for community respite. For example, SCC considers Saturday hours should be between 08:00 and 13:00 and there should be no working on Sundays and Bank Holidays. The Secretary of State considered a similar approach appropriate in the East Anglia ONE North Offshore Wind Farm Order 2022 (S.I.2022/432). Requirement 24 of that Order states the core hours are “between 0700 hours and 1900 hours Monday to Friday and 0700 hours and 1300 hours on Saturdays, with no activity on Sundays or bank holidays”, subject to certain exceptions listed in sub-paragraph (2). SCC’s proposed amendments to requirement 7 include the following.
- 14.59 Requirement 7(1) should be amended as follows –
- “Subject to sub-paragraphs (2) to (5) work may only take place between the hours of 07.00 and 19.00 Monday to Friday and **08.00 07.00** and **13.00 17.00** on Saturdays, **Sundays, bank holidays and other public holidays (the core working hours)**, unless otherwise approved by the relevant planning authority”.
- 14.60 Requirement 7(2) should be amended as follows –
- “No percussive piling works may take place outside of the hours of 0700 to 1900 Monday to Friday and **08.00 0700** to **13.00 1700** on Saturdays, unless otherwise approved by the relevant planning authority”.
- 14.61 Requirement 7(3) should be amended as follows –
- “Subject to sub-paragraphs (4) and (5), no HGV deliveries may be made to site outside of the hours of 0700 to 1900 Monday to Friday and **08.00 0700** to **13.00 1700** on Saturdays, unless otherwise approved by the relevant highway authority”.
- 14.62 Requirement 7(4)(a) should be omitted.

- 14.63 Requirement 7(4)(g) is less detailed than the equivalent provision of the National Grid (Bramford to Twinstead Reinforcement) Development Consent Order 2024, which paragraph 4.3.5 of the EM [APP-057] cites as a precedent for the requirements. For example, requirement 7(3)(g) of the Bramford Order states –
- “(3) The following operations may take place outside the core working hours referred to in sub-paragraph (1)—
- ...
- (g) the completion of works delayed or held up by severe weather conditions which disrupted or interrupted normal construction activities **that the undertaker and its contractor agree forms the critical path for the accepted construction programme. In such cases, the undertaker must, as soon as practicable, notify the relevant planning authority of the disruption or interruption and explain why that work could not be completed within the core working hours referred to in sub-paragraph (1)**”; [Words not included in the dDCO shown bold and underlined].
- 14.64 SCC considers the bold and underlined text (which SCC requested should be included in the Bramford DCO) should be included in the dDCO.
- 14.65 Requirement 7(5) is less detailed than the equivalent provision of the National Grid (Bramford to Twinstead Reinforcement) Development Consent Order 2024, which paragraph 4.3.5 of the EM [APP-057] cites as a precedent for the requirements. For example, requirement 7(4) of the Bramford Order states –
- “The core working hours exclude start up and close down activities up to 1 hour either side of the core working hours. **A 50dBA noise limit (LOAEL) will apply at the nearest noise-sensitive receptors for start-up and close down activities up to one hour either side of the core working hours**”.
- 14.66 SCC considers the bold and underlined text (which SCC requested should be included in the Bramford DCO) should be included in the dDCO.
- 14.67 Schedule 3 (requirements) (requirement 9(3) (reinstatement planting scheme)) – this provision states –
- “Any trees or hedgerows planted as part of an approved reinstatement planting plan that, within a period of five years after planting (or such other period as is specified in the landscape and ecological management plan approved pursuant to requirement 4), are removed, die or become in the opinion of the relevant

planning authority seriously damaged or diseased, must be replaced in the first available planting season with a specimen of the same species and size as that originally planted, unless otherwise approved by the relevant planning authority”.

14.68 The reference to “5 years” should be changed to “10 years”, which would provide greater ecological improvements.

14.69 **Schedule 4 (discharge of requirements) (paragraph 1, timescales)** – the timescales in Schedule 4 are too short and should be changed so that they are, at the very least, no shorter than those set out in *Advice Note Fifteen: drafting Development Consent Orders*. The EM [APP-057] justifies the shorter timescales as follows –

“Whilst it is acknowledged that the time limits included in Schedule 4 (in relation to the determination of applications made pursuant to the Requirements and any requests made by the relevant discharging authority for further information) do differ from those recommended in Advice Note 15, National Grid considers that shorter time limits are necessary and proportionate in light of the immediate and pressing national need which the project is intended to address. There is precedent for these time frames in the recently made National Grid (Bramford to Twinstead Reinforcement) Development Consent Order 2024”. (paragraph 4.4.2).

14.70 This argument is unconvincing. The 28-day decision-making period in paragraph 1(1) of Schedule 4 (compared to the 42-day period in paragraph 1(2) of Appendix 1 to *Advice Note Fifteen*) is unlikely to affect “the immediate and pressing national need which the project is intended to address”. It will be noted that a longer period than 35 days has been considered appropriate for other Suffolk-based energy NSIPs, which are Critical National Priority Infrastructure: (i) Sizewell C (Nuclear Generating Station) Order 2022(SI 2022/853) – 6 weeks (i.e. 42 days), and 8 weeks (i.e. 56 days) if there are named consultees: paragraph 1 of Schedule 24 (ii) East Anglia ONE North Offshore Wind Farm Order 2022 (SI 2022/432) – 56 days where no further information is requested and 42 days where further information is requested: paragraph 1 of Schedule 16 and (iii) East Anglia TWO Offshore Wind Farm Order 2022 (SI 2022/433) – 56 days where no further information is requested and 42 days where further information is requested: paragraph 1 of Schedule 16. Furthermore, the time for determining applications for the discharge of requirements under the Sunnica Energy Farm Order 2024 (SI 2024/802) is 56 days (paragraph 2 of Schedule 13).

- 14.71 While SCC will ensure that any request for approval will be dealt with as quickly as possible, it will be remembered that SCC will be receiving a considerable number of requests for approval across several nationally significant infrastructure projects. A 42-day decision-making period would be challenging in this context; the reduction of the timeframe to 28 days is unrealistic and potentially detrimental to the effective consideration of requests. Owing to these circumstances, the Councils consider a 56-day decision-making period would be reasonable.
- 14.72 Paragraph 4.4.3 of the EM [APP-057] says this schedule is “identical to the National Grid (Bramford to Twinstead Reinforcement) Development Consent Order 2024”. It is not. The equivalent period in the Bramford Order is 35 days. SCC’s experience of determining applications for the discharge of requirements for that Order have shown that 35 days is insufficient. More time, not less, is required here. For example, in SCC’s experience in discharging requirements under the Bramford DCO, the provision of 35 days, as opposed to 56 days, has been counterproductive to the prompt delivery of energy infrastructure projects. 56 days allows the discharging authority to ensure that consultees, including statutory consultees, respond within the decision period with enough time for any objections to be resolved with the applicant. When the decision period is only 35 days, SCC has found that there is insufficient time for objections to be resolved resulting in extensions of time being agreed or applications being rejected. In either case, the applicant’s delivery programme is compromised due to delay. This has resulted in the Bramford applicant rushing to make amendments which sometimes do not address the issues raised, resulting in further amendments needed to allow the requirement to be discharged. This sometimes leads to the decision period being extended beyond 56 days. SCC has not encountered this problem where it has 56 days to decide applications. Therefore, SCC considers that a decision period of 56 days to be more conducive than 35 days to the delivery of critical energy infrastructure.
- 14.73 **Schedule 4 (discharge of requirements) (paragraph 2, further information)** – SCC considers the provisions for requesting further information to be insufficient. As drafted, the discharging authority is permitted only 7 days to request further information otherwise it is considered to have sufficient information. This is an unreasonable burden to place on the discharging authority. Deciding whether further information is needed requires an extensive review of the submitted documents by officers of various technical disciplines which is unfeasible to complete in 7 days. The Order makes provision of 35 days to decide applications, the bulk

of which time is spent reviewing the submitted documents to reach a conclusion on whether they fulfil the obligations set out in the requirement. It is only once the documents have been thoroughly reviewed that it can be decided whether an application includes sufficient information for the requirement to be discharged. There is no limit to how many applications can be submitted to a discharging authority at once meaning it is possible for the discharging authority to be expected to review multiple applications amounting to many hundreds of pages of technical detail in just 7 days. Therefore, SCC considers a more reasonable time limit of 21 days would give the discharging authority adequate time to decide whether an application contains sufficient information. If the Applicant maintains that 7 days is reasonable, then this position should be justified in the EM **[APP-057]** which currently lacks such a rationale.

- 14.74 Schedule 4 (discharge of requirements) (paragraph 3, fees)** –the first point to make is that while SCC will be required to deal with applications for consent under articles and under requirements, however, by paragraph 3(1) of Schedule 4, a fee is only payable in respect of requirements. SCC considers that fees should also be paid for dealing with applications under articles and requirements. SCC's approach here is consistent with the standard drafting for a provision dealing with procedure for the discharge of approvals, as set out in Appendix 1 to PINS Advice Note 15, which concerns drafting DCOs. There is no justification in the EM **[APP-057]** for departing from this advice.
- 14.75 The second point to make is that the proposed fee is unreasonably low. Paragraph 3(1) says a fee must be paid as follows –
- “(a) such fee as may be prescribed (under sections 303 and 333(2A) of the 1990 Act for the discharge of conditions attached to a planning permission); or
- (b) a fee of £145 per request unless a bespoke arrangement has been agreed between the applicant and discharging authority and legally secured”.
- 14.76 Regarding (a), this is an application for a nationally significant infrastructure project under the Planning Act 2008, not for (say) a garage extension under the TCPA 1990. The fee should reflect the work involved.
- 14.77 Turning to (b), £145 per application is lamentably and unreasonably low. If we assume an hourly rate of £100 for an officer to deal with this work, the fee under (b) would mean the officer would have to deal with any discharge application within around 90 minutes before dealing with the application started to cost the local authority money. It is unlikely that any application

will be capable of determination within that period. While the Councils cannot make a profit for this work, it is reasonable for it to seek the full recovery of the actual costs incurred. The applicant's approach here is wholly unfair.

- 14.78 This is not only about fairness but also about the way in which the Order is drafted. For example, by paragraph 1 of Schedule 4, the Councils will have 28 days to make its decision on any application and if no decision is made within that period, consent will be deemed to have been granted. The same applies in respect of consents sought under articles. Dealing with any application for consent under this Order will therefore be a matter of high priority for SCC, diverting officer resource from other matters. The inclusion of the deeming provision and its effects on SCC resourcing is another reason why SCC considers its full costs for this work should be covered by the applicant.
- 14.79 Rather than the regime currently proposed in the Order, SCC considers it would be preferable if the applicant and SCC entered into a planning performance agreement (“**PPA**”) for the full recovery of SCC's costs in discharging any application under the Order. Paragraph 3(1) should be recast to provide that no application can be made until an appropriate PPA is in place.
- 14.80 Moreover, paragraph 3(2) – which provides for the refund of fees in certain circumstances – is unreasonable and should be deleted. For example, paragraph 3(2)(a) provides for repayment in the event of “the application being rejected as invalidly made”. To reject an application, the discharging authority will have had to consider it and the time taken to do so should be paid by the applicant and not the authority.
- 14.81 **Schedule 16 (protective provisions)** – Part 4 of Schedule 16 includes provisions for the protection of highway authorities. These have not been agreed by SCC and there have been no discussions with SCC about them. SCC would welcome discussions as a matter of urgency, noting the contents of the MHCLG and DLUHC guidance *Planning Act 2008: Content of a Development Consent Order required for Nationally Significant Infrastructure Projects* (30 April 2024) which states: “Applicants should expect to agree the form of protective provisions with the relevant parties for inclusion in the draft DCO **prior to submitting the application for development consent...**” [Emphases added].
- 14.82 **Schedule 17 (public general legislation)** – the disapplication of section 23 of the Land Drainage Act is not agreed, and neither are the protective provisions included at Part 3 (for the protection of drainage and flood authorities) of Schedule 16 (protective provisions) to the dDCO.

- 14.83 **Schedule 18 (amendment of local legislation)** – SCC requests copies of the Acts which affect their administrative area.

15 Minerals and Waste

Lead Authorities	Suffolk County Council
Supporting Authorities	Babergh District Council; Mid Suffolk District Council

Summary

- 15.1 The County Council as minerals and waste planning authority has responsibility for the safeguarding of planned and operational minerals and waste facilities as well as underlying minerals resources.
- 15.2 SCC also determines planning applications for its own development including new schools and highways improvements. There are no known conflicts at the time of writing.
- 15.3 No planned or operational minerals or waste facilities would be directly negatively affected by the proposed development. In fact, there would be a positive impact upon these facilities arising from the demand for sand and gravel and waste disposal.
- 15.4 In terms of the underlying sand and gravel resources the majority of the proposed development is not irreversible and although during the operational lifetime of the proposal, which would likely extend beyond the lifetime of anybody alive today, extraction within parts the area occupied by the lattice towers, sealing end compounds and underground cables would not be possible. Where minerals are extracted on site during the course of construction then they should be used in the construction of the proposed development where possible. Removal of the development following cessation of use should be required to restore access to mineral resources.
- 15.5 Waste created during construction, operation and decommissioning should be treated in accordance with the waste hierarchy of: a) prevention; b) preparing for re-use; c) recycling; d) other recovery, and; e) disposal.
- 15.6 A map showing the general distribution of sand and gravel resources is appended at **Appendix 28**.

Table 12: Summary of Impacts – Minerals and Waste

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
12a	Planned or existing minerals development	Positive	N/A	NPS / NPFF / SMWLP
12b	Planned or existing waste development	Positive	N/A	NPS / NPFF / SMWLP
12c	Underlying minerals resources	Negative	N/A	NPS / NPFF / SMWLP
Operational Phase Impacts				
12d	Planned or existing minerals development	Neutral	N/A	NPS / NPFF / SMWLP
12e	Planned or existing waste development	Neutral	N/A	NPS / NPFF / SMWLP
12f	Underlying minerals resources	Negative	N/A	NPS / NPFF / SMWLP
Decommissioning Phase Impacts				
12g	Planned or existing minerals development	Positive	N/A	NPS / NPFF / SMWLP
12h	Planned or existing waste development	Positive	N/A	NPS / NPFF / SMWLP
12i	Underlying minerals resources	Negative	Requirement to remove the development at the end of the consented operational lifetime	NPS / NPFF / SMWLP

Policy Context

National Policy

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 15.7 (5.11.19) “Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place.”
- 15.8 (5.11.28) “Where a proposed development has an impact upon a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that appropriate mitigation measures have been put in place to safeguard mineral resources.”
- 15.9 (5.15.2) “Sustainable waste management is implemented through the waste hierarchy, which sets out the priorities that must be applied when managing waste. These are (in order):
- a. Prevention
 - b. Preparing for reuse
 - c. Recycling
 - d. Other recovery, including energy recovery
 - e. Disposal”
- 15.10 (5.15.3) “Disposal of waste should only be considered where other waste management options are not available or where it is the best overall environmental outcome.”
- 15.11 (5.15.8) “The applicant should set out the arrangements that are proposed for managing any waste produced and prepare a report that sets out the sustainable management of waste and use of resources throughout any relevant demolition, excavation and construction activities.”
- 15.12 (5.15.9) “The arrangements described and a report setting out the sustainable management of waste and use of resources should include information on how re-use and recycling will be maximised in addition to the proposed waste recovery and disposal system for all waste generated by the development. They should also include an assessment of the impact of the waste arising from development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation.”
- 15.13 The applicant is encouraged to refer to the Waste Prevention Programme for England: Maximising Resources Minimising Waste [...] and should seek to

minimise the volume of waste produced and the volume of waste sent for disposal unless it can be demonstrated that this is the best overall environmental outcome.”

National Planning Policy Framework, December 2024

- 15.14 “Planning policies should:”
- 15.15 (223) “(c) safeguard mineral resources by defining Mineral Safeguarding Areas and Mineral Consultation Areas; and adopt appropriate policies so that known locations of specific minerals resources of local and national importance are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked);”
- 15.16 (223) “(d) set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place;”
- 15.17 (223) “(e) safeguard existing, planned and potential sites for: the bulk transport, handling and processing of minerals; the manufacture of concrete and concrete products; and the handling, processing and distribution of substitute, recycled and secondary aggregate material;”

National Planning Policy for Waste, October 2014

- 15.18 (8) “When determining planning applications for non-waste development, local planning authorities should, to the extent appropriate to their responsibilities, ensure that:”
- 15.19 “the likely impact of proposed, non-waste related development on existing waste management facilities, and on sites and areas allocated for waste management, is acceptable and does not prejudice the implementation of the waste hierarchy and/or the efficient operation of such facilities;”
- 15.20 “the handling of waste arising from the construction and operation of development maximises reuse/recovery opportunities, and minimises off-site disposal.”

Local Policy

Suffolk Minerals and Waste Local Plan, July 2020

- 15.21 Policy MP9 titled “Safeguarding of port and rail facilities, and facilities for the manufacture of concrete, asphalt and recycled materials” seeks to safeguard:
- 15.22 (a) “existing, planned or potential rail heads, wharves or associated storage, handling or processing facilities for the bulk transport by rail or sea of

minerals, including recycled, secondary and marine-dredged materials, and;”

- 15.23 (b) “existing, planned or potential sites for concrete batching, the manufacture of coated materials, other concrete products or the handling, processing and distribution of substitute, recycled and secondary aggregate material.”
- 15.24 Policy MP10 titled “Minerals consultation and safeguarding areas” seeks to safeguard:
- 15.25 (a) “those Minerals Safeguarding Areas located within the Minerals Consultation Areas identified on the Proposals Map from proposed development in excess of five Ha, and;”
- 15.26 (b) “areas falling within 250m of an existing, planned or potential site allocated in the Plan for sand and gravel extraction.”
- 15.27 Policy WP18 titled “Safeguarding of waste management sites” seeks to safeguard:
- 15.28 (a) “existing sites and sites proposed for waste management use as shown on the Proposals & Safeguarding Maps.”

Other Relevant Local Policy

- 15.29 None identified.

Relevant Representation

- 15.30 Suffolk County Council’s comments on Minerals and Waste can be found between paragraphs 284 – 285 in its Relevant Representation **[RR-3520]**.

Local Impact Assessment

Construction Phase Impacts

Positive

- 15.31 The Proposed Development will include the utilisation of locally sourced construction materials namely sand and gravel, asphalt and concrete from existing facilities and require the recycling or disposal of waste items therefore stimulating the local economy.

Neutral

- 15.32 None identified.

Negative

- 15.33 None identified.

Operational Phase Impacts

Positive

- 15.34 None identified.

Neutral

- 15.35 None identified.

Negative

- 15.36 The proposed development would prevent underlying sand and gravel resources being exploited for the foreseeable future. Appended Maps show the extent of underlying sand and gravel resources. It should be noted that although there are extensive spreads of high quality throughout out the Stour Valley, the statutory Area of Outstanding Natural Beauty status means that in practice quarrying proposals would be unlikely to be acceptable to SCC.

Decommissioning Phase Impacts

Positive

- 15.37 The proposed development will require the recycling or disposal of waste items therefore stimulating the local economy. The removal of the proposed development following the cessation of electrical generation and storage will potentially release sand and gravel resources.

Neutral

- 15.38 None identified.

Negative

- 15.39 None identified.



Comments on Application Documents

15.40 No comments at this deadline.

Required Mitigation

- 15.41 Where minerals are extracted on site during the course of construction then they should be used in the construction of the proposed development where possible.
- 15.42 Waste created during construction, operation and decommissioning should be treated in accordance with the waste hierarchy of: a) prevention; b) preparing for re-use; c) recycling; d) other recovery, and; e) disposal.
- 15.43 All structures including buildings, foundations, plant and machinery should be removed within 12 months following the cessation of electrical transmission.

16 Noise and Vibration

Lead Authorities	Babergh District Council; Mid Suffolk District Council
Supporting Authorities	Suffolk County Council

Summary

- 16.1 The construction impacts associated with this project have the potential to have significant noise and vibration impacts on residents and businesses in Babergh and Mid Suffolk districts. EN-1 and EN-5 recognise the impacts noise from transmission network development can have on quality of life, health, the environment, and local amenity. The Noise Policy Statement for England promotes good health and good quality of life through effective noise management. Similar considerations apply to vibration, which can also cause damage to buildings.
- 16.2 The councils have engaged constructively with the Applicant throughout the pre-application process and will continue to do so during the Examination. However, additional information is required to clarify the assessment of impacts deemed as significant.

Table 13: Summary of Impacts – Noise and Vibration				
Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
13a	Potential for significant noise and vibrations impacts from traffic movements and construction activities	Negative	Clarification of the assessment of 'significant' effects and implementation of Construction Environmental Management Plan	EN-1 (5.9), EN-5, Local Plan LP15 and LP24
Operational Phase Impacts				
13b	Embedded design choices (e.g., route refinement) have reduced impacts in certain locations.	Positive	Continued justification of design choices; ensure embedded mitigation is secured.	EN-1, EN-5, LP15 and LP24
13c	Potential for significant cumulative operational noise and vibration effects	Negative		EN 1, EN-5, LP15 and LP24
Decommissioning Phase Impacts				
13d	Removal of infrastructure would reduce impacts.	Positive	Ensure decommissioning is controlled to minimise impacts on sensitive receptors	EN 1, EN-5, LP15 and LP24

Policy Context

National Policy

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 16.3 (5.12.1) “Excessive noise can have wide-ranging impacts on the quality of human life and health such as annoyance, sleep disturbance, cardiovascular disease and mental ill-health. It can also have an impact on the environment and the use and enjoyment of areas of value such as quiet places and areas with high landscape quality.”
- 16.4 (5.12.2) “The Government’s policy on noise is set out in the Noise Policy Statement for England. It promotes good health and good quality of life through effective noise management. Similar considerations apply to vibration, which can also cause damage to buildings [...].”
- 16.5 (5.12.4) “Noise resulting from a proposed development can also have adverse impacts on wildlife and biodiversity [...].”
- 16.6 (5.12.6) “Where noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment:
- i. a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal, impulsive, low frequency or temporal characteristics of the noise
 - ii. identification of noise sensitive receptors and noise sensitive areas that may be affected
 - iii. the characteristics of the existing noise environment
 - iv. a prediction of how the noise environment will change with the proposed development:
 - a. in the shorter term, such as during the construction period
 - b. in the longer term, during the operating life of the infrastructure
 - c. at particular times of the day, evening and night (and weekends) as appropriate, and at different times of year
 - v. an assessment of the effect of predicted changes in the noise environment on any noise-sensitive receptors, including an assessment of any likely impact on health and well-being where appropriate, and noise-sensitive areas

- vi. if likely to cause disturbance, an assessment of the effect of underwater or subterranean noise
 - vii. measures to be employed in mitigating the effects of noise using best available techniques to reduce noise impacts.”
- 16.7 (5.12.7) “The nature and extent of the noise assessment should be proportionate to the likely noise impact.”
- 16.8 (5.12.8) “Applicants should consider the noise impact of ancillary activities associated with the development, such as increased road and rail traffic movements, or other forms of transportation.”
- 16.9 (5.12.9) “Operational noise, with respect to human receptors, should be assessed using the principles of the relevant British Standards and other guidance [...].”

National Planning Policy Framework, December 2024

- 16.10 (198) “Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:
- 16.11 (a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life...”

Local Policy

Babergh & Mid Suffolk Joint Local Plan – Part 1, November 2023

- 16.12 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP15 titled “Environmental Protection and Conservation” seeks to prevent or minimise all pollution impacts, including noise.
- 16.13 Babergh & Mid Suffolk Joint Local Plan – Part 1 Policy LP24 titled “Design and Residential Amenity” seeks to secure high quality design of all developments and to protect residential amenity impacts, including those arising from noise and vibration.

Other Relevant Local Policy

- 16.14 None identified.

Relevant Representation

- 16.15 Babergh and Mid Suffolk’s comments on noise and vibration can be found in its Relevant Representation [RR-0314] and [RR-2540].

Local Impact Assessment

Construction Phase Impacts

Positive

16.16 None identified.

Neutral

16.17 None identified.

Negative

16.18 There is the potential for the most significant impacts to occur during the construction phases of the development. To minimise disturbance and potential for adverse impacts on amenity by virtue of these aspects² conditions have been recommended to control hours of construction activities and secure robust noise and vibration management and monitoring plans.

Operational Phase Impacts

Positive

16.19 None identified.

Neutral

16.20 None identified.

Negative

16.21 Whilst operational phase noise and vibration impacts are not considered to be significant, this position is predicated on appropriate controls and mitigation through management plans.

Decommissioning Phase Impacts

Positive

16.22 None identified.

Neutral

16.23 None identified.

Negative

16.24 Whilst operational phase noise and vibration impacts are not considered to be significant, this position is predicated on appropriate controls and mitigation through management plans.

Comments on Application Documents

Assessment of Impact and Cumulative Effects

- 16.25** Measures to restrict change in cumulative noise effects and prevent background noise creep are necessary.

Draft Development Consent Order (DCO)

- 16.26** Construction working hours should be controlled and specific noise and vibration monitoring with trigger limits should be set with agreement with the Local Authority.

Management Plans

- 16.27** **Construction Vibration Effects on Buildings and Structures** - In document 6.14 Environmental Statement Chapter 14 - Noise and Vibration [APP-256], the Applicant has identified the potential for damage to a total of five buildings or structures due to construction vibration from potential compaction activities. None of these are located in Babergh or Mid Suffolk Districts.
- 16.28** Construction Noise and Vibration Mitigation measures NV04 and NV05 are relevant but measures should be put in place to avoid damage to these structures rather than rectifying any damage arising from the works after the fact. Site specific measures should be set out in the Main Works Contractor(s) Noise and Vibration Management Plan as set out in NV05 and agreed prior to relevant works commencing.
- 16.29** No structures or buildings have been identified where there is the potential for damage from vibration from potential piling activities in any project section.

Required Mitigation

- 16.30 Controlled construction working hours and an agreed noise and vibration management plan.

17 Public Health

Lead Authorities	Babergh District Council; Mid Suffolk District Council
Supporting Authorities	Suffolk County Council

Summary

- 17.1 The proposed temporary and permanent closures and diversions of PROWs, green and blue spaces, and routes to social infrastructure, including healthcare, raise public health concerns. Older people, disabled residents and households without access to private transport are likely to be most affected, particularly where multiple disruptions, construction traffic and noise coincide. There is a clear risk that these combined pressures will exacerbate existing health inequalities and materially affect those most reliant on accessible, low-cost local assets.
- 17.2 The Applicants assessments recognise the project may affect mental health, concluding constructions effects are minor adverse and not significant for the general population and minor to moderate adverse for vulnerable groups. The reliance on qualitative judgement and limited baseline data may understate the lived experience of affected communities, especially vulnerable groups. The proposed working hours, including early starts, extended daily activity and weekend or bank holiday working, provide limited opportunity for respite. Continuous exposure to disturbance, particularly where overlapping infrastructure projects are present, is likely to heighten stress, anxiety and reduced sense of control.
- 17.3 Cumulative impacts present a further major concern. Whilst the Applicant acknowledges that combined noise, visual and access effects may be significant for certain groups, it concludes that inter-project effects on health and wellbeing are negligible and proposes no mitigations. This creates a notable gap given the potential for prolonged uncertainty, repeated disruption and progressive environmental change to erode community amenity, sense of place and mental wellbeing over time. The absence of dedicated mental health monitoring limits the ability to identify, respond to and mitigate emerging adverse impacts, particularly for those living closest to the works and for vulnerable groups with fewer options for respite.

Table 14: Summary of Impacts – Public Health

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
14a	Impact of surface infrastructure and underground cables: Electromagnetic fields	Neutral	Compliance with the International Commission on Non-Ionizing Radiation Protection guidelines (1998) Completion of an EMF risk assessment in line with the Management of Health and Safety at Work Regulations 1999 and HSEs Control of Electromagnetic Fields at Work Regulations 2016	NPS EN-5 ICNIRP Guidelines 2020 HSE The Control of Electromagnetic Fields at Work Regulations 2016 The Management of Health and Safety at Work Regulations 1999 NPPF para 224(b)
14b	Impact on access to PROWs and social infrastructure (including healthcare)	Negative	Deliver mitigations as detailed within the Code of Construction Practice and Public Rights of Way Management Plan	NPS EN-5 NPPF, paras 96 (a, b & c), 98 (b), 99, 103, 105, 135, 198, 223(f), 224(b) Countryside and Rights of Way Act 2000 Suffolk County Council Green Access Strategy
14c	Impact on Public Mental Health	Negative	Adopt all principles within the Suffolk Community Engagement and Wellbeing SDG Provide clear support information and monitor wellbeing Restrictions to working hours	Suffolk Community Engagement and Wellbeing SGD NPS EN-1 NPPF paras 96c, 103, 135, 198, 223(f), 224(b)
14d	Impacts from noise and vibration	Negative	Monitoring, adaptive management and community engagement	NPS EN-1 NPS EN-5
14e	Impacts on air quality from construction dust, traffic emissions, generator and	Neutral	Deliver mitigations as set out in appropriate plans: Outline Code of Construction Practice [APP-300]	NPS / Green Future / NPPF / SCLP

	Non-Road Mobile Machinery (NRMM) emissions		Outline Dust Management Plan [APP-304] Outline Construction Traffic Management Plan [APP-309]	
Operational Phase Impacts				
14f	Impact of surface infrastructure and underground cables: Electromagnetic fields	Neutral	Compliance with the International Commission on Non-Ionizing Radiation Protection guidelines (1998) Completion of an EMF risk assessment in line with the Management of Health and Safety at Work Regulations 1999 and HSEs Control of Electromagnetic Fields at Work Regulations 2016	NPS EN-5 ICNIRP Guidelines 2020 HSE The Control of Electromagnetic Fields at Work Regulations 2016 The Management of Health and Safety at Work Regulations 1999 NPPF para 224(b)
14g	Impact on access to PROWs and social infrastructure (including healthcare)	Neutral	Minimal impact	NPS EN-5 NPPF, paras 96 (a, b & c), 98 (b), 99, 103, 105, 135, 198, 223(f), 224(b) Countryside and Rights of Way Act 2000 Suffolk County Council Green Access Strategy
14h	Impacts from noise and vibration	Neutral	Monitoring, adaptive management and community engagement	NPS EN-1 NPS EN-5
14i	Impacts on air quality	Neutral	Minimal impact	NPS / Green Future / NPPF / SCLP
14j	Impact on Public Mental Health	Negative	Adopt all principles within the Suffolk Community Engagement and Wellbeing SDG Provide clear support information and monitor wellbeing Restrictions to working hours	Suffolk Community Engagement and Wellbeing SGD NPS EN-1 NPPF paras 96c, 103, 135, 198, 223(f), 224(b)
Decommissioning Phase Impacts				
14k	Impact of surface infrastructure and underground	Neutral	Compliance with the International Commission on Non-Ionizing	NPS EN-5 ICNIRP Guidelines 2020

	cables: Electromagnetic fields		Radiation Protection guidelines (1998) Completion of an EMF risk assessment in line with the Management of Health and Safety at Work Regulations 1999 and HSEs Control of Electromagnetic Fields at Work Regulations 2016	HSE The Control of Electromagnetic Fields at Work Regulations 2016 The Management of Health and Safety at Work Regulations 1999 NPPF para 224(b)
14l	Impact on access to PROWs and social infrastructure (including healthcare)	Negative	Deliver mitigations as detailed within the Code of Construction Practice and Public Rights of Way Management Plan	NPS EN-5 NPPF, paras 96 (a, b & c), 98 (b), 99, 103, 105, 135, 198, 223(f), 224(b) Countryside and Rights of Way Act 2000 Suffolk County Council Green Access Strategy
14m	Impact on Public Mental Health	Negative	Adopt all principles within the Suffolk Community Engagement and Wellbeing SDG Provide clear support information and monitor wellbeing Restrictions to working hours	Suffolk Community Engagement and Wellbeing SGD NPS EN-1 NPPF paras 96c, 103, 135, 198, 223(f), 224(b)
14n	Impacts from noise and vibration	Negative	Monitoring, adaptive management and community engagement	NPS EN-1 NPS EN-5
14o	Impacts on air quality from decommissioning construction dust, traffic emissions, generator and Non-Road Mobile Machinery (NRMM) emissions	Neutral	Deliver mitigations as set out in appropriate plans: Outline Code of Construction Practice [APP-300] Outline Dust Management Plan [APP-304] Outline Construction Traffic Management Plan [APP-309]	NPS / Green Future / NPPF / SCLP

Policy Context

National Policy

The Control of Electromagnetic Fields at Work Regulations, 2016

- 17.4 UK organisations with five or more employees need to complete an EMF risk assessment. This is a statutory requirement in line with the Management of Health and Safety at Work Regulations 1999.

International Commission on Non-Ionizing Radiation Protection Guidelines

- 17.5 For public exposure, the UK policy complies with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998 guidelines.

The Management of Health and Safety at Work Regulations, 1999

- 17.6 Regulation 3.—(1) “Every employer shall make a suitable and sufficient assessment of—
- 17.7 (a)the risks to the health and safety of his employees to which they are exposed whilst they are at work; and
- 17.8 (b)the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking,”

International Commission on Non-Ionizing Radiation Protection Guidelines

- 17.9 For public exposure, the UK policy complies with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998 guidelines.

Countryside and Rights of Way Act, 2000

- 17.10 Provides statutory protection for PROWs and open access land.

A Green Future: Our 25 Year Plan to Improve the Environment

- 17.11 Sets out government action to help the natural world regain and retain good health. It aims to deliver cleaner air and water in our cities and rural landscapes, protect threatened species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use and fishing that puts the environment first.

Clean Air Strategy, 2019

- 17.12 Sets out Government plans for dealing with sources of air pollution. “An aim is to shift the focus towards prevention, promoting greater action to avoid exceedances, rather than tackling air pollution only when limits are surpassed.”

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 17.13 (5.2.1) “Energy infrastructure development can have adverse effects on air quality. The construction, operation and decommissioning phases can involve emissions to air which could lead to adverse impacts on health, on protected species and habitats, or on the wider countryside and species. Air emissions include particulate matter (for example dust) up to a diameter of ten microns (PM10) and up to a diameter of 2.5 microns (PM2.5) as well as gases such as sulphur dioxide, carbon monoxide and nitrogen oxides (NOx).”

National Planning Policy Framework, December 2024

- 17.14 (5) “The Framework does not contain specific policies for nationally significant infrastructure projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications.”
- 17.15 (8) (a) “[...] an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
- 17.16 (8) (b) “[...] a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being”
- 17.17 (85) “Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential.”

- 17.18 (96) (a) “[...] promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;
- 17.19 (96) (b) “[...] are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of well-designed, clear and legible pedestrian and cycle routes, and high quality public space, which encourage the active and continual use of public areas; and
- 17.20 (96) (c) “[...] enable and support healthy lives, through both promoting good health and preventing ill-health, especially where this would address identified local health and well-being needs and reduce health inequalities between the most and least deprived communities – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.”
- 17.21 (98) (b) “[...] take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community;”
- 17.22 (99) “Planning policies and decisions should consider the social, economic and environmental benefits of estate regeneration. Local planning authorities should use their planning powers to help deliver estate regeneration to a high standard.”
- 17.23 (103) “Access to a network of high-quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities, and can deliver wider benefits for nature and support efforts to address climate change.”
- 17.24 (105) “Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.”
- 17.25 (135) (f) “[...] create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.”

- 17.26 (187) “Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 17.27 (187) (e) “preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;”
- 17.28 (198) “[...] “Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: (a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life; (b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and (c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.”
- 17.29 (223) (f) “[...] “set out criteria or requirements to ensure that permitted and proposed operations do not have unacceptable adverse impacts on the natural and historic environment or human health, taking into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality.”
- 17.30 (224) (b) “[...] “ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality;”

Local Policy

Babergh & Mid Suffolk Joint Local Plan – Part 1, November 2023

- 17.31 Babergh & Mid Suffolk Joint Local Plan Policy SP09 titled “Enhancement and Management of the Environment” communicates the intent to monitor air quality such that adverse effects will be mitigated.
- 17.32 Babergh & Mid Suffolk Joint Local Plan Policy LP15 titled “Environmental Protection and Conservation” seeks to minimise impacts upon air quality by reference to the following criteria:

- 17.33 (a) “Prevent, or where not practicable, mitigate and reduce to a minimum all forms of possible pollution including, but not limited to: air, land, ground and surface water, waste, odour, noise, light and any other general amenity, including public amenity and visual amenity impacts. This must be convincingly demonstrated by impact assessments where appropriate.”
- 17.34 (b) “Significant adverse amenity impacts are avoided where a proposal is located adjacent to or close to existing uses. This would include an assessment of any identified amenity impacts that have a significant adverse effect and how the continued operation of existing use(s) would not be prejudiced.”
- 17.35 Babergh & Mid Suffolk Joint Local Plan Policy LP23 titled “Sustainable Construction and Design” include the following criteria:
- 17.36 (1) “All new development is required to minimise its dependence on fossil fuels and to make the fullest contribution to the mitigation of climate change through adopting a sustainable approach to energy use.”
- 17.37 (3) “In meeting the above, all major developments are required to submit a Sustainability Design and Construction Statement. This should be submitted at the appropriate stage in the application process and demonstrate how the principles set out in 2c)-2h) will be incorporated into the design of the development.”
- 17.38 (4) “Non-residential development of 1,000sqm and above must achieve a minimum of BREEAM ‘Very Good’ standard or equivalent. Developers will be expected to provide certification evidence of the levels for BREEAM at design stage and on completion of development. All new developments will also be expected to meet the higher water efficiency standards as set out in 2b), unless it is convincingly demonstrated that it is not possible.”

Other Relevant Local Policy

- 17.39 None identified.

Relevant Representation

- 17.40 Suffolk County Council’s comments on Public Health can be found between paragraphs 248 - 271 in its Relevant Representation [RR-3520].

Local Impact Assessment

Construction Phase Impacts

Positive

- 17.41 None identified.

Neutral

Impact of surface infrastructure and underground cables: Electromagnetic fields

- 17.42 The proposals involve the construction of substantial electrical infrastructure with associated Electrical and Magnetic forces. The Applicant's assessment ([APP-192], paragraphs 10.6.4) outlines that the project has been designed in a precautionary approach and the Councils has been reassured that all recognised standards in respect of public exposure to Electric and Magnetic Forces will be adhered to.

Impact on air quality from construction dust, traffic emissions, generator and Non-Road Mobile Machinery (NRMM) emissions

- 17.43 The air pollution levels resulting from the Norwich to Tilbury Proposal have been concluded in the Environmental Statement (Chapter 7: Air Quality) to be 'Not Significant' throughout the construction phase. Public Health will defer to Babergh and Mid Suffolk Council on air quality matters as they are the monitoring authority. Public Health however are satisfied with the mitigations proposed in the relevant plans to manage air quality impacts throughout the construction phase.

Negative

Impact on access to PROWs and social infrastructure (including healthcare)

- 17.44 The project proposes temporary and, in some cases, permanent closures and diversions of Public Rights of Way ("PROW") ([APP-329], table 10.3), as well as temporary closures and diversions affecting green/blue spaces ([APP-329], table 8.2) and access to social infrastructure ([APP-192], table 10.4). Anticipated closures lasting weeks or months, and even shorter or more localised disruptions, can have a disproportionate effect on physical activity, social connectedness and mental wellbeing. These impacts are likely to be felt most acutely by older people, individuals with limited mobility, and households without access to private transport. The potential for harm is amplified where multiple closures, increased construction traffic, and elevated noise levels coincide with other NSIPs in the area. Under these conditions, there is a heightened risk of widening existing health inequalities, as those already experiencing barriers to good health are the most affected by the loss of accessible, low cost opportunities for

daily activity, social interaction, and engagement with their local environment.

- 17.45 The Applicant's assessment of impacts varies by location and receptor. **[APP-192]** Paragraphs 10.7.105 – 10.7.107 identify a range of impacts on PROWs, open spaces, and cycle routes, including several significant adverse effects. However, the Chapter concludes that the overall level of change arising from the project is low and can be appropriately mitigated through standard good practice construction management measures. As such, the Chapter considers effect of the Project on physical activity is considered to be negligible (not significant) for the general population and minor adverse (not significant) for vulnerable groups.
- 17.46 For access to social infrastructure, impacts are described as “negligible and not significant” (**[APP-192]**, Paragraph 10.7.62). The Chapter acknowledges that some individuals within the areas affected by road closures / diversions may experience heightened anxiety about potential delay (for example perceptions about how it may impact their ability to attend medical appointments or other requirements) and concludes that with appropriate communication and community engagement as set out in **[APP-305]**, concerns should be effectively mitigated.
- 17.47 Whilst Public Health acknowledge the Applicant's efforts to minimise disruption and provide mitigation, we remain concerned that the assessment does not fully capture the combined ongoing and cumulative effects, particularly on vulnerable groups and in locations where multiple disruptions coincide or where communities are already experiencing health inequalities. In practice, even minor or short-term disruptions can have a material and disproportionate impact on daily physical activity, wellbeing, and social cohesion for those most dependent on these local assets.

Impact on Public Mental Health

- 17.48 The consenting and construction of major infrastructure projects such as the Proposed Scheme can have significant and enduring impacts on the mental health and wellbeing of local residents. Changes to the local environment, including alterations to landscape character, increased noise, vibration, activity, and the presence or introduction of large scale infrastructure, can diminish residents' sense of place, belonging, and control. Uncertainty surrounding the scale, duration, and nature of the works, as well as concerns about continued access to essential services, community facilities, social infrastructure and green/blue spaces, may contribute to heightened stress, anxiety, and reduced quality of life, particularly among vulnerable groups such as older people, disabled residents, and those without access to private transport.

- 17.49 The Residual Effects assessment detailed within **[APP-192]** concludes that impacts on mental health and wellbeing during construction are largely indirect, arising through changes to determinants such as noise, visual amenity, access to services, and physical activity. It finds that, for the general population, the magnitude of many effects are low and the significance is “minor adverse (not significant)”, whilst for vulnerable groups, effects may be “minor to moderate adverse” in respect to EMF. The assessment highlights that mechanisms such as community engagement, information provision, and complaints procedures are intended to provide some measure of control and reassurance for affected residents. It also notes that whilst some individuals may experience heightened stress or anxiety, particularly those living in close proximity to construction activities or with existing vulnerabilities, these effects are not expected to be widespread or persistent at the community level.
- 17.50 From a public health perspective, whilst the assessment aligns with current guidance, there are limitations that should be acknowledged. The reliance on qualitative judgement, the absence of direct baseline data on mental health (noting the data within **[APP-193]** Table A10.1.6 are not considered comprehensive), and the focus on population level rather than individual or community level impacts may understate the experience of those most affected. The conclusion that effects are “not significant” at the population level does not fully capture the potential for cumulative, persistent, or disproportionate impacts on vulnerable groups, particularly where multiple stressors coincide (e.g. noise, loss of access, uncertainty, and perceived risks). The assessment’s mitigation measures, primarily information provision and engagement are important but may not be sufficient to address the underlying drivers of anxiety, loss of control, or diminished wellbeing for those most exposed to disruption.

Working Hours

- 17.51 A particular concern for public health is the proposed construction working hours, which, as currently set out in **[APP-300]** paragraphs 2.2.3 – 2.2.8, would allow activities from as early as 07:00 -19:00 on weekdays plus a provision for start up and close down activities up to 1 hour either side of these core working hours, and from 07:00 – 17:00 on weekends and bank holidays. This leaves local communities with little opportunity for respite from construction related noise, vibration, traffic, and disruption. Continuous exposure to these stressors, especially when compounded by overlapping NSIPs in the region, is likely to have a substantial impact on mental health and wellbeing. Vulnerable groups, including older people, disabled residents, and those without access to private vehicles, may be

disproportionately affected, as they have fewer options for respite or alternative travel. The lack of quiet periods and predictability in daily life can exacerbate stress, anxiety, and feelings of powerlessness, and may contribute to health inequalities within the affected communities.

Cumulative impacts

- 17.52 The cumulative effects of multiple infrastructure projects in the same locality can result in significant adverse impacts on community wellbeing, including increased anxiety, loss of control, and emotional distress, as identified in the Suffolk County Council's Community Engagement and Wellbeing SGD.
- 17.53 **[APP-281]** Paragraphs 17.5.46 – 17.5.48 conclude that inter project cumulative effects on health and wellbeing receptors within the areas surrounding the Project would be *not significant* during both construction and operation and maintenance. The assessment notes that best practicable means (“**BPM**”) and other mitigation measures implemented by other developments would prevent adverse effects from environmental change including noise, air quality and landscape and visual effects. It further acknowledges that, in a number of instances, adverse effects on mental health and wellbeing may be particularly relevant due to the scale of other development (e.g. significant residential or infrastructure development) and associated perceived effects on neighbourhood quality, sense of place and uncertainty during the construction phase.
- 17.54 **[APP-281]** 17.4.22 explains that “*No monitoring is proposed during construction or operation (and maintenance).*” This appears a notable gap given the identified potential for adverse effects that Public Health suggest may extend into impacts on physical activity levels, mental wellbeing, and community amenity.
- 17.55 In addition, Table 17.3 recognises that for some groups the cumulative effect of noise, visual, and access impacts is considered *significant*, noting that “owing to the significance of visual effects within 500 m of the Order Limits, and as further mitigation is unlikely to be practicable, it is anticipated that the residual cumulative effect of visual and noise amenity effects with access and delay effects would lead to a significant intra-project cumulative effect on pedestrians, cyclists and horse riders.”
- 17.56 However, despite recognising these potential pressures, the Applicant concludes that inter-project effects on health and wellbeing during construction and operation would be “negligible and not significant”, and does not propose specific mitigation to address inter-cumulative effects on mental health and wellbeing. This conclusion is reached even though

cumulative construction activity may extend, intensify, or compound the duration and magnitude of disruption, particularly for communities exposed to multiple large projects either concurrently or in close succession and relies heavily on the assumption that other developers will consistently deliver BPM mitigation to a high standard, an assumption that may not be realistic in practice.

- 17.57 SCC considers that, in respect of cumulative impacts, the approach set out within assessments **[APP-281]** and **[APP-192]** does not fully reflect the lived experience of affected communities, nor does it adequately capture the psychological and social impacts of prolonged uncertainty, repeated disruption, and the progressive industrialisation of the local environment. The cumulative sense of disruption, loss of amenity, and erosion of place identity, especially where multiple NSIPs are present or anticipated, has the potential to exacerbate adverse mental health outcomes beyond those reflected in the Applicant's "negligible" classification. These impacts are likely to be felt most acutely by vulnerable groups, including older people, disabled residents, and those without access to private transport, who may have fewer practical options for respite or alternative access to social infrastructure and green or blue spaces.

Community Engagement

- 17.58 Effective community engagement is fundamental to protecting and promoting public health in the context of major infrastructure projects. Meaningful engagement enables communities to understand, influence, and adapt to changes that may affect their environment, wellbeing, and daily lives. The Applicants approach to community engagement as set out in **[APP-305]** and **[APP-071]**, demonstrates efforts to reach hard-to-reach and seldom-heard groups through targeted communications, alternative formats, engagement with local community organisations, and use of the Mental Wellbeing Impact Assessment ("MWIA") toolkit. These elements are welcomed.
- 17.59 Research and local experience in Suffolk demonstrate that when communities feel excluded from decision making, or when engagement is limited to statutory minimums, there can be significant negative impacts on mental health and wellbeing, including increased anxiety, loss of trust, and a diminished sense of control and belonging. Conversely, early, honest, and continuous engagement can actively mitigate these impacts, giving a sense of agency, inclusion, and build resilience within affected communities.
- 17.60 There are areas where the Applicants engagement process could be strengthened. Several local authorities and stakeholders have raised concerns about the accessibility and navigability of consultation materials,

particularly for those seeking information specific to their locality. The reliance on digital-first approaches, while inclusive in intent, may still present barriers for digitally isolated or less digitally confident residents, despite the availability of paper copies and inspection points. Some councils have also highlighted the limited use of social media platforms beyond X (Twitter) and Facebook, and the lack of two-way dialogue via these channels, which may restrict engagement with younger or more digitally active demographics. There have also been requests for greater clarity on how feedback will influence project decisions, and for more tailored, locally relevant information to be provided at an earlier stage. Whilst the applicant has made efforts to address these points, including expanding the Primary Consultation Zone (PCZ) and providing additional events and materials, further work is needed to ensure that all communities, particularly those most directly affected, feel genuinely included and empowered in the process.

- 17.61 Councils requested longer consultation periods (six weeks, **[APP-077]**, but the Applicant maintained a 30-day period for targeted consultations, citing proportionality. This may have limited the ability of some community representatives to coordinate and respond effectively. A number of councils expressed concern that the defined consultation zones may exclude interested parties just outside the boundary, particularly in rural areas. Whilst the Applicant did make information available online and accepted feedback from anyone, direct notification was limited to those within the defined zones, potentially reducing awareness and participation among neighbouring communities.

Impacts from Noise and Vibration

- 17.62 **[APP-256]** notes Noise Sensitive Receptors (“**NSR**”) include residential properties, schools and healthcare facilities. Whilst the Chapter identifies embedded and standard mitigation measures, there are notable limitations and areas of concern. The assessment acknowledges in Paragraph 14.7.24 that construction vibration may exceed the Significant Observed Adverse Effect Level (“**SOAEL**”) at 74 Noise Sensitive Receptors, primarily due to compaction activities associated with highway works, haul road construction, and temporary construction compounds. With mitigation in the form of Best Practicable Means (“**BPM**”), the magnitude of impact is expected to be negligible to small at all nearby residential, low to medium sensitivity to non-residential NSRs, and negligible at nearby high-sensitivity NSRs, resulting in a residual effect that is not significant. However, there is no specific commitment to vibration monitoring as noted in **[APP-306]** Paragraph 4.6.1 with assessments deferred to Section 61 applications.

- 17.63 Additionally, whilst **[APP-256]** references the ongoing engagement and communication with affected communities in Paragraph GG30, the practical mechanisms for ensuring timely and effective responses to local concerns, particularly for those most vulnerable to noise and vibration impacts could be more clearly defined to include consideration for targeted support for vulnerable groups, escalation procedures and response times.

Operational Phase Impacts

Positive

- 17.64 None identified.

Neutral

Impact of surface infrastructure and underground cables: Electromagnetic fields

- 17.65 The proposals involve the construction of substantial electrical infrastructure with associated Electrical and Magnetic forces. The Applicant's assessment (**[APP-192]**, paragraphs 10.6.4) outlines that the project has been designed in a precautionary approach and the Councils has been reassured that all recognised standards in respect of public exposure to Electric and Magnetic Forces will be adhered to.

Impact on access to PROWs and social infrastructure (including healthcare)

- 17.66 Minimal impact.

Impacts from Noise and Vibration

- 17.67 Minimal impact.

Impacts on air quality

- 17.68 Minimal impact.

Negative

Impact on Public Mental Health

- 17.69 The operation of the Proposed Scheme may continue to exert influences on the mental health and wellbeing of local residents and communities. Once operational, changes to the local environment such as visual intrusion, maintenance traffic movements, lighting, and changes in local air quality may alter residents'sense of place, comfort, and security. The permanent presence of large scale infrastructure can transform local character and identity, potentially leading to feelings of loss, disconnection, or reduced satisfaction with the living environment. Concerns regarding long term environmental impacts, perceived risks to health and safety, or the fairness of who benefits from or bears the burdens of the scheme may also

contribute to sustained anxiety, mistrust, or frustration among affected communities.

- 17.70 The potential for cumulative operational effects, particularly where multiple NSIPs or industrial developments coexist in the same area, is also a recognised stressor. Persistent noise, vibration, traffic, lighting, or landscape impacts from several projects can collectively erode community cohesion, amplify perceptions of neglect or inequity, and intensify feelings of fatigue or resignation. These effects extend beyond physical nuisance to encompass deeper psychosocial effects, including a diminished sense of agency and belonging.

Decommissioning Phase Impacts

Positive

- 17.71 None identified.

Neutral

Impact of surface infrastructure and underground cables: Electromagnetic fields

- 17.72 The proposals involve the construction of substantial electrical infrastructure with associated Electrical and Magnetic forces. The Applicant's assessment ([APP-192], paragraphs 10.6.4) outlines that the project has been designed in a precautionary approach, and the Councils has been reassured that all recognised standards in respect of public exposure to Electric and Magnetic Forces will be adhered to.

Impact on air quality from construction dust, traffic emissions, generator and Non-Road Mobile Machinery (NRMM) emissions

- 17.73 Decommissioning impacts related to air quality are consistent with the Construction impacts

Negative

Impact on access to PROWs and social infrastructure (including healthcare)

- 17.74** Decommissioning impacts related to access and use of PROWs and social infrastructure are consistent with the Construction impacts

Impact on Public Mental Health

- 17.75 Decommissioning impacts related to Public Mental Health are consistent with the Construction impacts

Impacts from Noise and Vibration

- 17.76 Decommissioning impacts related to Noise and Vibration are consistent with the Construction impacts

Comments on Application Documents

17.77 No comments at this deadline.

Required Mitigation

Impact of surface infrastructure and underground cables: Electromagnetic fields

- 17.78 No mitigation required.

Impact on access to PROWs and social infrastructure (including healthcare)

- 17.79 Public Health is generally satisfied that the mitigations set out in **[APP-300]** and **[APP-329]** provide a reasonable framework to minimise the public health impacts of reduced or restricted access and amenity during the project phases. Whilst measures for PROWs include limiting closures to short durations, providing clear signage, reinstating routes in consultation with the LHA PROW Officer, and conducting precondition surveys, Public Health recommend that the local community be given advance notice of any planned PROW closures in accessible formats to ensure robust communication.
- 17.80 Public Health recognises that, even with reasonable measures in place, there will be an unavoidable residual negative impact on local access, amenity, and community wellbeing relative to the existing baseline. While the proposed mitigations will reduce disruption, they cannot eliminate it entirely. Consequently, the overall effect on local residents, visitors, and businesses during the construction period is expected to remain adverse. Public Health recommend targeted monitoring of health and wellbeing outcomes for affected communities is undertaken. Processes should be put in place and documented to communicate and engage with users of PROWs, schools, and social infrastructure (including healthcare providers) to ensure timely information about closures, diversions, and mitigation measures. Additionally, the Applicant should proactively distribute mental health resources (e.g. WellMinds [REDACTED], provide funded Mental Health First Aid training for community members, and support local mental health organisations to mentor volunteers, as recommended in the Suffolk County Council Community Engagement and Wellbeing SGD.
- 17.81 Public Health also recommend the applicant maintain flexibility in mitigation and monitoring plans to respond to unforeseen cumulative impacts, especially if construction timelines or project overlaps change.

Impact on Public Mental Health

Monitoring

- 17.82 Public Health considers that the Applicant should develop and implement a proportionate but robust Mental Health and Wellbeing Monitoring Plan for

the duration of the Project (construction and early operation), with clear reporting routes and defined review points.

- 17.83 Reliance solely on publicly available GP or Primary Care data would be insufficient, as this captures only those individuals who actively present and self-report. This approach risks under representing wider community impacts, particularly among individuals who experience stress, anxiety or wellbeing deterioration but do not engage with formal health services.
- 17.84 Whilst community surveys may provide more direct insight into lived experience, these too have methodological limitations, including potential response bias where views are influenced by opposition to the Project rather than demonstrable mental health effects. Nevertheless, survey and qualitative approaches can provide valuable triangulation when designed appropriately and interpreted alongside service data.
- 17.85 Learning from monitoring arrangements associated with other NSIPs, including Sizewell C, suggests that a multi-layered approach is more robust. This may include:
- i. Population health management (PHM) data and trends in Primary Care activity;
 - ii. Monitoring of referrals to social prescribing and community mental health services;
 - iii. Engagement with Primary Care leads within the project catchment to identify emerging trends;
 - iv. Regular liaison with Community Mental Health Teams;
 - v. Clear community routes for raising concerns (with mechanisms to ensure issues are captured, categorised and escalated appropriately);
 - vi. Periodic reporting to relevant local authority and health partnership forums to enable two-way dialogue;
 - vii. Consideration of independent or academic evaluation to provide objective assessment of early and cumulative impacts including work undertaken by Suffolk MIND and University of Suffolk; and
 - viii. Following SCC's guidance on community engagement.³⁹

Working Hours

- 17.86 To effectively mitigate the effects of prolonged construction disturbance on community wellbeing, SCC expect the Applicant to revise the proposed

³⁹ <https://www.suffolk.gov.uk/asset-library/community-engagement-and-wellbeing-policy.pdf>

core working hours to minimise avoidable noise, vibration, and disruption and protect public mental health. Construction activity should be limited to Monday–Friday: 08:00–18:00 and Saturday: 08:00–13:00, with no works permitted on Sundays or Bank Holidays, except in exceptional circumstances agreed in advance with SCC.

- 17.87 Start up and close down periods should be strictly limited to no more than one hour either side of the core hours and must exclude any activity likely to cause disturbance to nearby residents or businesses.

Cumulative impacts

- 17.88 The Applicant should continue to engage proactively with affected communities and undertake robust monitoring of health and wellbeing outcomes, particularly those within 500 m of the Order Limits to monitor the impacts on residents, pedestrians, cyclists, and horse riders. The Applicant should remain open to implementing targeted, site-specific measures or enhancements if significant adverse effects are observed during construction or operation, even if these go beyond standard mitigation.
- 17.89 Processes should be put in place and documented to communicate and engage with users of PROWs, schools, and community facilities (including healthcare) to ensure timely information about closures, diversions, and mitigation measures. Additionally, the Applicant should proactively distribute mental health resources (e.g. WellMinds), provide funded Mental Health First Aid training for community members, and support local mental health organisations to mentor volunteers, as recommended in the Suffolk County Council Community Engagement and Wellbeing SGD.

Community Engagement

- 17.90 Suffolk County Council has published a Supplementary Guidance Document (“**SGD**”) for NSIP developers about Community Engagement and Wellbeing, supporting its Energy and Climate Adaptive Infrastructure Policy. This guidance emphasises that effective engagement must go beyond statutory minimums, requiring project promoters to build relationships of trust, confidence, and understanding with local communities. Public Health consider it essential for promoters to adopt a collaborative approach, involving the community meaningfully in the design and delivery of the project. Clear, comprehensive, honest, and open engagement throughout the consenting, construction, and decommissioning phases is vital to safeguarding community wellbeing, as it ensures residents feel listened to and that their views are genuinely considered. The SGD specifically recognises that the scale and pace of change, uncertainty about project impacts, and the cumulative effect of multiple infrastructure schemes can

all contribute to significant mental health and wellbeing impacts. Public Health expect the Applicant to implement the following measures, as set out in the SGD:

- **Appoint a dedicated ‘relationship manager’** - an impartial, consistent point of contact for the community, to facilitate dialogue, address concerns, and provide timely, high quality, and accessible information.
- **Engage in regular, face-to-face conversations** with community leaders, parish councils, and residents, ensuring technical information is explained clearly and that feedback mechanisms are in place and responsive.
- **Invest in local community assets** (such as public spaces, village halls, or community organisations) as a form of mitigation and compensation, with assets identified in close collaboration with the community itself.
- **Support community mental health and resilience** by funding local mental health organisations, providing Mental Health First Aid training for community members, and promoting resources such as East Suffolk Council's WellMinds.

17.91 **Adopt the SGD’s principles of early, honest, and continuous engagement**, including the creation of a community panel to participate in project design, and the use of participatory monitoring and adaptive management to track and respond to wellbeing impacts over time.

17.92 Public Health consider that targeted consultation periods are extended where requested by stakeholders for justifiable reasons, and to take more pragmatic steps to engage with interested parties just outside the boundary, especially in rural areas. Further work is needed to ensure that all communities, particularly those most directly affected, feel genuinely included and empowered in the process.

Impacts from Noise and Vibration

17.93 To address the current lack of a specific commitment to vibration monitoring and the deferral of detailed assessments to Section 61 applications, it is recommended that real-time vibration and noise monitoring be implemented at all identified high-risk NSRs, including the 74 receptors identified as potentially exceeding the SOAEL during compaction and highway works. Detailed monitoring protocols should be developed and agreed with the LPA prior to the commencement of works. These protocols should specify trigger levels, monitoring locations, frequency, and reporting arrangements. Pre-construction baseline measurements should also be

taken to establish reference levels and enable meaningful post construction comparison. Monitoring results must be communicated promptly to both the LPA and affected residents through accessible and appropriate channels.

- 17.94 Where monitoring indicates that agreed noise or vibration limits are exceeded, an adaptive management approach should be employed, with immediate implementation of mitigation measures. Such measures could include adjusted construction techniques, use of vibration damping equipment, or rescheduling of high impact activities to minimise disruption and safeguard public health.
- 17.95 Targeted support should be provided for vulnerable groups, including older residents and those with pre-existing health conditions. Where necessary, temporary relocation or other forms of respite should be offered, accompanied by clear communication regarding the timing and expected duration of works.

Impacts on air quality

- 17.96 No additional mitigation required from a Public Health perspective.

18 Public Rights of Way

Lead Authorities	Suffolk County Council
Supporting Authorities	Babergh District Council; Mid Suffolk District Council

Summary

- 18.1 The proposed new pylon route significantly affects the public rights of way (“**PROW**”) network during the construction phase due to this SCC strongly advocates this is dealt with within its own chapter. It is therefore covered in health and well-being chapter; landscape and visual chapter; social economics, recreation and tourism and transport and traffic chapter. As a result, the post methodologies do not recognise the importance of the quality of the experience enjoyed by the public when going for a walk or ride. SCC does welcome the draft PROW Management Plan but would like all the other aspects to be covered off or repeated in a dedicated PROW chapter, or in a subsection of the Traffic and Transport section.
- 18.2 The PROW Management Plan (“**PROWMP**”) should be a standalone document. The PROW Management Plan should also include the following information:
- 18.3 Management measures which will be in place to ensure the continued safe use by the public of the PROW which cross the onsite access route.
- 18.4 The following safety measures will also be employed for each PROW crossing:
- i. Where a PROW crosses the haul road, the surface will be firm, smooth, level and free draining with no loose stones or voids on the surface. This may require additional work to the type 1 surface such as compacting fines (4 or 6mm to dust aggregate) to fill voids.
 - ii. No steps or gradients will be introduced which could deter wheeled users (1in 20 is the accepted standard). The crossing will be maintained in a safe and fit condition for use by pedestrians, wheeled users, cyclists and equestrians (as appropriate) all year round, to the reasonable satisfaction of the Highway Authority;
 - iii. Use of signage (including Give Way signs) to ensure that haul road users are aware of the potential for PROW users to cross their path and PROW users are aware that they are approaching a construction interface with the associated hazards;

- iv. Use of vehicle marshals during construction hours to ensure the general public using the PROW are able to safely cross the construction area;
- v. A speed restriction to 10mph along the haul road/construction roads in the vicinity (circa 20m) of the PROW (speed limit on the remainder of the haul road will be 30mph);
- vi. Information regarding the presence of the PROW and the potential for PROW users will be included in the Method Statements, such that vehicle and plant operators will be mindful always for members of the public (hikers, dog walkers, horse riders, cyclists etc);
- vii. No-reversing restrictions will be in place at locations where construction traffic interact with PROW;
- viii. Stopping/parking of vehicles and mobile plant will not be permitted at locations where construction traffic interacts with PROW;
- ix. Temporary fencing to be installed along the length of the working width, with gaps in the fencing to allow access along the PROWs. Signage will be in place so that users can quickly identify the continuation of the route across the haul road;
- x. Information regarding these measures will be a compulsory part of the induction training for drivers;
- xi. The surface of each PROW where it crosses the construction road will be kept in a safe and fit condition at all times for all legal users. The PROW will be maintained to a standard agreed with SCC as Local Highway Authority; and
- xii. The positioning of site notices will be carefully considered to keep sign clutter to a minimum and to collate information on route closures where appropriate. Signs will be carefully worded with clear, uncomplicated information showing maps that the public would be familiar with (e.g. OS maps with topography context) to give them confidence that their walk or ride will still be possible, albeit with a minor diversion.

PROW Reinstatement

- 18.5 The following measures will be followed:
- 18.6 A pre-construction and post-construction survey of the PROW (surface condition and street furniture) affected will be undertaken by an experienced surveyor. The results of these surveys will be shared with SCC;

- 18.7 A qualified Agricultural Liaison Officer (“**ALO**”) will be employed to ensure that information on existing land conditions is obtained, recorded and verified during the PROW surveys.
- 18.8 The ALO will act as the point of contact for the restoration of the PROW.
- 18.9 The pre-condition and post-construction surveys will include a photographic record with accompanying map and table listing:-
- i. Date record taken;
 - ii. Map reference;
 - iii. Reference and type of PROW;
 - iv. Overview description of PROW, giving average width, surface type, general condition;
 - v. Highlighting any defects in current condition such as wet areas, pre-existing surface damage such as ruts, compaction, or obstructions; and
 - vi. Note any other vehicle use (farm or private vehicle use).
- 18.10 Section 15 covers receptors and some long-distance trails, some notable circular walks have been omitted and need to be referenced and assessed, using the ‘Discover Suffolk’ website routes affected are and not limited to:
- i. Great Bricett Moat & Pub Walk,
 - ii. Great Bricett Airfield & Hall Walk,
 - iii. Bramford Mills and Meadows Walk.
- 18.11 SCC has concerns about the impact of multiple National Grid projects particularly within the Bramford area and the long-term impact on restrictions on the rights of way network. The combination of projects could see closures for significant lengths of time effectively severing the network and creating long term disruption to PROW users. Although the closures are not permanent, this will impact on access and thus on the health and well-being of the local community over a lengthy period. SCC considers that appropriate mitigation for these residual impacts is required.
- 18.12 Several promoted long-distance routes will be affected by the proposal covering the Stour Valley Path, Gipping Valley Footpath and Mid Suffolk Footpath and connecting promoted circular routes, in addition to local strategic routes close to villages. These routes need to be monitored during construction of the line and usage of haul roads, to identify impacts and where required further mitigate. This should also cover the increase in construction traffic on minor routes close to villages that are also used for non-motorised access to the PROW network. SCC are happy to provide

details of specific areas of known medium to high use that should be included in further surveying. This comment carries over from previous correspondence and should also be addressed in the PROWMP, which has not been attached to the submission documents but referred to as document 7.6.

- 18.13 SCC also expects mitigation measures for the impact on the popular sections of the rights of way to offset the disruption to local communities. Consideration needs to be given to whether temporary infrastructure can assist as legacy for PROW access as a permanent measure once completion of the scheme, including any proposed structures. Further discussion would be welcomed on this.
- 18.14 Further details would be welcomed on treatment of routes and proposals for closures.

Table 15: Summary of Impacts – Public Rights of Way

Item	Description of Impact	Positive; Neutral; Negative	Required Mitigation	Policy Context
Construction Phase Impacts				
15a	Detrimental impact to PROW - PROW are both historic and living features that are part of the landscape, and need to be assessed as such in order to identify appropriate treatment	Negative	Reassessment to ensure that PROW as historic and living features of the landscape have been appropriately captured and mitigated for.	NPS / Green Future / NPPF / SCLP
15b	Impacts of construction on Public Rights of Way including diversions, closures, and amenity	Negative	Plan. A robust PROW strategy will be required. Further assessment work required on the impacts of traffic and transport including for cumulative effects and improved methodology	
15c	Long-term impacts on Public Rights of Way including diversions, closures, and amenity	Negative	Robust controls within the PROW Management Plan. PROW enhancement where required	
15d	Impact of surface infrastructure (including construction traffic)	Negative	A PROW strategy will be required.	
15e	Impact of underground cables (including decommissioning traffic)	Negative	A PROW strategy will be required.	
15f	Closure of PROW for lengthy periods of time can result in significant changes to people's behaviours, leading to adverse effects on mental and physical health and wellbeing.	Negative	PROW closures must be minimised. The Access & PROW plans need to include proposed diversions for temporarily stopped up PROW. Agreed with the Local Highway Authority. Must be documented in the Construction Management Plan	
15g	Damage by vehicles using or crossing PROW, including to the substructure, resulting in	Negative	Applicant to confirm internal haulage routes and identify PROW impacted. Mitigation	

	difficulty in reinstatement to the same standard that was previously present and ongoing maintenance liabilities.		measures to be agreed with the Local Highway Authority, including commuted sums e.g., or compaction that might result in flooding, reinstatement of boundary features. Must be documented in the Construction Management Plan	
15h	Extending works into Weekends and bank holidays during construction could negatively impact upon healthy lifestyle behaviours of users of the PROW network	Negative	The Applicant must assess the impact of extending work into Saturdays for the duration of the construction on the behaviour of NM users of the PROW network and propose appropriate mitigation measures to counter any negative impact in order to maintain existing standards of health and well-being of affected communities.	
Operational Phase Impacts				
15i	Impact of underground cables	Neutral	Minimal impact	
15j	Detrimental impact to PROW - PROW are both historic and living features that are part of the landscape, and need to be assessed as such in order to identify appropriate treatment	Negative	Robust controls within the PROW Management Plan. PROW enhancement where required	NPS / Green Future / NPPF / SCLP
15k	Long-term impacts on Public Rights of Way including diversions, closures, and amenity	Negative	Reassessment to ensure that PROW as historic and living features of the landscape have been appropriately captured and mitigated for.	
15l	Impact of underground cables (including construction traffic)	Negative	A PROW strategy will be required.	
Decommissioning Phase Impacts				
15m	Long-term impacts on Public Rights of Way including	Negative	Robust controls within the PROW Management Plan.	NPS / Green Future / NPPF / SCLP

	diversions, closures, and amenity		PRoW enhancement where required.	
15n	Impact of surface infrastructure (including decommissioning traffic)	Negative	A PROW strategy will be required	
15o	Impact of underground cables (including decommissioning traffic)	Negative	A PROW strategy will be required	
15p	Closure of PROW for lengthy periods of time can result in significant changes to people's behaviours, leading to adverse effects on mental and physical health and wellbeing.	Negative	PROW closures must be minimised. The A&ROW plans need to include proposed diversions for temporarily topped up PROW. Agreed with the Local Highway Authority. Must be documented in the Construction Management Plan	
15q	Damage by vehicles using or crossing PROW, including to the substructure, resulting in difficulty in reinstatement to the same standard that was previously present and ongoing maintenance liabilities.	Negative	Applicant to confirm internal haulage routes and identify PROW impacted. Mitigation measures to be agreed with the Local Highway Authority, including commuted sums e.g., or compaction that might result in flooding, reinstatement of boundary features. Must be documented in the Construction Management Plan	
15r	Extending works into Weekends and bank holidays during construction could negatively impact upon healthy lifestyle behaviours of users of the PROW network	Negative	The Applicant must assess the impact of extending work into Saturdays for the duration of the construction on the behaviour of NM users of the PROW network and propose appropriate mitigation measures to counter any negative impact in order to maintain existing standards of health and well-being of affected communities.	

Policy Context

National Policy

National Policy Statements

Overarching National Policy Statement for Energy (EN-1), November 2023

- 18.15 (5.11.24) “Where green infrastructure is affected, the Secretary of State should consider imposing requirements to ensure the functionality and connectivity of the green infrastructure network is maintained in the vicinity of the development and that any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space including appropriate access to National Trails and other public rights of way and new coastal access routes.”
- 18.16 (5.11.30) “Public Rights of way, National Trails, and other rights of access to land are important recreational facilities for example for walkers, cyclists and horse riders. The Secretary of State should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails, other rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve or create new access. In considering revisions to an existing right of way, consideration should be given to the use, character, attractiveness, and convenience of the right of way.”

Local Policy

Babergh & Mid Suffolk Joint Local Plan – Part 1, November 2023

- 18.17 Policy LP29 “Safe, Sustainable and Active Transport” requires all development to protect and enhance the Public Rights of Way network:
- 18.18 (2) “Development will be expected to contribute to the delivery of sustainable transport strategies for managing the cumulative impacts of growth, whilst protecting and enhancing the Public Rights of Way network.”

Other Relevant Local Policy

- 18.19 None identified.

Relevant Representation

- 18.20 Suffolk County Council’s comments on Public Rights of Way can be found between paragraphs 272 - 283 in its Relevant Representation [RR-3520].

Local Impact Assessment

Construction Phase Impacts

Positive

18.21 None identified.

Neutral

18.22 None identified.

Negative

18.23 Detrimental impact to historic PROW including diversions, closures and amenity.

Operational Phase Impacts

Positive

18.24 None identified.

Neutral

18.25 Minimal impact of underground cables.

Negative

18.26 Detrimental impact to historic PROW including diversions, closures and amenity.

Decommissioning Phase Impacts

Positive

18.27 None identified.

Neutral

18.28 None identified.

Negative

18.29 Detrimental impact to historic PROW including diversions, closures and amenity.

Comments on Application Documents

- 18.30 A pre and post condition survey must be carried out including identification and assessment of surface condition and with a scope of coverage and methodology to be agreed with SCC as Highway Authority. This should include pre-construction work where PROW might be used to gain access to the corridor and reinforcement works might be required prior to use by vehicles. Pre and post condition surveys are covered in 2.2.4 and will be required and agreed by SCC PROW and adequately covered and agreed in the PROWMP.
- 18.31 Where impacted by the works, any PROW will be restored to original condition or to a condition agreed with SCC - where there are existing defects, the Applicant should agree restoration measures with the SCC, and this should be included within the Code of Construction Practice. This is referred to in 2.2.4 of the Draft PROW Management Strategy and adequately covered and agreed in the PROWMP.
- 18.32 Where PROW cross the cable corridor, haul road, access tracks and other sites, the surface must be kept in a safe and fit condition at all times for all users. Management measures should be included within the Construction Traffic Management Plan and adequately covered and agreed in the PROWMP.
- 18.33 Pre-construction works must not obstruct or disturb any public rights of way (e.g. new fencing, archaeology surveys etc) unless otherwise agreed with SCC. Management measures should be discussed, and any temporary closures will need to be included in the DCO and adequately covered and agreed in the PROWMP.
- 18.34 Public rights of way that are used for any stage of construction access should remain open, safe, and fit for the public to use at all times with management measures put in place with the agreement of SCC.
- 18.35 Any temporary closure of a PROW must be agreed with SCC and the duration kept to the minimum necessary, this must be included within the DCO.
- 18.36 An alternative route must be provided for any public right of way that is to be temporarily closed prior to closure. The location of alternative routes to be agreed with SCC and adequately covered and agreed in the PROWMP. The path or way must not be substantially less convenient to the public in consequence of the diversion.
- 18.37 Any alternative route must be safe and fit for the public to use at all times – suitable surface, gradient and distance with no additional road walking

between the natural destination points. Any diversion route surface, width and gradient should be at least commensurate with the existing route. Any routes which divert onto a road, which does not currently emerge onto a road, should have a Road Safety Audit undertaken to ensure that it is safe for all users.

- 18.38 Any temporary closure and alternative route will be advertised in advance on site and in the local media, and to the local parish councils including a map showing the extent of the closure and alternative route. The closure and alternative should be signed accordingly and SCC PROW informed prior to closure. Also, the path or way must not be substantially less convenient to the public in consequence of the diversion. There should be no new gates or stiles erected on any public rights of way that are impacted by the cable corridor and any other associated site.

Document: 6.15 Environmental Statement Chapter 15 – Socioeconomics

- 18.39 Recreation and Tourism, Table 15.24, p88: W-129/025/0 is marked as significant in the construction phase, but still marked as low in sensitivity, what mitigation is proposed to lessen the significant impact?

Document: 6.16 Environmental Statement Chapter 16 - Traffic and Transport

- 18.40 16.4.15 refers to PROW surveys and states that PROW officers agreed the scoping. This is not totally correct, as SCC PROW did not agree locations, or days, or months prior to the survey being undertaken. When the Councils were approached after the surveys, the Councils advised that it needed to be at least three days and in holiday season as well as school time and the Councils needed locations of where the surveys were to be undertaken and the methodology behind the locations, along with the method of collection, as permissions should be sought on PROWs.
- 18.41 16.4.31 refers to the dates the surveys were taken and noted that the PROW users would be higher in spring/summer months when the weather is more favourable and daylight hours are greater. This is agreed and SCC PROW would request more accurate surveys to be undertaken.
- 18.42 SCC recommend altering the following statement:
- 18.43 S02: PROWs crossing the working areas will be managed in discussion with the relevant Local Planning Authorities and SCC PROW team and potential temporary closures and diversions applied, where required. Road closures and diversions will be kept as brief as possible, with alternative routes maintained where practicable. Access disruption would be reduced while construction activities occur where practicable. Any required temporary diversions will be clearly marked at both ends with signage explaining the

diversion, the duration of the diversion and a contact number for any concerns. This should be in prior discussion with SCC PROW with regards to dates, timeframes, routes and signage.

Required Mitigation

- 18.44 PROWs to be included and robustly assessed in CTMP and PROWMP.
- 18.45 Whilst measures for PROWs include limiting closures to short durations, providing clear signage, reinstating routes in consultation with the LHA PROW Officer, and conducting precondition surveys, Public Rights of Way recommend that the local community be given advance notice of any planned PROW closures in accessible formats to ensure robust communication.
- 18.46 Increase wear and deterioration of PROWs and PROW structures due to the additional usage due to diversions to be assessed, monitored and mitigated recommended to LHA PROW officer.

END OF DOCUMENT

NORWICH TO TILBURY

EN020027

Joint Local Impact Report

Annex A (Suffolk County Council Archaeological Service, Comments on Application Documents)

Suffolk County Council FC74BF695

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Glossary of Acronyms

<i>DCO</i>	<i>Development Consent Order</i>
<i>ES</i>	<i>Environmental Statement</i>
<i>NSIP</i>	<i>Nationally Significant Infrastructure Project</i>
<i>PPA</i>	<i>Planning Performance Agreement</i>

“The Council” / “SCC” refers to Suffolk County Council.

Purpose of this Submission

The document has been prepared by Suffolk County Council to provide additions to the main content of the Local Impact Report (“**LIR**”). Examination Library references are used throughout to assist readers.

Table 1: 6.9.A4 ES Appendix 9.3 – Hydrological Risk Assessment [APP-185]				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
1.1	Archaeology	4.2.2	Determination of the Stour River crossing suitability must be informed by a full geoarchaeological and palaeoenvironmental assessment to guide project design and to evaluate the feasibility of horizontal directional drilling (HDD), pipe-jacking, or direct-buried pipe installation. These assessments should create a detailed deposit model for the river valley and characterise subsurface stratigraphy, palaeochannels, sediment stability, groundwater conditions, and archaeological significance and sensitivity so that the most appropriate construction method can be selected and the archaeological resource can be identified, avoided, or mitigated effectively.	

Table 2: 6.11 ES Chapter 11 – Historic Environment [APP-208]				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
2.1	Archaeology	General Comments	There will be significant ground disturbance from underground cables, pylon works and third-party infrastructure which are likely to cause partial or complete loss of below-ground archaeological heritage assets across much of the scheme. Owing to the project's scale and the extent of disturbance, there is a high probability that archaeology that is not presently recorded in the Historic Environment Record (HER) will be encountered during the archaeological evaluations, and the resulting archaeological mitigation works. The Environmental Statement (ES) contains no assessment of the likelihood of encountering previously unrecorded heritage assets, or of the potential significance of any such assets. However, the potential for the project to encounter such heritage assets is mentioned in Standard Mitigation Measure H04. <i>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</i> SCCAS recommend that the Historic Environment Baseline Report (HEBR) (Document 6.11.A1) for archaeology must go beyond a simple	

			inventory of Historic Environment Record (HER) entries and provide a structured assessment of archaeological potential to evaluate the likelihood of project impacts encountering currently unknown heritage assets of unknown significance. This assessment should draw on known assets, landscape context, geology, findspot distributions, cropmarks, previous investigations, and geoarchaeological and palaeoenvironmental evidence to form the ES archaeological baseline and produce mapped zones of known archaeological potential (high/medium/low) to indicate priority areas for early evaluation (geophysics, trial trenching, and geoarchaeological and palaeoenvironmental assessment) where potential constraints are identified, to inform project design, mitigation and project delivery timetables. The HEBR should also treat the HER as a working resource rather than a definitive map, since it records only known sites and is continually updated by new fieldwork and research.	
2.2	Archaeology	11.5.29 – 11.5.33 & 11.5. 68 – 11.5.73	Document: 6.11.A6 Environmental Statement Appendix 11.6 - Geoarchaeological monitoring of Ground Investigation Works Report identified deposits with potential archaeological and palaeoenvironmental value, notably peats and organic silts. The scope of the monitoring did not include palaeoenvironmental assessment or scientific dating, and consequently, the chronology, preservation conditions, and significance of these deposits remain undetermined. Accordingly, this document constitutes a preliminary assessment only and should not be considered as a substitute for the full geoarchaeological and palaeoenvironmental assessment that will be required to inform project design decisions and mitigation.	

			SCCAS therefore recommends a programme of geoarchaeological assessment including transects of boreholes within the river valleys to refine the deposit models, and to inform a programme of coring, palaeoenvironmental sampling and scientific dating (e.g. radiocarbon, OSL where appropriate). The results should be used to assess the survival and significance of deposits, to inform an appropriate mitigation strategy and to feed directly into project design. This programme must be secured by enforceable Requirement wording and scheduled early in the project timetable so that findings can inform design decisions and mitigation.	
2.3	Archaeology	11.5.49 – 11.5.63 & 11.5.97 – 11.5.105	Geophysical surveys are currently being carried out in the priority areas. Surveys of the non-priority areas are scheduled to begin during the examination but are unlikely to be completed before the application is determined. Interim results are presented in Document 6.11.A4: Environmental Statement Appendix 11.4 – Geophysical Survey Results Report. However, this report does not include a full analysis of the survey results, nor does it provide a complete geophysical survey of the project Order Limits. Full geophysical survey reports will therefore be required for review and comment by the relevant Local Planning Authority Archaeological Advisors (LPAAAs) and once approved, must be submitted for inclusion in the appropriate county Historic Environment Records (HERs). The current geophysical survey is limited to magnetometry, which is sensitive to variations in the Earth's magnetic field and favour features that provide sufficient magnetic contrast, such as fired features, large features and/or ditches with magnetically enhanced fills etc. whereas features with little to no magnetic contrast may not	

			be detected. Interpretation of magnetometer results is inherently subjective and should not be relied upon in isolation, therefore trial trenching is required to ground-truth anomalies, confirm negative results, and establish the presence, character, date and significance of archaeological remains and deposits to inform mitigation or design decisions.	
2.4	Archaeology	11.5.64 – 11.5.67 & 11.5.107 – 11.5.123	The discussion of the trial trench summary report should be expanded to compare the evaluation results with the ongoing geophysical survey, cropmark evidence and the Historic Environment Records (HER) for the full evaluation report. The synthesis of these datasets, which will correlate the trial trenching results with geophysical anomalies, cropmark data and HER records, will better indicate the likelihood, character and distribution of further, currently unrecorded archaeological heritage assets and aid in the formulation of appropriate mitigation strategies.	
2.5	Archaeology	11.7.19	SCCAS agree that Mesolithic occupation remains would be of high value. However, this does not considered other recorded assets and the site's river valley setting, where assessment strongly indicates the likelihood of previously unrecorded Mesolithic activity within the Waveney landscape. Taken together, the dataset requires assessment of the area's Mesolithic archaeological potential, additionally geoarchaeological and palaeoenvironmental assessment and archaeological evaluation will be required to establish the presence, preservation and date of any deposits. Where such occupation, land use, resource use is demonstrated to be well-preserved and stratified, it would constitute rare survival of potential national significance .	

			It is important to remember that as communities were highly mobile during the Mesolithic period, therefore the term occupation extends beyond locations of settlement to also include transient occupation and resource use shown through flint scatters, fish traps etc.	
2.6	Archaeology	11.7	Based upon current information within the County Historic Environment Record, the proposed construction laydown area, east of Wortham (located north of lion road grid ref 610100,277750) lies near recorded archaeological heritage assets of potential regional to national significance (Historic Environment Baseline Report number 2164). SCCAS therefore recommends an upfront archaeological evaluation to establish the presence, absence, significance, extent and depth of archaeology within the laydown area, as such remains could form a constraint upon development. Given the temporary nature of the laydown area, avoidance or redesign should be prioritised where significant remains are identified. However, where avoidance is not possible, appropriate mitigation must be implemented to record the heritage assets ahead of pre-commencement works and construction, in accordance with EN1. This could have significant time and cost implications for the development and must be scheduled early into the programme to avoid delays to project delivery.	
2.7	Archaeology	11.7.114	This needs to be amended to state that “no further known non-designated heritage assets”. There remains, however, a potential for additional archaeological heritage assets to be identified through ongoing and future archaeological investigation. Any new discoveries must be appraised and the assessment updated to reflect their	

			presence, significance, extent and depth, which will inform appropriate archaeological mitigation measures. This also needs to be covered in Section C.	

Table 3: 6.11.A1 ES Appendix 11.1 – Historic Environment Baseline Report [APP-209]				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
3.1	Archaeology	General Comments	1. Because of the project's large scale and the extent of proposed ground disturbance, there is a high likelihood that archaeological remains not currently recorded in the Historic Environment Record will be encountered during works. The Historic Environment Baseline Report (HEBR) must therefore move beyond a simple inventory of known assets and provide a structured assessment of archaeological potential based on known heritage assets, landscape context, geology, findspot distributions, cropmarks, previous archaeological work and geoarchaeological and palaeoenvironmental information. This should form the basis of the ES historic environment archaeological baseline. 2. The Historic Environment Record (HER) is not a definitive map of every archaeological feature in Suffolk. It reflects known and recorded sites, finds and investigations, but archaeological sites and remains are unrecorded until discovered through fieldwork, development-led investigations, or chance finds. The HER is continually updated as new surveys, evaluations, excavations research and public contributions are reported, so its coverage and detail evolve over time and should be treated as a working resource to inform the HEBR. 3. This HEBR needs to evaluate the group value of the heritage assets as well as the heritage asset value of individual assets.	

			By assessing the combined information, the baseline can inform the archaeological potential for development impacts to encounter archaeological remains, which are indicated to be present in all areas. This baseline report should assess the types of heritage assets present along with spatial clustering of heritage assets and artefact types to aid in interpreting the archaeological potential and the potential significance of archaeological remains/deposits within the development Order Limits. 4. The HEBR should combined the known evidence into figures of mapped archaeological potential (high, medium, low), which would indicate areas of potential archaeological constraints for the development and prioritise these for early evaluation (geophysical survey, trial trenching and geoarchaeological and palaeoenvironmental assessment). 5. Where sites have been subject to previous archaeological work, the asset value should be judged by the contribution that record makes to regional research frameworks rather than being assumed to be low because the archaeological work has been undertaken. As archaeological interest and research potential can persist after excavation as advances in scientific techniques, new research questions, and improved interpretative frameworks can enable further insights from previously investigated material. However, the level of harm to the heritage asset from subsequent development may reasonably be assessed as low where they have been fully excavated and recorded.	

			6. Where designated heritage assets are discussed, the asset value should include non-designated heritage assets that could be associated with the designation. 1.1 There are 3452 uses of the term “evidential value” does this equate to archaeological value? 1.2 SCCAS notes that the report includes a conversion chart linking HER numbers to the project's identifiers and provides PDF maps, but these formats do not allow straightforward integration with the HER database when we are assessing the quality and content of the submitted document.	
3.2	Archaeology	Table A11.1.1 Heritage value assessment criteria	The assessment criteria for heritage value differs when considering archaeological potential. Asset value is often rated lower where no archaeological investigations have been carried out or where individual finds have been recorded in the HER, or from contributions to the Portable Antiquity Scheme (PAS) etc. The baseline should therefore state clearly that the mapped heritage assets within the Order Limits do not represent the full archaeological resource, and that areas beyond recorded sites may contain as yet unidentified remains from all periods, with currently unknown significance, which have the potential to be impacted by the scheme.	
3.3	Archaeology	3.3.57 – 3.3.164	This assessment needs to evaluate the group value of heritage assets and the significance of individual assets to inform on the potential to encounter currently unknown archaeological heritage assets. By integrating the Historic Environment Record (HER), LiDAR, topographic surveys, cropmark evidence, historic mapping, and other relevant datasets, the baseline will enable	

			and assessment of the archaeological potential across the Order Limits and provide an initial assessment for development-related groundworks to encounter prehistoric remains, which are indicated across the Order Limits. The baseline report should integrate spatial clustering, artefact distributions, LiDAR and topographic data, previous archaeological investigations to assess the potential for previously unidentified archaeology and to assess the potential to encounter currently unknown significant archaeological heritage assets and deposits within the Order Limits. Where desk-based assessment identifies potential areas of significant prehistoric archaeology these may impose constraints on development. These areas should inform project timetables for early archaeological evaluation to inform appropriate archaeological mitigation (by preservation in situ or by record) as well as inform project delivery and development timetables.	
3.4	Archaeology	3.3.66 – 3.3.74	Paragraph 3.3.67 states that “In situ Mesolithic occupation remains would be of high value,” and, when considered alongside the other recorded assets and the site’s river valley setting, this assessment strongly indicates the likelihood of previously unrecorded Mesolithic activity within the Waveney landscape. Taken together, the dataset requires assessment of the area’s Mesolithic archaeological potential, additionally geoarchaeological and palaeoenvironmental	

			assessment and archaeological evaluation will be required to establish the presence, preservation and date of any deposits. Where such occupation, land use, resource use is demonstrated to be well preserved and stratified, it would constitute rare survival of potential national significance. It is important to remember that as communities were highly mobile during the Mesolithic period, therefore the term occupation extends beyond locations of settlement to also include transient occupation and resource use shown through flint scatters, fish traps etc.	
3.5	Archaeology	3.3.76	SCCAS questions the assignment of medium value to the cropmark interpreted as a possible Neolithic long barrow (2011). Long barrows are rare monuments in Suffolk, as noted in paragraph 3.3.75, and this rarity supports assigning a higher heritage asset value to the feature. In addition, long barrows rarely occur in isolation and are normally components of broader Neolithic landscapes as well as being the focus for later activity. The presence of a probable Neolithic long barrow therefore increases the likelihood of encountering previously unknown archaeology of unknown significance in the surrounding area.	
3.6	Archaeology	3.3.82	The occurrence of multiperiod site 2601 is a strong indicator of additional, currently unrecorded archaeological heritage assets within the Order Limits.	
3.7	Archaeology	3.3.84	SCCAS questions the assignment of medium value to the cropmark interpreted as a possible Neolithic henge (2008). Henges are a distinctive but geographically uneven monument class in Britain and are a relatively rare monument type in Suffolk. Henges also rarely occur in isolation, typically forming components of wider Neolithic	

			monumental landscapes and act as focal points for later activity. The presence of a probable henge therefore significantly increases the likelihood of encountering previously unknown archaeology of unknown significance in the surrounding area. Accordingly, this monument type should be treated as being of potential national significance until archaeological fieldwork demonstrates otherwise. On that basis, assigning a higher heritage asset value to the feature is justified.	
3.8	Archaeology	3.3.90	SCCAS questions the assignment of medium value to the cropmark interpreted as a possible Neolithic long barrow (2010). Neolithic long barrows are a rare monument type for Suffolk, and rarely occur in isolation, typically forming a component of a wider Neolithic landscape, and act as focal points for later activity, which is shown by the presence of cropmark ring ditches (2034, 2035 and 2036). The presence of a probable Neolithic long barrow and cropmark ring ditches therefore significantly increases the likelihood of encountering previously unknown archaeology of unknown significance in the surrounding area. Accordingly, this monument group should be treated as being of potential regional to national significance until archaeological fieldwork demonstrates otherwise. On that basis, assigning a higher heritage asset value to the feature is justified.	
3.9	Archaeology	3.3.95	<i>“Based on satellite imagery, the site was stripped in 2019/2020 and fell within a former works compound but there is no know record of archaeological investigation.”</i> Archaeological work on this site has been undertaken as part of the East Anglia One Offshore Wind Farm NSIP project (HER number: BRF 130) ESF25149.	

			The excavation revealed seven phases of activity: two tentatively prehistoric, four medieval, and one probably postmedieval. The most significant finds were evidence of Anglo-Saxon farming and two 11th–12th century tofts. These medieval features are likely linked to the settlement and field systems recorded at EA1 sites 1 and 2 to the west and north of Area 3, together indicating a dispersed medieval settlement historically known as Bullen (Bullen Green). This information should be included within the Early medieval section of the HEBR. The HER record BRF 019 is based off of an aerial photograph, and shows the oval cropmark interpreted as a possible long barrow lies outside the EA1 Area 3 excavation boundary. Given current information, SCCAS questions the assignment of medium value to this cropmark as a Neolithic long barrow. Long barrows are rare in Suffolk, seldom occur in isolation, and normally form part of a broader Neolithic landscape and later focal activity, and should be assigned a higher heritage asset value.	
3.10	Archaeology	3.3.165 – 3.3.1547	This assessment needs to evaluate the group value of heritage assets and the significance of individual assets to inform on the potential to encounter currently unknown archaeological heritage assets. By integrating the Historic Environment Record (HER), LiDAR, topographic surveys, cropmark evidence, historic mapping, and other relevant datasets, the baseline will enable and assessment of the archaeological potential across the Order Limits and provide an initial assessment for development-related groundworks to encounter archaeology dating from the Roman, early-medieval, medieval and post-	

			medieval periods, which are indicated to be present in all areas of the Order Limits. The baseline report should integrate spatial clustering of known heritage assets, artefact distributions, LiDAR and topographic data, previous archaeological investigations and historic mapping to inform on the potential for previously unidentified archaeology, and to assess the potential for the development to encounter currently unknown significant archaeological heritage assets and deposits within the Order Limits Where desk-based assessment identifies potential areas of significant Roman, early medieval, medieval and post-medieval archaeology as these may impose constraints on development. These areas should inform project timetables for early archaeological evaluation to inform appropriate archaeological mitigation (by preservation in situ or by record) as well as inform project delivery and development timetables.	
3.11	Archaeology	3.3.168	These heritage assets of Roman and Anglo-Saxon date have the potential to meet the criteria for national significance and must be referenced in this section.	
3.12	Archaeology	3.3.264	SCCAS considers the PAS metal artefact scatter (2369) to be indicative of an Anglo-Saxon cemetery. Anglo-Saxon cemeteries rarely occur in isolation and are typically components of broader archaeological landscapes and the Anglo-Saxon practice of burying their dead around or amongst earlier monuments further increases the likelihood of encountering previously unknown remains of	

			undetermined significance in the surrounding area. Given the assemblage's significance and research potential, this feature should be reassessed and attributed a higher heritage asset value.	
3.13	Archaeology	3.3.272	The assemblage recorded as 2194 (three bronze bowls) is consistent with Anglo-Saxon hanging bowls typically found in 6 th to 7 th century furnished burials. As such, this record should be regarded as evidence for an Anglo-Saxon cemetery and reassessed to a higher heritage asset value.	
3.14	Archaeology	3.3.459	There has been no systematic archaeological investigation of the area, and the precise location of the Abbey therefore remains unknown . The Historic Environment Record indicates a high archaeological potential for belowground remains associated with the Benedictine cell across the wider landscape. Consequently, the assessment must evaluate the likely character, extent and significance of buried archaeological deposits informed by the HER data. On this basis, it is not appropriate to assign a low heritage asset value. The feature should be reassessed to reflect its greater potential and research significance.	
3.15	Archaeology	3.3.374	Cropmarks are visible on google earth imagery dated 18 th July 2016 and the ESRI world imagery Wayback dated to 2021-06-09.	
3.16	Archaeology	3.3.387	The precise location of the chapel is unknown. As a medieval chapel site, it has elevated archaeological and research potential and therefore warrants a higher heritage asset value.	
3.17	Archaeology	3.4.73 – 3.4.145	This assessment needs to evaluate the group value of heritage assets and the significance of individual assets to inform on the potential to encounter currently unknown archaeological	

			heritage assets. By integrating the Historic Environment Record (HER), LiDAR, topographic surveys, cropmark evidence, historic mapping, and other relevant datasets, the baseline will enable and assessment of the archaeological potential across the Order Limits and provide an initial assessment for development-related groundworks to encounter prehistoric remains, which are indicated across the Order Limits. The baseline report should integrate spatial clustering, artefact distributions, LiDAR and topographic data, previous archaeological investigations to assess the potential for previously unidentified archaeology and to assess the potential to encounter currently unknown significant archaeological heritage assets and deposits within the Order Limits. Where desk-based assessment identifies potential areas of significant prehistoric archaeology these may impose constraints on development. These areas should inform project timetables for early archaeological evaluation to inform appropriate archaeological mitigation (by preservation in situ or by record) as well as inform project delivery and development timetables	
3.18	Archaeology	3.4.97 – 3.4.114	There is an inconsistency: Section B assigns probable Bronze Age barrows a medium heritage asset value, yet Section C applies a low value without explanation. This change has not been justified within the HEBR and the assessment revised for consistency so that equal consideration is given to similar heritage assets. Given the	

			archaeological significance and research potential of Bronze Age barrows, SCCAS considers these features to warrant a medium or higher heritage asset value and recommends their reassessment accordingly.	
3.19	Archaeology	3.4.98	This is the cropmark (3004) for a probable Bronze Age barrow and should be considered of medium or higher heritage asset value. The HEBR must assess and discuss the potential for additional, currently unknown archaeological remains both in the immediate vicinity of this heritage asset and within the project Order Limits.	
3.20	Archaeology	3.4.104	The group value of these heritage assets, which together form likely form part of a barrow cemetery, should be assessed as having elevated heritage asset value. The oval cropmark morphology is consistent with a long barrow, and comparable clusters of Neolithic and Bronze Age features (see paragraph 3.3.90) have been noted. Given the combined archaeological potential and research value this grouping warrants a higher significance rating and has the potential to be of regional to national significance.	
3.21	Archaeology	3.4.106	The cropmark (3324) is interpreted as a probable Bronze Age barrow and should be regarded as having medium or higher heritage asset value. Its significance must be assessed in terms of the contribution it can make to regional research frameworks and our understanding of Bronze Age funerary and landscape practices, rather than being downgraded solely because it has been partially excavated. Additionally, the HEBR must assess and discuss the potential for additional, currently unknown archaeological remains both in the immediate vicinity of this heritage asset and within the project Order Limits.	

3.22	Archaeology	3.4.129	The general prehistoric cropmark complex should be regarded as of higher significance . The HEBR should treat the complex as a potentially multi-phase archaeological assess its value against regional research frameworks for settlement, economy, and land-use change. It must map the cropmark complex in relation to other known assets and landscape features, in order to provisionally identify areas of archaeological significance which may form constraints upon the proposed development.	
3.23	Archaeology	3.4.129 – 3.4.132	These paragraphs do not address the potential for additional archaeological heritage assets to be present. As a part of the archaeological priority areas, the site has been subject to geophysical survey and trial trenching, which has identified further archaeological features on site, which have not been identified through cropmark assessment or geophysical survey. The HEBR must assess the potential for currently unrecorded archaeological remains/deposits across the Order Limits. Given the significance of the assets already identified, the report should also evaluate how these remains could form a constraint upon the proposed development. Paragraph 3.4.131 notes that additional cropmarks were identified during this assessment; SCCAS requests that the project provide geoacted shapefiles of these cropmarks so they can be incorporated into the HER.	
3.24	Archaeology	3.4.146 – 3.4.956	This assessment needs to evaluate the group value of heritage assets and the significance of individual assets to inform on the potential to encounter currently unknown archaeological	

			heritage assets. By integrating the Historic Environment Record (HER), LiDAR, topographic surveys, cropmark evidence, historic mapping, and other relevant datasets, the baseline will enable and assessment of the archaeological potential across the Order Limits and provide an initial assessment for development-related groundworks to encounter archaeology dating from the Roman, early-medieval, medieval and post-medieval periods, which are indicated to be present in all areas of the Order Limits. The baseline report should integrate spatial clustering, artefact distributions, LiDAR and topographic data, previous archaeological investigations and historic mapping to assess the potential for previously unidentified archaeology and to assess the potential to encounter currently unknown significant archaeological heritage assets and deposits within the Order Limits. Where desk-based assessment identifies potential areas of significant Roman, early medieval, medieval and post-medieval archaeology as these may impose constraints on development. These areas should inform project timetables for early archaeological evaluation to inform appropriate archaeological mitigation (by preservation in situ or by record) as well as inform project delivery and development timetables.	
3.25	Archaeology	3.4.578	The Church of St Mary (List Entry 1351625) was sketched by John Constable. This association contributes to the asset's cultural and	

			historic significance and should be considered when assessing its heritage value and any potential impacts on setting of the heritage asset.																
3.26	Archaeology	Table 2.1 Scoping of Historic Environment Assessment	<table border="1"> <thead> <tr> <th>Matter</th><th>Phase</th><th>Scoped in</th><th>Scoped out</th><th>Justification</th></tr> </thead> <tbody> <tr> <td>Terrestrial archaeology – physical effects</td><td>Construction</td><td>✓</td><td></td><td>There is known archaeology present within the Order Limits and the assessment includes a consideration of archaeological potential, and the consideration potential impacts to yet unknown archaeological remains of all archaeological periods.</td></tr> <tr> <td></td><td>Operation (and maintenance)</td><td></td><td>✓</td><td>There is only a limited need for sub-surface works during operation, which would only affect ground that has previously been disturbed during the construction phase of the Project.</td></tr> </tbody> </table> This table states that: <i>“There is known archaeology present within the Order Limits and the assessment includes consideration of archaeological potential, and the consideration potential impacts to yet unknown archaeological remains of all periods”</i>. SCCAS cannot see where archaeological potential has been discussed beyond this table. The baseline should make clear that the mapped heritage assets within the Order Limits do not represent the full archaeological resource and that areas beyond recorded sites may contain as yet unidentified remains of all periods.	Matter	Phase	Scoped in	Scoped out	Justification	Terrestrial archaeology – physical effects	Construction	✓		There is known archaeology present within the Order Limits and the assessment includes a consideration of archaeological potential, and the consideration potential impacts to yet unknown archaeological remains of all archaeological periods.		Operation (and maintenance)		✓	There is only a limited need for sub-surface works during operation, which would only affect ground that has previously been disturbed during the construction phase of the Project.	
Matter	Phase	Scoped in	Scoped out	Justification															
Terrestrial archaeology – physical effects	Construction	✓		There is known archaeology present within the Order Limits and the assessment includes a consideration of archaeological potential, and the consideration potential impacts to yet unknown archaeological remains of all archaeological periods.															
	Operation (and maintenance)		✓	There is only a limited need for sub-surface works during operation, which would only affect ground that has previously been disturbed during the construction phase of the Project.															

Table 4: 6.11.A2 ES Appendix 11.2 – Historic Environment Assessment Tables				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
4.1	Archaeology	General comments	The Historic Environment Assessment Tables do not assess the potential of known heritage assets to inform on the presence of unknown archaeological heritage assets of unknown significance. Therefore, the mitigation measures set out in the Historic Environment Assessment Tables (document 6.11.A2) are inadequate to address the likely impacts of this scheme and risk avoidable and irreversible harm to the historic environment. This would be inconsistent with EN1, which requires that both direct and indirect impacts are identified and understood and that harm is avoided or minimised through design and mitigation, with any justified loss of archaeological assets preserved by record. Given the route's passage through multiple, distinct East Anglian landscapes, there is a realistic potential for previously unknown heritage assets of local to national significance, which is not accommodated for when assessing the HER data. Accordingly, the assessment tables must set out the requirement for a full programme of archaeological evaluation, including geophysical survey, trial trenching, and geoarchaeological and palaeoenvironmental assessment, to establish presence, extent, character and significance and to inform a programme of archaeological mitigation. Where avoidance is not feasible, mitigation must follow the hierarchy of preservation in situ, or, where loss is justified, preservation by record with excavation, recording, post-excavation analysis (PXA), which will inform the production of an Updated Project Design (UPD)	

			and detail publication and deposition of the archive in an appropriate archaeological archive repository. All work must be undertaken in accordance with the approved AMS-OWSI and relevant DWSIs, which will be prepared and implemented to professional standards and agreed with the local planning authority and where relevant, Historic England. There is no public benefit in unnecessary destruction or damage to archaeological heritage assets known or currently unknown. SCCAS strongly recommend that the applicant amend the mitigation measures to detail full archaeological evaluation will be implemented to inform appropriate mitigation measures for project development impacts.	
4.2	Archaeology	11.1.1	Clarify in bullet point one that the definition of construction includes pre-commencement works.	
4.3	Archaeology	Table A11.2.1	As discussed in SCCAS comments on the Historic Environment Baseline Report (document reference 6.11.A1): The mapped heritage assets shown in this baseline reflect known, recorded sites and finds at the time of reporting. The ES should acknowledge that this information does not represent the full archaeological resource within the Order Limits and that unrecorded archaeological remains will survive across the Order Limits, particularly in areas with no prior archaeological investigation and evaluation. Records within the HER can be used to inform on the potential to encounter previously unknown archaeological heritage assets, through cropmark data, groups of or isolated finds etc. which indicate the presence of more extensive archaeological remains which are currently unknown.	

			Where no archaeological evaluation has been undertaken, asset value assessments need to clearly state that they are provisional and may underrepresent potential significance. Consequently, the scheme has the potential to impact previously unidentified archaeological deposits of unknown date, character and significance, only by implementing a full programme of archaeological evaluation (geophysical survey and trial trench evaluation) to inform on the presence, absence, character, extent, depth and significance of archaeological heritage assets can this be assessed. This assessment of the information available within the Historic Environment Record (HER) is treating this information as an absolute. However, the HER is not a definitive map of every archaeological feature in Suffolk. It reflects known and recorded sites, finds and investigations, but archaeological sites, features and remains are unrecorded until discovered through fieldwork, development led investigations, or chance finds. The HER is continually updated as new surveys, evaluations, excavations research and public contributions are reported, so its coverage and detail evolve over time and should be treated as a working resource to inform the HEBR.	
4.4	Archaeology	Table A11.2.11	Remove ambiguous wording, such as if required. Where there is a development impact archaeological evaluation will be required to inform an appropriate mitigation strategy. Where archaeological evaluation (geophysical survey and trial trenching) has not been undertaken, then the proposals for archaeological mitigation cannot be determined, as the impact upon archaeological heritage assets, and any further heritage assets which are currently unknown, cannot be determined.	

			As a result, this table needs to clearly state that archaeological evaluation, both geophysical survey and trial trenching will be undertaken ahead of any groundworks associated with this development to inform an appropriate mitigation strategy for the heritage assets covered in this table, whether this be by design (preservation in situ/avoidance) or by excavation and recording. Where the table discusses mitigation for finds or finds spots that have been removed from a site, it proposes no mitigation measures. It is unclear as to whether this means (a) no further mitigation for the individual heritage asset, which would be correct as it has been removed from site and recoded, so there would be no further mitigation possible for that asset or (b) whether means no proposed archaeological mitigation for the area the findspot is recorded, as the heritage asset has been removed from the site. If it is the latter, this overlooks that these surface finds were displaced from their original contexts, meaning the source archaeological features are likely to remain within the development area. Consequently, there is the potential for the development to disturb previously unrecorded archaeological heritage assets and mitigation measures here should detail a programme of full archaeological evaluation (geophysical survey and trial trenching) which will inform on appropriate archaeological mitigation.	
4.5	Archaeology		2003 – “In situ Mesolithic occupation remains would be of high value,” when considered alongside the other recorded assets and the site’s river valley setting, this assessment strongly indicates the likelihood of previously unrecorded Mesolithic activity within the Waveney landscape. Taken together, the dataset requires	

			assessment of the area's Mesolithic archaeological potential, additionally geoarchaeological and palaeoenvironmental assessment and archaeological evaluation will be required to establish the presence, preservation and date of any deposits. Where such occupation, land use, resource use is demonstrated to be wellpreserved and stratified, it would constitute rare survival of potential national significance. It is important to remember that as communities were highly mobile during the Mesolithic period, therefore, the term occupation extends beyond locations of settlement to also include transient occupation and resource use shown through flint scatters, fish traps etc. Therefore, the mitigation proposals need to detail that a programme of full archaeological evaluation (geophysical survey and trial trenching) along with a full programme of geoarchaeological and palaeoenvironmental assessment will be used to inform mitigation measures of important early Holocene deposits and archaeological heritage assets.	
4.6	Archaeology		2009 – The cropmark currently recorded as a Neolithic long barrow should be treated as a high value heritage asset. Long barrows are rare in Suffolk and are normally components of wider Neolithic landscapes and later focal activity; they should not be assessed in isolation. Mitigation must consider the entire extent of the monument and recognise that, as burial monuments, long barrows may contain human remains which require specific archaeological and legal safeguards. Archaeological evaluation would need to be undertaken to inform on the presence/absence, character, extent, depth and significance of	

			the archaeological heritage asset, which would inform appropriate mitigation. Should this heritage asset be shown to be a Neolithic long barrow its significance would warrant full excavation and recording, partial excavation and recording of a heritage asset of this significance would not be acceptable.	

Table 5: 6.11.A4 ES Appendix 11.4 – Geophysical Survey Report [APP-212]				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
5.1	Archaeology	Front page	The document title should be amended to <i>Interim Geophysical Survey Report for the Priority Areas</i>. This change will ensure a clear distinction between this interim submission and the subsequent full geophysical survey report, which will be submitted for review.	
5.2	Archaeology	1.1	This needs to clearly state that this is an interim report of the priority areas only and it will be followed by a full geophysical survey report, which will be submitted to the Local Planning Authority's Archaeological Advisor for comment and approval, and inclusion in the relevant County Historic Environment Record.	
5.3	Archaeology	1	The interim report needs to clearly set out how the ongoing geophysical survey results of the priority areas will be integrated into this interim report.	
5.4	Archaeology	3	This should have a statement that clearly sets out the limitations of magnetometer surveys: Without ground truthing the results of the geophysical surveys it is difficult to interpret the data. Only features with sufficient magnetic contrast will register within the data and the interpretation of the results is inherently subjective. Additionally, the lack of a detectable anomaly within the survey data does not guarantee an absence of archaeology, nor can the survey alone establish the precise significance, character, date or extent of the features it does identify.	

5.5	Archaeology	3 Table	Although the Historic Environment Baseline Report (HEBR) uses its own internal heritage identifiers while the Geophysical Survey Report references HER numbers, the Geophysical Survey Report must clearly cross-reference the HEBR conversion chart. Provide a direct link or table reference so examiners can easily trace each HER number to the corresponding HEBR identifier and associated heritage asset details.	
5.6	Archaeology	Figures	To improve clarity, label every figure with its corresponding development section so readers can immediately identify the specific area where each survey was conducted.	

Table 6: 6.11.A5 ES Appendix 11.5 – Trial Trenching Results Report [APP-213]				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
6.1	Archaeology	Front page	The document title should be amended to <i>Interim Trial Trenching Results Reports for the Priority Areas</i>. This change will ensure a clear distinction between this interim submissions which do not provide full assessment of the results and the subsequent full trial trenching reports, which will be submitted for review and approval by the relevant Local Planning Authority Archaeological Advisors.	
6.2	Archaeology	General comment	This needs to clearly state that this is an interim report of the priority areas only and it will be followed by a full trial trenching reports with full assessment of results, which will be submitted to the Local Planning Authority's Archaeological Advisor for comment and approval, and inclusion in the relevant County Historic Environment Record. Full results will inform appropriate mitigation strategies.	
6.3	Archaeology	General	The interim report needs to clearly set out how the ongoing trial trenching results of the priority areas will be integrated into this interim report or submitted during the examination.	

Table 7: 7.2 Outline Code of Construction Practice (oCoCP) [APP-300]				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
7.1	Archaeology	2.2.2 <i>Environmental mitigation measures</i>	This bullet point should also include archaeological mitigation measures to ensure that the protection and mitigation of archaeological heritage assets is addressed during the pre-commencement phase of works. Early identification and mitigation of areas of development impacts are essential and must be secured through the AMS-OWSI and the Detailed Written Scheme of Investigation (DWSI), as appropriate.	
7.2	Archaeology	6.1.13 <i>ES Chapter 11: Historic Environment (document reference 6.11) considers the potential effects on archaeological remains, built heritage and historic landscape assets. The Project could affect the historic environment during construction by disturbing known and unknown archaeology during excavation and through the removal of historic landscape features. There is also low potential for construction phase impacts to</i>	It is important to emphasise that the proposed development will result in direct and indirect impacts on archaeological heritage assets. Groundworks and construction activities have the potential to disturb both known and previously unrecorded archaeological remains. The impacts on archaeology must be appropriately evaluated, and mitigation measures clearly defined and secured through the pre-commencement phase to ensure the protection and preservation of archaeological heritage assets.	

		<i>historic buildings due to indirect impacts resulting from vibration.</i>		
7.3	Archaeology	6.1.14 <i>Construction and operation (and maintenance) phase management measures in relation to the Historic Environment are contained in the following:</i> • <i>Mitigation measures / environmental commitments in Table 6.1.</i> • <i>Outline Archaeological Mitigation Strategy and Written Scheme of Investigation (document reference 7.5).</i>	Management measures relating to archaeological heritage assets must be included in the Register of Environmental Actions and Commitments (REAC) to ensure they are tracked, implemented, and monitored throughout the lifecycle of the project. This includes mitigation strategies for both archaeological and palaeoenvironmental remains, which are particularly vulnerable in areas defined for preservation in situ or in areas of peaty or waterlogged soils.	
7.4	Archaeology	6.1.16 <i>Construction and operation (and maintenance) phase management measures in relation to Hydrology, Land Drainage and Flood Risk are contained in the following:</i>	Impacts on archaeology and palaeoenvironmental deposits must also be considered within the Hydrological Assessment. De-watering or changes to groundwater regimes can be highly destructive to sensitive deposits, especially those with the potential to preserve organic remains. Such impacts may result in irreversible loss of archaeological and palaeoenvironmental information. Therefore, hydrological modelling and mitigation strategies must be developed in consultation with the Historic England Regional Science Advisor and integrated into the wider environmental management framework.	

		• <i>Mitigation measures / environmental commitments in Table 6.1.</i> • <i>Outline Flood Warning and Evacuation Plan (see Appendix G)</i> • <i>Surface Water Management Plan – this Plan has not been prepared to support the Outline CoCP because the detailed design is not yet known. This Plan will demonstrate how runoff across the site will be controlled and how any off-site effects will be managed and mitigated and will be prepared by the Main Work(s) Contractor.</i>		
7.5	Archaeology	<i>GG08</i> <i>Where features are to be retained (including veteran trees, ancient woodland, high, medium and low value trees, hedgerows, watercourses and</i>	Management for the protection of archaeological and other heritage assets must be secured through the approved AMS-OWSI, which will detail the production of a Historic Environment Management Plan (HEMP). This document should set out clear methodologies for the preservation and protection of heritage assets throughout all phases of the project (construction, operation, enhancement and	

		<i>archaeological/ heritage assets where practicable), an appropriate protective area or protection mechanisms will be established using appropriate equipment or fencing and signage and will be inspected, repaired, and replaced as necessary.</i>	decommissioning). The HEMP should be developed in consultation with the Historic England Regional Science Advisor and relevant local authority archaeological advisors or heritage advisor to ensure it reflects best practice and is proportionate to the significance and sensitivity of the affected heritage assets.	
7.6	Archaeology	H01 <i>Methodology and processes for archaeological mitigation is specified through the Outline AMS-OWSI (document reference 7.5) to be submitted with the DCO application.</i>	This should read: “Methodologies and processes for further archaeological evaluation and mitigation are specified within the Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (AMS-OWSI) (document reference 7.5). This document provides the framework for identifying, assessing, and managing archaeological heritage assets and will directly inform the production of Detailed Written Schemes of Investigation (WSIs) for specific areas or phases of the Project.” This clarification strengthens the purpose of the Outline AMS-OWSI by ensuring that archaeological evaluation (geophysical survey and trial trenching) is appropriately scoped and implemented. These evaluations are essential for identifying areas of archaeology and informing proportionate mitigation strategies and informing project delivery timetables.	
7.7	Archaeology	H03	To avoid unintentional damage to archaeological heritage assets, all relevant management measures must be included in the live	

		<i>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.</i>	constraints mapping for the project. This ensures that heritage assets and sensitive areas are clearly visible and accessible to all teams involved in construction, operation, and decommissioning activities. Early identification and mapping of these constraints is essential to ensure effective avoidance and mitigation.	
7.8	Archaeology	H04 <i>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 LPA 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.</i>	While the commitment to notify the Local Planning Authority (LPA) upon the discovery of previously unknown or unexpectedly significant heritage assets is welcomed, it is essential to emphasise the importance of early-stage archaeological evaluation to minimise such risks. Archaeological evaluation (geophysical survey and trial trenching) is a critical component of the pre-application and pre-construction process. These combined methods help identify areas of archaeological sensitivity, assessing the significance of known and unknown assets, and inform the development of proportionate and effective strategies to mitigate the impacts of the development upon the Historic Environment. Early identification enables the project to integrate mitigation into the programme timetable, reducing the likelihood of unexpected discoveries and ensuring compliance with policy and best practice guidance.	
7.9	Archaeology	W06 <i>Where a main river is crossed by a trenchless crossing, the cables will be laid at least 1 m below the hard bed level of the</i>	Where a main river is crossed by a trenchless method (such as horizontal directional drilling or microtunnelling) the design of that crossing must take into account the potential for archaeological and palaeoenvironmental remains and their preservation. River valleys often contain deeply stratified and organic-rich deposits, including	

		<i>river and will remain at or below this level for not less than 3 m from the brink of the riverbank. Marker posts shall also be positioned on each bank of the river to indicate the location of the under-crossing and the nature of the works. The Project proposed the following trenchless crossings (as detailed in Table 4.9 within ES Chapter 4: Project Description (document reference 6.4)):</i>	peat and alluvium, which may preserve significant archaeological and palaeoenvironmental evidence. To avoid disturbance or degradation of these sensitive deposits, the crossing design should be informed by appropriate geoarchaeological and palaeoenvironmental assessment and developed in consultation with the Historic England Regional Science Advisor. This will ensure that the methodology is proportionate and aligned with best practice for the protection of sensitive buried heritage assets.	

Table 8: 7.2 Outline Code of Construction Practice Appendix C – Outline Soil Resource Plan [APP-303]				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
8.1	Archaeology	1.1.8 <i>Protection of the soil resource during pre-construction archaeological investigations will be critical to ensure the long-term sustainable use of the land affected by the Project. Full details of the required approach during these investigations will be set out in the final SRP in alignment with the requirements as detailed in the Written Scheme of Investigation. In addition, the final SRP will include details on how areas with potential archaeology remains will be managed and considered if soil reinstatement is required.</i>	It is currently unclear whether archaeological considerations will be fully addressed the final SRP in line with the Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (AMS-OWSI) or the Detailed Written Scheme of Investigations (DWSIs). Clarification is required to ensure that archaeological assessment and mitigation is appropriately scoped and secured. Archaeology must also be a key consideration in the design of decompaction strategies and any Aftercare Management Plans. These activities have the potential to impact buried archaeological remains, particularly in areas where archaeological heritage assets are known to exist or suspected to exist. As such, all relevant strategies should be developed in consultation with the relevant Local Authority Archaeological Advisor (LAAA) and Historic England Regional Science Advisor to ensure they are proportionate and aligned with best practice	
8.2	Archaeology	1.9.29 <i>"The approach for the checks required and the methodology to be used to reinstate the land</i>	Decompaction methodologies have the potential to impact archaeological heritage assets. Where decompaction is proposed, archaeological considerations must inform the design of an appropriate mitigation strategy.	

		<i>at the end of the construction phase will depend on the thickness of soils stripped and the results of compaction testing etc. The approaches set out will be in line with published guidance and will ensure the following:</i> • <i>Deep ripping of the overburden where required prior to the placement of subsoil</i> • <i>The soil profile created will be checked by the Soil Scientist to ensure it is suitable for the proposed end use (Table 1.1)."</i>	Archaeological mitigation may be required prior to the implementation of any decompaction methodology.	
8.3	Archaeology	1.9.35 <i>"An Aftercare Management Plan will be produced by the Main Works Contractor(s) which will detail the aftercare period, monitoring frequency and interventions which may be required depending on issues highlighted by the monitoring."</i>	The Aftercare Management Plan must take into account the presence and significance of archaeological heritage assets. Particular attention should be given to areas within and adjacent to the development impact zone, and order limits as activities associated with aftercare may affect archaeological remains beyond the areas of development impact and/or the defined order limits. Appropriate assessment and, where necessary, mitigation should be integrated into the plan to ensure the protection of these heritage assets.	

8.4	Archaeology	1.9.36 <i>Peat is a particularly sensitive material that varies in its physical characteristics based upon its forming factors, such as location, climate, landform, and parent material.</i> <i>Peatlands will often support or have the potential to support a range of sensitive habitats and species.</i>	This paragraph should also include that Peat deposits are an important source of palaeoenvironmental and archaeological information. All Suffolk River Valleys are known to contain archaeologically significant peat deposits, which survive to varying degrees of preservation and can survive in localised pockets and/or stratified layers. These deposits can preserve valuable evidence of past environments, land use, and human activity. The proposed development within these areas must be informed by appropriate geoarchaeological and palaeoenvironmental assessment to guide design and mitigation strategies. The assessments, design and mitigation strategies should be designed in consultation with the Historic Environment Regional Science Advisor and the relevant local authority archaeological advisor to ensure they are proportionate.	
8.5	Archaeology	1.9.41 <i>The SRP will include detailed design for reinstated profiles of peaty soils and any hydrological management measures required.</i>	Peat deposits in the Suffolk River Valleys are typically interbedded with alluvial and/or inundation layers, often forming complex, laminated sequences. The separation and interpretation of these deposits can be challenging, requiring specialist input to ensure accurate stratigraphic reconstruction.	
8.6	Archaeology	1.9.42 <i>More detailed measures for peaty soil mitigation will be developed and incorporated into the SRP post consent / pre-construction for peaty soil handling during construction</i>	The peaty soil mitigation strategy must be designed with full consideration of potential archaeological impacts. This strategy should be developed in consultation with the relevant Local Authority Archaeological Advisor and Historic England Regional Science Advisor to ensure that any mitigation is appropriate, proportionate, and informed by current best practice in geoarchaeological and palaeoenvironmental assessment.	

		<i>once full details of working areas and works programmes are understood.</i>		

Table 9: 7.4 Outline Landscape and Ecological Management Plan [APP-321]				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
9.1	Archaeology	1.2.2	The historic environment must be a material consideration when selecting land for environmental mitigation, ecological offsetting, and Biodiversity Net Gain (BNG), including land located outside the project Order Limits. Archaeological assessment and evaluation should inform site selection and the design of mitigation measures so that heritage assets are identified, understood, and appropriately protected or recorded before any enhancement or habitat creation is implemented. The historic environment will need to be treated as a core factor in decisions about land allocated for ecological mitigation, offsetting, and Biodiversity Net Gain (BNG). Where BNG or other ecological measures are proposed on land outside the project Order Limits, archaeological assessment and consultation with the relevant Local Authority Archaeological Advisors will be required to inform on evaluation needed to be carried out to inform site selection and the design of an appropriate mitigation. Any areas required to facilitate development should be treated as high priority for heritage appraisal and, where necessary, mitigation or recording. All archaeological works would be undertaken in accordance with the approved AMS-OWSI and a DWSI, which will be submitted and approved by the relevant LPAAA.	
9.2	Archaeology	1.4	Offsite Biodiversity Net Gain (BNG) must be delivered in a way that recognises and protects buried archaeological assets. Site selection,	

			design and delivery of habitat creation or enhancement must be informed by archaeological assessment so that damaging interventions (for example tree planting, pond creation, or soil inversion/de-nitrification used for heathland and species-rich grassland) are avoided, minimised or mitigated before works commence.	
9.3	Archaeology	2.2	Where advance works are proposed, archaeology must be consulted as many habitat creation or enhancement methods are excessively damaging to buried archaeological remains (tree planting, pond creation and soil de-nitrification for heathland and species rich grassland creation, etc). It is therefore essential that archaeology is taken into account when choosing locations.	
9.4	Archaeology	3.3	For clarity in project delivery and risk reduction it is important to implement a live project constraints map so all environmental, archaeological, ecological, and operational constraints are recorded, visualised, and kept up to date in a single, accessible system for project staff.	
9.5	Archaeology	5.3	Archaeology must be consulted as many habitat creation or enhancement methods are excessively damaging to buried archaeological remains (tree planting, pond creation and soil de-nitrification for heathland and species rich grassland creation, etc). It is therefore essential that archaeology is taken into account when designing habitat replacement and protection measures.	
9.6	Archaeology	Table 5.4	SCCAS notes that clay breakouts from proposed HDD river crossings of the Stour could cause significant environmental harm, and any mitigation for drilling clay breakouts must explicitly consider archaeological impacts. Hydrological changes associated with the	

			works may adversely affect archaeological heritage assets both within and beyond the Order Limits redline. Reinstatement of arable habitat has the potential to cause substantial damage to buried archaeological remains; such areas must therefore be subject to archaeological evaluation and, where necessary, mitigation. Areas identified and agreed for in situ archaeological preservation must be managed under the AMS/OWSI and by separate DWSIs. Close, ongoing coordination between all Clerks of Works identified in the OLEMP and the Archaeological Clerk of Works is essential to ensure the ecological and archaeological requirements are delivered smoothly and without conflict.	
9.7	Archaeology	6	The LEMP must be developed and implemented in close coordination with the AMS/OWSI to ensure that species mitigation and habitat works are planned and delivered alongside archaeological works.	
9.8	Archaeology	6.1.35	Archaeology needs to be a consideration for displacement of Water Voles.	
9.9	Archaeology	7.5.15	The project needs to understand the archaeological implications of their removal. As the survival of veteran trees tend to relate to survival of historic parkland or historic boundaries.	
9.10	Archaeology	7.7	These are likely to have archaeological impacts, particularly on well preserved waterlogged archaeological remains and palaeoenvironmental information. Geoarchaeological and palaeoenvironmental assessment will be required to inform specific archaeological methodology will need to be developed to mitigate these impacts. I.e. development of a Peat Management Strategy and Deep waterlogged archaeological excavation strategy.	

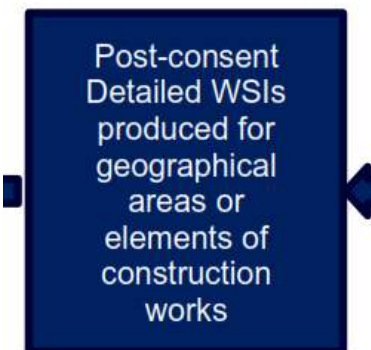
9.11	Archaeology	9.1	The relevant LPAAA will need to review the indicative landscape design in order to provide advice on the archaeological implications of the habitat creation in these locations.	
9.12	Archaeology	SCCAS Recommendation	• Early assessment: Undertake full geoarchaeological and palaeoenvironmental assessment of the river valleys to inform appropriate archaeological mitigation. • Integrated mitigation planning: undertake full archaeological evaluation to ensure CoCP, AMS-OWSI and LEMP work together so that drilling, spoil management, and reinstatement methods are designed to avoid or minimise disturbance to archaeological deposits; where avoidance is not possible, undertake appropriate mitigation, informed by the results of archaeological evaluation. • Hydrological risk assessment: Assess potential hydrological changes from HDD and associated works and evaluate their likely impacts on archaeological heritage assets and important deposits; incorporate findings into both ecological and archaeological mitigation strategies. Consultation with the Historic England regional science advisor for the eastern region is strongly advised. • Management of preserved areas: Document any areas to be preserved in situ and manage them through the AMS-OWSI, DWSIs, HEMP and live constraints mapping, with clear responsibilities, monitoring regimes, and long-term maintenance arrangements. • Clerks of Works coordination: Establish communication protocols and regular joint site meetings between the Archaeological Clerk of Works and all ecological/engineering	

			Clerks of Works named in the OLEMP to coordinate works, inspections, and unexpected discoveries. • Contingency procedures: Put in place a written unexpected archaeological finds procedure linked to the OLEMP so that discovery, recording, temporary protection, and decision making are consistent throughout the CoCP, AMS-OWSI and LEMP.	

Table 10: 7.5 Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (AMS-OWSI) [APP-328]				
Table Item	Service Area and/or Topic	Referenced Paragraph or Item	SCC's Comments	References
10.1	Archaeology	General	In line with the requirements of the Overarching National Policy Statement for Energy (EN-1), the historic environment must be considered as an integral part of the environmental assessment process. EN-1 (Section 5.8) requires applicants to assess the significance of heritage assets and the impact of proposed developments on them, including mitigation where appropriate. Similarly, EN-5 (Electricity Networks Infrastructure) reinforces the need to consider the historic environment in the context of infrastructure development. These policies make clear that impacts on heritage assets must be properly assessed and addressed through appropriate mitigation strategies, secured during the pre-commencement phase of works.	
1.3 Purpose of the Outline AMS-OWSI				
10.2	Archaeology	1.3.1 <i>"The purpose of this document is to set out the process, guiding principles and methods for the planning and implementation of additional archaeological mitigation works (and any post-consent archaeological work)"</i>	This statement needs to be amended as the AMS-OWSI purpose is to set out the principles and methodology of post-consent archaeological evaluation and archaeological mitigation. For archaeology this is to mitigate the impacts of the development upon archaeological heritage assets. SCCAS would recommend the following amendment to add clarity to the documents purpose:	

		<i>proposed to mitigate the adverse effects of the Project.”</i>	“The purpose of this document is to set out the guiding principles and methodologies for post-consent archaeological evaluation and archaeological mitigation. For archaeology, its primary function is to ensure that the impacts of the development on archaeological heritage assets are appropriately assessed and mitigated.”	
10.3	Archaeology	1.3.2 <i>“This document details the types of archaeological mitigation proposed to reduce the effect of the Project on archaeological remains.”</i>	This paragraph needs to be amended; we suggest the following wording: “This document details the archaeological preservation in situ management and archaeological investigations and recording, proposed as mitigation for the impacts of the development upon archaeological heritage assets.” This is to add clarity to the purpose of the document. The purpose of the OWSI, which is to detail the process of all post-consent archaeological work; evaluation (geophysical survey and trial trenching), archaeological mitigation, post-excavation assessment, reporting, publication and archiving.	
10.4	Archaeology	1.3.4 <i>“Appropriate and proportionate geophysical (magnetometer) survey and archaeological trial trenching has been undertaken to date. This is summarised in Section 1.8. Alongside the detailed desk-based information included in assessment this is considered to provide a reasonable basis for</i>	We would recommend the following amendment for the first sentence of this paragraph: “For some areas of the project impact geophysical survey and archaeological trial trenching has been undertaken to date.” <i>This clarification is important for the Examination, as not all areas affected by the proposed development will have undergone archaeological evaluation. This is because certain design elements, such as haul roads and overhead sections, have not yet been finalised.</i>	

		<i>assessment necessary for the purposes of the ES (document reference 6.11). It is expected that limited additional archaeological evaluation would also be carried out post-consent at certain locations along the Project where access was previously not possible or where only a limited amount of work was carried out pre-consent. This assumes that the majority of evaluation would have been undertaken during the pre-consent phase, as set out in Section 1.8. The purpose of this would be to inform the detailed mitigation requirements.”</i>	“It is expected that limited additional archaeological evaluation would also be carried out post-consent at certain locations along the Project where access was previously not possible or where only a limited amount of work was carried out pre-consent, or where designs of impacts have yet to be finalised” • The term "limited" should be removed, as the archaeological evaluation must be undertaken to the same scope and standard as the pre-consent archaeological works. This ensures consistency in the evaluation approach. • The use of the term "certain" is inappropriate, as it implies a selective approach. Archaeological evaluation is required for all areas subject to development impact where pre-consent evaluation has not been undertaken. This requirement is not discretionary. SCCAS recommends the inclusion of figures to add clarity and support the archaeological strategy. One figure should show all areas where geophysical survey and trial trenching have been completed, and a second figure highlighting all areas where the evaluation remains outstanding and are to be undertaken post-consent. These visual aids will help ensure that archaeological evaluation is clearly documented and that future mitigation is appropriately targeted and timetabled.	

10.5	Archaeology	Image 1.1 	this should include: “Post-consent Detailed WSIs produced for; phases of archaeological work, geographical areas or elements of construction works” This clarifies that multiple DWSIs may be produced for a single section, particularly where post-consent evaluation is needed to inform mitigation, as implied by the flow chart.	
10.6	Archaeology	Image 1.1 	This should also include archiving. Additionally, there needs to be two more stages prior to this stage. For clarity of the procedure please add in: 1. Produce Post-Excavation Assessment Report and Updated Project Design (PXA/UPD). 2. Share with Stakeholders for agreement. 3. Include details about when discharge of requirement is appropriate. Notes: 1. All costs for detailed assessment, reporting, publication, and archiving must be agreed and secured at the Updated Project Design stage.	

			2. Archive deposition costs for Suffolk must also be secured at this stage, as the County Archaeology Store is the only suitable repository. 3. Digital archive deposition costs must be secured at the same stage, with ADS as the required repository for Suffolk.	
1.4 Scope of the Outline AMS-OWSI				
10.7	Archaeology	1.4.1 <i>“This document follows the approach to mitigation set out in ES Chapter 11: Historic Environment (document reference 6.11) of the ES (Volume 6 of the DCO application) and mitigation measures in the Outline CoCP (document reference 7.2). Mitigation in the Outline CoCP is secured by Requirement 4 and mitigation within this Outline AMS-OWSI is secured by Requirement 5 in the Draft DCO (document reference 3.1) which would require the Main Works Contractor(s) to submit, have approved by the relevant discharging authority, and comply with, Detailed WSIs that are substantially in accordance with this document. All pre-</i>	Please add in the following red text: “All pre-commencement operations listed in the Draft DCO (document reference 3.1) would be carried out in accordance with this Outline AMS-OWSI and relevant DWSIs.”	

		<i>commencement operations listed in the Draft DCO (document reference 3.1) would be carried out in accordance with this Outline AMS-OWSI.”</i>		
10.8	Archaeology	1.4.2 <i>“The Outline AMS-OWSI sets out the framework for archaeological mitigation of sites affected by the Project. This document conforms with current good practice as defined by national and professional standards, and takes account of relevant guidance including but not limited to:”</i>	Please include local guidance to this paragraph as the local guidance documents are referenced the bullet points below: “The Outline AMS-OWSI sets out the framework for archaeological mitigation of sites affected by the Project. This document conforms with current good practice as defined by national, local and professional standards, and takes account of relevant guidance including but not limited to:”	
10.9	Archaeology	1.4.4 <i>“The mitigation measures proposed within this Outline AMS-OWSI are informed by established approaches set out in recognised national guidance, such as the Design Manual for Roads and Bridges (DMRB) LA 106 (Cultural Heritage Assessment, National Highways, 2020). While the Project is not a road scheme, this guidance provides nationally</i>	This should also reference EN-1 and EN-5 and ClfA guidance, which is referenced in DMRB LA 106.	

		<i>recognised approaches to mitigation strategies for archaeological remains within linear infrastructure contexts. Its principles are broadly applicable to large-scale infrastructure projects, including linear energy developments.”</i>		
10.10	Archaeology	1.4.6 <i>“Embedded, standard and additional mitigation measures relevant to the Historic Environment are described in ES Chapter 11: Historic Environment, Section 11.6 (document reference 6.11) and the Outline CoCP (document reference 7.2).</i> <i>Standard and additional mitigation measures specific to the Historic Environment are secured through Requirement 4 in the Draft DCO (document reference 3.1) which would require the Main Works Contractor(s) to prepare the CoCP to discharge the Requirement.”</i>	This is incorrect, as Section 11.6 contains no mitigation measures. The AMS-OWSI outlines the mitigation process but cannot define specific mitigation measures until evaluation is complete. Site or section specific mitigation will be detailed in the DWSIs, once informed by the evaluation.	

10.11	Archaeology	1.4.7 <i>“Standard and additional mitigation measures for archaeology set out in the Outline CoCP include:”</i>	The Standard and additional mitigation measures are insufficient for delivery of the project, as they do not provide sufficient details of the archaeological process, archaeological evaluation and mitigation.	
10.12	Archaeology	1.4.7 <i>“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.”</i>	This should read: “Methodologies and processes for further archaeological evaluation and mitigation are specified within the Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (AMS-OWSI) (document reference 7.5). This document provides the framework for identifying, assessing, and managing archaeological heritage assets and will directly inform the production of Detailed Written Schemes of Investigation (DWSIs) for specific areas or phases of the Project.” This clarification strengthens the purpose of the Outline AMS-OWSI by ensuring that archaeological evaluation, such as geophysical survey and trial trenching, is appropriately scoped and implemented. These evaluations are essential for identifying areas of archaeology and informing proportionate mitigation strategies.	
10.13	Archaeology	1.4.7 <i>“H03 - The location of known archaeological remains or areas where archaeological investigations will be undertaken (i.e., excavations) will be</i>	To avoid unintentional damage to archaeological heritage assets, all relevant management measures must be included in the live constraints mapping for the project. This ensures that heritage assets and sensitive areas are clearly visible and accessible to all teams involved in construction, operation, and decommissioning activities. Early identification and mapping of these constraints is essential to ensure effective avoidance and mitigation.	

		<i>signposted/ fenced off to avoid unintentional damage.”</i>		
10.14	Archaeology	1.4.7 “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 LPA 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.”	A robust protocol must be established to train operatives in identifying archaeological remains during construction works. While the commitment to notify the Local Planning Authority (LPA) upon the discovery of previously unknown or unexpectedly significant heritage assets is welcomed, it is essential to emphasise the importance of early-stage archaeological evaluation to minimise such risks. Thorough evaluation (through geophysical survey and trial trenching) is a critical component of the pre-application and pre-construction process. These combined methods help identify areas of archaeological sensitivity, assessing the significance of known and unknown assets, and inform the development of proportionate and effective strategies to mitigate the impacts of the development upon the Historic Environment. Early identification enables the project to integrate mitigation into the programme timetable, reducing the likelihood of unexpected discoveries and ensuring compliance with planning policy and best practice guidance.	
1.5 Structure of the Outline AMS-OWSI				
10.15	Archaeology	1.5.1 “Chapters 1 to 4 of this document comprise the outline archaeological mitigation strategy. They describe the principles to be applied when designing and	This should include: Chapters 1 to 4 of this document comprise the outline archaeological mitigation strategy. They describe the principles to be applied when designing and implementing a programme of archaeological evaluation and mitigation for the Project.	

		<i>implementing archaeological mitigation for the Project. They propose strategies and approaches for the protection of archaeological remains to be retained and for the investigation, recording, analysis, and publication of archaeological remains to be removed in advance of construction.”</i>	This highlights the need for further evaluation to inform appropriate archaeological mitigation in response to development impacts.	
10.16	Archaeology	1.5.3 <i>“Chapter 6 of this document details the requirement for post-excavation analysis and the eventual publication of the archaeological and other heritage work arising from the mitigation programme.”</i>	Chapter 6 should detail the requirement for post-excavation analysis, publication and deposition of archives arising from the programmes of archaeological fieldwork other heritage work arising from the mitigation programme This removes the word "eventual" to emphasise that post-excavation analysis, publication, and archive deposition must occur in a timely manner, and clarifies the post-excavation process outlined in Chapter 6.	
1.6 Status of this Document				
10.17	Archaeology	1.6.2 <i>“This Outline AMS-OWSI has been agreed in principle with the Local Planning Authority Archaeological Advisors. This document will be updated in agreement with the Local Planning Authority</i>	This document is not currently agreed in principle. SCCAS reviewed a draft in April 2025. However, due to its substantially incomplete nature, we were unable to provide comprehensive comments or offer agreement in principle. Consequently, the referenced paragraph is inaccurate until the document has been formally approved by the LPAAA.	

		Archaeological Advisors and will be provided to them for approval.”		
1.7 Roles and Responsibilities				
10.18	Archaeology	1.7.3 “The Local Planning Authority Archaeological Advisors will be responsible for confirming that the requirements of the DCO are met, in accordance with any conditions relating to archaeology. The archaeological Advisors will be responsible for final sign off and approval of all mitigation measures.”	This paragraph should add in the following sentence in red. “The Local Planning Authority Archaeological Advisors, working with the discharging authority, will be responsible for confirming that the requirements of the DCO are met, in accordance with the DCO requirements relating to archaeology. The Local Planning Authority Archaeological Advisors will be responsible for final sign off and approval of all mitigation measures.” This should acknowledge who the discharging authority would be in accordance with the DCO.	
10.19	Archaeology	1.7.5 “National Grid will appoint an Archaeological Contractor to carry out the archaeological evaluation and mitigation fieldwork. The Archaeological Contractor will be responsible for the production of DWSIs for each stage of archaeological investigation.”	This paragraph should also specify the party responsible for submitting the Detailed Written Schemes of Investigation (DWSIs) to the LPAAA for review and approval.	
1.8 Summary of Evaluation Fieldwork Undertaken by the Project				

10.20	Archaeology	1.8.1 <i>“The results of the evaluation fieldwork completed to date are contained in ES Appendix 11.3: EACN Geophysical Survey Report (document reference 6.11.A3), ES Appendix 11.4: Geophysical Survey Results Report (document reference 6.11.A4), ES Appendix 11.5: Trial Trenching Results Reports (document reference 6.11.A5) and ES Appendix 11.6: Geoarchaeological and Archaeological Monitoring of Ground Investigation Works Report (document reference 6.11.A6). The results of this fieldwork are summarised in the ES Chapter 11: Historic Environment (document reference 6.11) and included in assessment in ES Appendix 11.2: Historic Environment Assessment Tables (document reference 6.11.A2).”</i>	The way this paragraph reads in its current form could be miss understood about the extent of the work that has been undertaken to date. SCCAS would recommend the following amendment in red to clarify this: “The results of the evaluation fieldworks completed to date for the priority areas only are contained in...”	
10.21	Archaeology	1.8.2 <i>“Table 1.1 below provides a summary of the progress to date</i>	Table 1.1 only covers the priority areas and non-priority areas that have been currently identified. This does not cover all areas of construction impact yet to be identified.	

		<i>and future programme for the archaeological evaluation fieldwork for the Project. The table refers to priority and non-priority areas for fieldwork. Priority areas have been defined based on reduced design flexibility, construction methodology, and the associated extent of archaeological impact likely to result from their construction. The Limits of Deviation (LoD) allows for greater flexibility at the construction stage for some elements of the Project than others, for example the overhead line in comparison to temporary construction compounds. The priority areas have less design flexibility in the LoD than the non-priority areas. Construction programme considerations have also informed the classification of priority areas. Priority areas comprise:</i>		
10.22	Archaeology	1.8.4 <i>“In most cases the classification of priority areas for geophysical</i>	<i>Please remove “consequently areas of physical impact, are smaller they have not been included in the priority areas for archaeological</i>	

		<i>survey and archaeological trial trenching are the same. However, for geophysical survey the priority areas also include some sections of proposed overhead line or 3rd party mitigation works where there is assessed to be higher archaeological potential. As there is greater flexibility in final design for these design elements and the working areas, and consequently areas of physical impact, are smaller they have not been included in the priority areas for archaeological trial trenching.”</i>	<i>trial trenching.”</i> As this is materially incorrect, as where archaeological remains exist the damage would be equivalent.	
10.23	Archaeology	Table 1.1	Please remove the word “contingency” from the post DCO Consent/Pre-commencement sections of this table. All areas that have not been evaluated where construction impacts will occur, must be evaluated (geophysical survey and trial trenching) prior to commencement. This is to inform an appropriate mitigation strategy. This is to provide clarity in the process and to ensure that all areas impacted by the development will be evaluated to inform on an appropriate archaeological mitigation strategy. The AMS-OWSI should clearly state that not all areas of the Order Limits have been surveyed and on the areas that have been surveyed only magnetometer survey was undertaken. No other geophysical	

			techniques have been deployed. The results presented therefore relate exclusively to magnetometer data and without “ground truthing” the results should not be interpreted as a comprehensive characterisation of the archaeology within a given area/site.	
2. Principles and Objectives for Archaeological Mitigation				
2.1 Principles				
10.24	Archaeology	2.1.3 <i>“Additional archaeological mitigation is required where there would be an unavoidable impact on archaeological remains and associated deposits. The sites of archaeological interest which would require mitigation were initially identified in ES Chapter 11: Historic Environment (document reference 6.11) and ES Appendix 11.2: Historic Environment Assessment Tables (document reference 6.11.A2) (and any further environmental information – as detailed within ES Chapter 11: Historic Environment document reference 6.11) and Table 1.1, regarding providing Historic Environment baseline and</i>	Please remove the word additional from this paragraph, as archaeological mitigation will be a requirement of the DCO. This is incorrect, as the evaluation results are only for the priority areas and not the full scheme. All areas where there are potential impacts upon archaeological remains must be evaluated to inform appropriate mitigation strategies.	

		<i>assessment following further evaluation).</i> ”		
10.25	Archaeology	2.1.4 <i>“All heritage assets should be considered with appropriate weight, reflecting their value, which could be subject to change in the event of discovery of currently unknown archaeological remains or new information on known archaeological remains”</i>	Please add in the following sentence to bullet point 2: All heritage assets should be considered with appropriate weight, reflecting their value, which could be subject to change in the event of discovery of currently unknown archaeological remains or new information on known archaeological remains as a result of a programme of archaeological evaluation (geophysical survey and trial trenching). This is to clarify the process.	
10.26	Archaeology	2.1.5 <i>“Only undertake extensive intrusive works in areas within the Order Limits where there would be a direct impact through development to archaeological remains”</i>	Please amend bullet point 5, to bring this point in line with EN01 5.9.12: Only undertake extensive intrusive works in areas within the Order Limits where there would be a direct and/or indirect impact through development to archaeological remains. e.g. any areas where preservation of archaeological heritage assets by avoidance has been agreed and there is an indirect impact, such as drilling clay break out, or areas where a de-compaction strategy is required. Or areas where off site ecological compensation/BNG is agreed and would have a direct impact upon archaeological heritage assets. There needs to be a bullet point for the AMS-OWSI and DWSIs linking to OLEMP, OCoCP, OCEMP, Overarching Soil Management Plan and any other project level environmental and/or construction	

			management documents. This is to ensure control measures are coherent and easily cross-referenced. Archaeological mitigation should be included on live constraints mapping for the project. There should be the inclusion of a bullet point for public engagement and outreach.	
2.2 Objectives				
10.27	Archaeology	2.2.2 • <i>“Ensure a detailed programme of archaeological work is in place to appropriately mitigate impacts on any archaeological remains due to the Project...”</i> • <i>Ensure that the results of the investigations are:</i> — <i>Made publicly available in an appropriate format for assimilation into the relevant Historic Environment Records (HERs)</i>	We would recommend the following amendment to clarify the process: • Ensure a detailed programme of archaeological work is in place to appropriately mitigate impacts on any archaeological remains due to the Project, informed by archaeological evaluation (geophysical survey and trial trenching) for all areas of impact. With the provision for public outreach there should be a methodology developed to enable effective public engagement. In previous projects of equivalent scale and complexity, the delivery of public outreach has been coordinated by a dedicated “Archaeological Outreach Officer”. This individual has either been a part of the principal archaeological contractors’ team or been directly employed by the developer. The Archaeological Outreach Officer can be an excellent source of positive engagement between developers of the scheme and the local community.	

		— Disseminated in a timely manner via the Online Access to the Index of Archaeological Investigations (OASIS) and the Archaeological Data Service — Disseminated through outreach during and post fieldwork where possible.”		
Table 2.1 Aims of Mitigation Techniques Proposed on the Project				
10.28	Archaeology	Table 2.1 Ref 1	Preservation in situ will need to be agreed and secured by creation of a separate management plan, this management plan will need to link to other documents such as the OLEMP and OCoCP and Soil Management Plan etc. The preservation in situ management plan would need to detail the preservation in situ of archaeology during, construction (including decommissioning of 132kV) and operation. The Preservation in situ management plan would also need to have sufficient provision to allow for archaeological mitigation should archaeological heritage asset be unable to be preserved in situ during construction and/or during its operation.	
10.29	Archaeology	Table 2.1 Ref 1.1 – Avoidance <i>“Primarily achieved through design as embedded mitigation but can be recommended when significant archaeological remains are</i>	Preservation in situ through avoidance will need to secure the production and the implementation of a Historic Environment management plan (HEMP). This would need to link into other management plans such as the CEMP and LEMP to ensure preservation of the archaeological heritage assets. This will also need	

		<i>discovered during archaeological work or construction. The aim is to avoid damage to heritage assets by removing any potential impact.”</i>	to allow for monitoring of the preservation in situ areas by the Archaeological Clerk of Works and have sufficient provision to allow archaeological mitigation should preservation in situ not be achieved during construction or during operation such as repair works.	
10.30	Archaeology	Table 2.1 Ref 1.2 - Burial or sealing of remains with barrier membrane <i>Burying or sealing remains beneath fill material to ensure that they are not disturbed (including use of a protective barrier membrane between the buried remains and the fill material. The aim is to avoid damage to heritage assets by removing any potential impact.</i>	This is no longer considered good practice. As a general principle, once archaeology has been exposed it will need to be mitigated as re-burial of exposed remains will not allow preservation in situ, as the burial environment will have changed. Depending on the buried heritage assets the use of barrier membrane may cause damage through altering water percolation through the burial environment and the introduction of Oxygen which will cause the degradation of artefacts and palaeoenviromantal remains. If areas are temporarily built up, above topsoil/ploughsoil level, there will need to be sufficient testing to assess compaction/compression damage to archaeology as this depending on depth of the archaeological heritage assets can cause direct and indirect impact upon archaeological heritage assets, through compaction and plastic deformation to archaeological heritage assets. If areas are temporarily built up, then the decompaction methodology needs to be informed by the results of archaeological evaluation and mitigated appropriately ahead of implementation of a decompaction methodology.	
10.31	Archaeology	Table 2.1 Ref 1.3 Fencing <i>Measures for preservation in situ would include protective fencing. The aim is to avoid damage to</i>	In order to establish the extent of buried archaeological heritage assets archaeological evaluation including geophysical survey and trial trenching of a suitable sample percentage (typically 4% with geophysical survey and 5% without geophysical survey), would be	

		<i>heritage assets by removing the potential for unintended impacts</i>	required to inform on extent of archaeological heritage assets to be preserved in situ.	
10.32	Archaeology	Table 2.1 Ref 1.4 – Track matting <i>Where construction vehicle movements cannot be avoided, temporary track matting will be laid to spread vehicle loads, prevent rutting and minimise compression of the soil profile, thereby reducing the risk of harm to any buried archaeological remains.</i>	Use of track matting is fine where depth of soil coverage above archaeology is sufficient, however, preservation in situ cannot be achieved if remedial works such as decompaction will be utilised after the track matting has been removed. Where decompaction is required the area will need to be mitigated appropriately ahead of implementation of a decompaction methodology.	
10.33	Archaeology	Table 2.1 Ref 2.1 - Geoarchaeological Deposit Modelling <i>May be used in conjunction with 4.4. Using existing information to map the distribution of buried deposits of archaeological interest across a site or landscape.</i> <i>Interpretation of when the deposits accumulated and what they represent allows areas of archaeological potential to be identified. The aim is to enable subsequent fieldwork to be focused and/or the context of</i>	This should also include palaeoenvironmental assessment and C-14 dating, as there are known organic rich deposits and peats within the river valleys. This is essential to inform on the palaeoenvironmental potential, significance and date of these deposits to inform the scheme design and an appropriate mitigation strategy.	

		<i>archaeological remains to be better understood.</i>		
10.34	Archaeology	Table 2.1 Ref 3.1 – Controlled metal detecting <i>The systematic metal detecting of a given area of archaeological investigation to allow the plotting and recording of any metalwork. There are two aims, firstly to create a record of the distribution of archaeological artefacts within the ploughzone, to advance understanding of the value of the archaeology of a given area and to inform the development of further mitigation, and secondly to recover any archaeological metalwork from topsoil during intrusive archaeological fieldwork.</i>	this should also include that controlled metal detecting will be undertaken on areas of archaeological mitigation, prior to the excavation areas being opened. Please include: <i>controlled metal detecting will be undertaken on all areas designated for archaeological mitigation prior to the excavation areas being opened. Detecting will be completed after any surface clearance and prior to any hand excavation of archaeological features.</i>	
10.35	Archaeology	Table 2.1 Ref 3.2 – Geophysical survey <i>A non-intrusive archaeological survey technique used to identify differences between buried archaeological remains and surrounding soil. The purpose of this is to understand likely</i>	The AMS-OWSI should acknowledge that geophysical survey is not a definitive evaluation technique and should clearly state that without “ground truthing” the results it is difficult to interpret the data. Only features with sufficient magnetic contrast will register within the data, and interpretation of these results is inherently subjective. Additionally, the lack of a detectable anomaly within the survey does not guarantee an absence of archaeology, nor can the survey alone	

		<i>presence, extent and nature of buried archaeological remains.</i>	establish the precise character, date or extent of features it does identify. The AMS-OWSI should clearly state that not all areas of the Order Limits have been surveyed and on the areas that have been surveyed only magnetometer survey was undertaken. No other geophysical techniques have been deployed. The results presented therefore relate exclusively to magnetometer data and without “ground truthing” the results should not be interpreted as a comprehensive geophysical characterisation of the site.	
10.36	Archaeology	Table 2.1 Ref 4.1 – Trial trenching This comprises the machine excavation of trenches and investigation by hand of identified archaeological remains. The aim is to determine the presence or absence of archaeological deposits, their state of preservation and to inform the development of further mitigation.	SCCAS would recommend the following amendment: <i>“This comprises the machine excavation of trenches and investigation by hand of identified archaeological remains. The aim is to determine the presence or absence, significance, extent, depth and character of archaeological heritage assets as well as their state of preservation. To inform the development of a programme of appropriate archaeological mitigation.”</i> This amendment clarifies the objectives of archaeological trial trenching.	
10.37	Archaeology	Table 2.1 Ref 4.2 – Detailed excavation <i>A programme of controlled, intrusive fieldwork with defined objectives which maps, examines, records and interprets archaeological remains at a site or</i>	We would recommend the following amendment: “A programme of controlled, intrusive fieldwork which maps, investigates through hand-excavation and post-excavation analysis, records and interprets archaeological remains at a site or within a specified area. The aim is to create a complete record of any archaeological remains before they are lost, wholly or in part, to advance understanding of the value of the archaeological assets.”	

		<i>within a specified area. The aim is to create a record of any archaeological remains before they are lost, wholly or in part, to advance understanding of the value of the archaeological assets.</i>	This amendment clarifies the objectives of detailed excavation.	
10.38	Archaeology	Table 2.1 Ref 4.3 – Strip, Map and sample excavation <i>Strip, map and sample comprises the archaeologically controlled strip of a defined area within the Order Limits under the direction of a suitably qualified archaeologist.</i> <i>The aim is to create a record of any archaeological remains before they are lost, wholly or in part, to advance understanding of the value of the archaeological assets.</i>	SCCAS would recommend the following amendment in red: “Strip, map and sample comprises the archaeologically controlled strip of a defined area within the Order Limits under the direction of a suitably qualified archaeologist. The exposed archaeology will then be planned, and the level of hand-excavation will be determined in consultation with the LPAAA. The aim is to create a record of any archaeological remains before they are lost, wholly or in part, to advance understanding of the value of the archaeological assets.” Strip Map and Sample mitigation should only be applied to areas where the archaeological evaluation has indicated the presence of lower value archaeological heritage assets which are spread over a larger area, e.g. Prehistoric Field Systems. This mitigation methodology should not be applied to areas of occupation, industry or burial. Where SMS mitigation identifies areas of higher archaeological value than anticipated the SMS methodology should be changed to a detailed excavation methodology.	

10.39	Archaeology	Table 2.1 Ref 4.4 Geoarchaeological and palaeoenvironmental investigation <i>May be used in conjunction with 2.2</i> <i>(Geoarchaeological deposit modelling). A programme of sample recovery and assessment/analysis carried out to investigate palaeoenvironmental conditions and soil sediment development that may be relevant to the research of archaeological sites or remains found within the vicinity. Achieved through trial pit excavations or other soil sample retrieval methods (such as auger or boreholes). The aim is to provide additional information and context to any archaeological remains before they are lost, wholly or in part, to advance understanding of the value of the archaeological assets.</i>	This should be included in 2.1 as palaeoenvironmental and geoarchaeological assessment as it sets out the assessment criteria. SCCAS would recommend the following amendment in red: Will be used in conjunction with 2.1 (Geoarchaeological deposit modelling). A programme of sample recovery and assessment/analysis/scientific dating carried out to investigate palaeoenvironmental conditions, significance of deposits and soil sediment development that may be relevant to the research of archaeological sites or remains found within the vicinity, and the broader palaeoenvironment. Achieved through trial pit excavations or other soil sample retrieval methods (such percussion auger or boreholes to provide sleeved samples for full analysis). The aim is to provide additional sufficient information and context to any archaeological remains before they are lost, wholly or in part, to advance understanding of the value of the archaeological assets, and to inform the broader understanding of palaeoenvironmental conditions in the region. This will also inform on the potential for organic artefact preservation within deposits. For Geoarchaeological and palaeoenvironmental mitigation, this section needs to set out mitigation measures informed by the results of palaeoenvironmental and geoarchaeological assessment.	

10.40	Archaeology	Table 2.1 Ref 5.1 – Archaeological Monitoring and Recording <i>A programme of observation of soil stripping by machine for construction works and where required the investigation and recording of archaeological remains.</i> <i>To be carried out in specific areas where the presence of, or moderate potential for, archaeological remains has been demonstrated or can be predicted. The aim is to create a record of any archaeological remains before they are lost, wholly or in part, to advance understanding of the value of the archaeological assets.</i>	Archaeological monitoring and recording should be confined to minor, unassessed interventions, such as supervising ground-investigation test pits. Where a project area shows clear archaeological potential (indicated by baseline information or through archaeological evaluation), more comprehensive evaluation and mitigation, like targeted excavation or strip, map and sample excavation, to ensure appropriate archaeological mitigation. When monitoring reveals archaeological assets of potential significance, the approach must be escalated according to the nature and importance of those finds. E.g. progress to opening an excavation area to allow Detailed Excavation for heritage assets of significant archaeological interest. Risks and Project Implications • Monitoring and recording during construction is inherently high risk, as unexpected discoveries will halt works. • Discovery of significant archaeology during construction may force redesigns or additional fieldwork, impacting project timelines. • Unexpected and unplanned-for mitigation can drive up costs and delay project delivery. Therefore, archaeological monitoring and recording should only be reserved for very specific situations. Instead, SCCAS recommends a comprehensive evaluation of all scheme impacts, combining geophysical survey with trial trenching, to inform the development of the archaeological potential of areas of impact. This full assessment not only shapes effective archaeological mitigation	

			strategies but also provides reliable data for realistic project delivery timelines and cost forecasts. We would recommend a complete re-write of this to the following: <i>For small, defined, construction impacts, where archaeological potential is low an archaeological monitoring and recording programme may be implemented. This will:</i> <i>• Provide continuous archaeological oversight of all relevant groundworks.</i> <i>• Require an immediate halt to construction if remains are uncovered, allowing for careful hand-excavation and comprehensive recording.</i> <i>• Trigger an escalation protocol, informing the relevant LPAAA if discoveries prove more extensive or significant than anticipated.</i> <i>Any upgrade to a more robust mitigation strategy will be agreed with the relevant LPAAA and in discussion with project stakeholders to ensure heritage assets are properly investigated and documented before development resumes.</i>	
10.41	Archaeology	Table 2.1 Ref 6.2 - Outreach activities <i>This could include presentations, talks, public events and exhibitions</i>	Outreach activities can span traditional and digital channels, including: • Presentations, talks, public events and exhibitions • Maintenance and enhancement of digital outreach platforms • Engagement with media partners, such as documentaries or features on Digging for Britain	

10.42	Archaeology	Table 2.1 Ref 7 – Post-excavation	Note: Please ensure that funding is available to allow for the off-site processing finds and stabilizing sensitive materials during the fieldwork phase, as this is essential to ensure their conservation.	
10.43	Archaeology	Table 2.1 Ref 7.1- Conservation and assessment <i>A programme of post-excavation assessment, conservation and reporting would be carried out.</i>	We would recommend the following amendment to provide clarity to the post-excavation assessment process: <i>“A programme of post-excavation assessment, conservation and reporting would be carried out and presented in Post-Excavation Assessment Reports (PXA). An Updated Project Design must be developed from the PXA’s detailing a programme of full post-excavation analysis, reporting, publication and archive deposition.”</i>	
10.44	Archaeology	Table 2.1 7.2 Analysis and Reporting <i>Archaeological post-excavation analysis (including but not limited to, finds analysis, environmental sample analysis, Carbon 14 and Optically Stimulated Luminescence (OSL) dating and other specialist inputs), and reporting.</i>	Further detail should be included in this summary, we would recommend the following amendment: A programme of post-excavation analysis will be undertaken, which will include (but not limited to): • Finds Analysis, • Environmental Sample Analysis, • Appropriate Scientific Dating, • Bayesian Modelling, • Human remains and faunal remains analysis, • and other specialist input and reporting. These specialists’ analysis will be reported in Post-Excavation Assessment reports and inform the production of an Updated Project Design (UPD), detailing further analysis, publication, outreach and deposition of archives.	

10.45	Archaeology	Table 2.1 Ref 7.3 – Archiving <i>The deposition of the archive in an approved local museum or other repository, and the creation of an appropriate digital archive.</i>	We would recommend the following amendment to this summary: “The deposition of the archive in an approved local museum or other repository, in accordance with local archival guidance and the creation of an appropriate digital archive to be deposited with the Archaeological Data Service (ADS). All archives (both physical and digital) will be accompanied by an appropriate archive report and GIS shapefiles provided for inclusion in the County Historic Environment Record” Note: Archive deposition charges will apply; these must be agreed with the local archive repository in advance of deposition and detailed in the Updated Project Design (UPD). For Suffolk the archive repository is the Suffolk County Council Archaeology Store in accordance with national and local guidance (there are no museums with capacity to take an archaeological archive in Suffolk), and the Suffolk archive deposition charges are payable at the PXA/UPD submission. SCC County Archaeology Store can only store the archive generated within the County. We cannot accept archive material from other counties.	
10.46	Archaeology	Table 2.1 Ref 8.1 – Publication <i>Publication of the results in appropriate formats including academic and more popular publications.</i>	Please see SCCAS recommendation in red below: Provision for publication of the results of archaeological fieldwork will be proportionate to the significance of the archaeology recorded, and published in appropriate nationally recognised academic journals e.g. East Anglian Archaeology (EAA). In addition,	

			more popular publications may be produced as part of the programme outreach. Note: As a minimum, summaries of the archaeological work undertaken within Suffolk must be provided for inclusion in the Proceedings of the Suffolk Institute for Archaeology.	
10.47	Archaeology	3.1.3 <i>“The research framework relevant to the Project is the East of England Regional Research Framework (EERRF) (Association of Local Government Archaeological Officers East of England and Historic England, 2000; 2011; 2021). “</i>	Please include a reference to the East of England Regional Research Framework website (https://researchframeworks.org/eoe/). This online resource lays out period-specific research agendas (each framed by specific research questions) and is complemented by overarching, multi-period research questions. As a live, web-based document, it is regularly updated to reflect the latest archaeological investigations, discoveries and evolving research priorities.	
10.48	Archaeology	3.1.5 <i>“The EERRF, desk-based studies, geophysical surveys and the results of the archaeological trial trenching would be used to inform specific research questions for the Project, in consultation with key stakeholders, and would be set out in the DWSIs.”</i>	Please remove “specific” and replace with initial, as research questions can change during the mitigation/excavation process. This work will be guided by initial research questions, which may be refined as archaeological work progress, ensuring that final reporting and publication is proportionate to the significance of the archaeological heritage assets affected by the development.	
10.49	Archaeology	3.1.6	The research objectives for each DWSI will only be fully understood once Post-Excavation Assessment reporting has been undertaken	

		<i>“Each DWSI for areas of archaeological interest would be prepared substantially in accordance with this document, which is secured through Draft DCO Requirement 5 (document reference 3.1), and would clearly identify research objectives and approaches which would contribute to meeting those objectives.”</i>	and the research objectives of the project would be defined in an Updated Project Design. “Each DWSI for areas of archaeological interest would be prepared substantially in accordance with this document, which is secured through Draft DCO Requirement 5 (document reference 3.1), and would identify initial research objectives and approaches which would contribute to meeting those objectives.”	
10.50	Archaeology	4.1.4 <i>“As the construction of the temporary construction compounds would require removal of soil there is potential for physical impacts to archaeology located within these areas. The construction techniques are expected to affect near-surface archaeology with no impacts expected to deeply buried deposits. On the basis of current construction information it is not expected that the static load or vehicle movements within temporary construction compounds would generate</i>	In areas containing waterlogged and/or organic-rich sediments, appropriate archaeological evaluation must be undertaken to assess the potential impact on stratified deposits. This is essential to ensure that any significant palaeoenvironmental or archaeological remains are identified and appropriately mitigated prior to development. While no impacts are currently anticipated on deeply buried archaeological deposits, this assumption must be verified through archaeological evaluation. Archaeological evaluation, combining geophysical survey and trial trenching, is necessary to confirm the presence or absence of archaeological heritage assets, and inform on the significance of archaeological remains and to ensure appropriate mitigation is applied, if required.	

		<i>downward compaction pressures of a great enough magnitude to impact deeply buried archaeological deposits, any such impacts are expected to occur within the depth of archaeological deposits that would be investigated as ‘near-surface’ features through mitigation measures set out in the relevant DWSI.”</i>		
4.2 Haul Roads				
10.51	Archaeology	4.2.9 <i>“Temporary crossings would be required over watercourses, streams, and field ditches to maintain the haul roads along the alignment; these would likely consist of temporary bridges or culverts. Further detail is included in ES Appendix 4.2: Watercourse Crossing Details (document reference 6.4.A2).”</i>	Watercourses and streams where temporary crossings will be required will need archaeological evaluation and palaeoenvironmental assessment to inform design. e.g. impacts could be large if Water Vole mitigation is required.	
10.52	Archaeology	4.2.10 <i>“As the construction of the haul roads would require removal of soil</i>	While no impacts are currently anticipated on deeply buried archaeological deposits, this assumption must be verified through archaeological evaluation. Archaeological evaluation, combining	

		<i>there is potential for physical impacts to archaeology located within these areas. The construction techniques are expected to affect near-surface archaeology with no impacts expected to deeply buried deposits. On the basis of current construction information it is not expected that vehicle movements on the haul roads would generate downward compaction pressures of a great enough magnitude to impact deeply buried archaeological deposits, any such impacts are expected to occur within the depth of archaeological deposits that would be investigated as ‘near-surface’ features through mitigation measures set out in the relevant DWSI.”</i>	geophysical survey and trial trenching, is necessary to confirm the presence or absence of archaeological heritage assets, and inform on the significance of archaeological remains and to ensure appropriate mitigation is applied, if required.	
4.3 Overhead Lines				
10.53	Archaeology	4.3.4 <i>“As the construction of the pylons and surrounding working areas would require removal of soil there</i>	Archaeological evaluation should be undertaken to inform appropriate mitigation strategies for each pylon location and its associated working area.	

		<i>is potential for physical impacts to archaeology located within these areas. The construction techniques are expected to affect near-surface archaeology with potential for impacts to deeply buried deposits in the locations of the pylon foundations. On the basis of current construction information it is not expected that the static load or vehicle movements within pylon working areas would generate downward compaction pressures of a great enough magnitude to impact deeply buried archaeological deposits, any such impacts are expected to occur within the depth of archaeological deposits that would be investigated as ‘near-surface’ features through mitigation measures set out in the relevant DWSI.”</i>	In addition, any geotechnical investigations should be archaeologically monitored by a suitably qualified geoarchaeologist. This will help assess potential impacts on deeply buried deposits and inform the development of appropriate mitigation measures	
10.54	Archaeology	4.3.6 <i>“Other elements of the works to construct the pylons and install the conductors are not expected to cause any below ground impacts</i>	Archaeological evaluation will be required to inform on the impacts of the development.	

		<i>as there would be no requirement to break ground in new areas.”</i>		
4.4 Substations				
10.55	Archaeology	4.4.2 <i>“As the construction of the substation would require removal of soil there is potential for physical impacts to archaeology located within these areas. The construction techniques are expected to affect near-surface archaeology with potential for impacts to deeply buried deposits in the locations of any piling works. On the basis of current construction information it is not expected that the static load or vehicle movements within other parts of substation working areas would generate downward compaction pressures of a great enough magnitude to impact deeply buried archaeological deposits, any such impacts are expected to occur within the depth of archaeological deposits that would be investigated as ‘near-</i>	While no impacts are currently anticipated on deeply buried archaeological deposits, this assumption must be verified through archaeological evaluation. Archaeological evaluation, combining geophysical survey and trial trenching, is necessary to confirm the presence or absence of archaeological heritage assets, and inform on the significance of archaeological remains and to ensure appropriate mitigation is applied, if required.	

		<i>surface’ features through mitigation measures set out in the relevant DWSI.”</i>		
4.6 Underground Cables				
10.56	Archaeology	4.6.5 <i>“As the construction of the underground cable and working area would require removal of soil there is potential for physical impacts to archaeology located within these areas. The construction techniques are expected to affect near-surface archaeology with no impacts expected to deeply buried deposits. On the basis of current construction information it is not expected that the static load or vehicle movements within the construction swathe for underground cables would generate downward compaction pressures of a great enough magnitude to impact deeply buried archaeological deposits, any such impacts are expected to occur within the depth of archaeological</i>	Document 6.4.F1 Environmental Statement Figure 4.1 – Proposed Project Design indicates that the proposed open-cut construction will occur within areas of high palaeoenvironmental value. As such, there is potential for both direct and indirect impacts on significant palaeoenvironmental sequences and associated archaeological heritage assets. To appropriately assess and mitigate these potential impacts, archaeological evaluation and palaeoenvironmental assessment will be required. These investigations will inform the development of suitable mitigation strategies to ensure the protection and understanding of the buried historic environment	

		<i>deposits that would be investigated as ‘near-surface’ features through mitigation measures set out in the relevant DWSI.”</i>		
10.57	Archaeology	4.6.8 <i>“The underground cable would be installed using a drilling or boring method (or a suitable alternative method) to pass beneath features. There are different trenchless methods that could be used, and each method would have a different construction footprint (all of which could be accommodated within the Order Limits). Depending on the technique, there may be a need to undertake several passes to make the hole wide enough to allow the ducts (pipes) to be pulled through.”</i>	Document 6.9.A4 – Hydrological Risk Assessment states that HDD is not suitable due to the nature of the sub-surface geology and has proposed a boring method of micro tunnelling. There is confusion when you discuss features, are you describing geological features or archaeological features? There are deep deposits of peat and alluvium within the Stour River Valley, the significance of which is currently unknown as no palaeoenvironmental assessment has been undertaken. The trenchless crossing design will need to be informed by appropriate archaeological assessment. This section will need amending in consultation with the design engineers.	
10.58	Archaeology	4.6.13 <i>“The construction methods for trenchless installation of underground cable are not expected to affect near surface archaeology in normal working,</i>	SCCAS does not agree with the current assessment regarding trenchless river crossings. No palaeoenvironmental assessment has been undertaken to inform the suitability of the proposed design. Document 6.9.A4 – Hydrological Risk Assessment identifies the instability of	

		<i>with the exception of the drive and reception locations. In these locations impacts to both near surface and deeply buried archaeological deposits could occur, due to construction passing through the full stratigraphy to reach the required depth. Within the trenchless crossing there is the possibility of a drilling slurry breakout. However, this is considered to be unlikely with the proposed mitigation of these risks and consequently archaeological mitigation in advance is not proposed. The trenchless crossing locations are subject to geophysical survey and archaeological trial trench evaluation to ensure the character and extent of any archaeology in these locations is understood [emphasis added]. This would inform any potential mitigation requirements in the event of a drilling slurry breakout.</i>	underlying deposits, which significantly increases the risk of drilling slurry breakout during trenchless construction. Such an event would have catastrophic consequences for organic-rich deposits of archaeological and palaeoenvironmental significance. Without appropriate assessment, these sensitive and irreplaceable deposits would be at risk of irreversible To ensure the protection of sensitive palaeoenvironmental deposits, the design of trenchless crossings must be informed by palaeoenvironmental assessment. This should include the use of sleeved cores to enable detailed stratigraphic analysis and scientific dating of buried sequences. Such work must be undertaken in consultation with the Historic England Regional Science Advisor to ensure that appropriate methodologies are applied and that maximum information is recovered to inform both mitigation and design decisions.	
10.59	Archaeology	4.6.14	Further assessment is required to establish the significance of the paleoenvironmental deposits identified at these locations. This	

		<i>“The construction techniques have potential to affect deeply buried deposits depending on the potential identified by geoarchaeological monitoring of the ground investigation works in these locations. In most cases it is assessed that the depth is great enough to avoid impacts to even deeply buried deposits.”</i>	should include the extraction of sleeved cores to facilitate detailed stratigraphic analysis and enable scientific dating techniques.	
4.7 Modifications and Removal of Existing National Grid Pylons				
10.60	Archaeology	4.7.2 <i>“Where pylons are proposed to be removed, it may be necessary to establish a 60 m x 60 m working area. Typically, this area would not be stoned; instead, if ground conditions are poor, trackway may be used. Removal of pylons would involve removing the conductors by lowering cut sections to the ground, then lowering the insulators and fittings to the ground. Where a pylon is in a clear area and it is safe to do so, the pylon would be removed by ‘felling’ the whole structure. Alternatively,</i>	The felling of pylons is likely to have a direct impact on archaeological remains through both ground compaction and physical penetration of subsurface deposits. Compaction effects may include the crushing or distortion of fragile features such as postholes, hearths, or buried soils, as well as the displacement or fragmentation of artefacts within the stratigraphy. In waterlogged or soft sediments, compaction can also lead to the irreversible collapse of organic remains, including preserved timbers, peat layers, or palaeoenvironmental deposits, compromising their integrity and interpretive value.	

		<i>a mobile crane would be used to remove the structure in sections which would then be lowered to the ground. Once dismantled, the pylon steelwork would typically be broken up on site then removed. The reinforced concrete foundation would then be removed typically to a depth of 1.2 m below ground level. The excavation would then be backfilled and the ground reinstated and any waste removed from site to a suitable licensed waste management facility.”</i>		
10.61	Archaeology	4.7.3 <i>“The removal of existing pylons is not expected to cause new impacts to archaeology as the works areas would have been affected by construction of the pylons, and if archaeology were present it would have been removed at this time.”</i>	SCCAS disagree with this paragraph. As detailed in 4.7.2 the deconstruction of existing pylons has the potential to impact archaeology through compaction and penetration during the felling process. See comments on 4.7.2	
10.62	Archaeology	4.7.4 <i>“Archaeological impacts related to construction of new/temporary pylons and underground cable are</i>	There are no details regarding temporary pylons.	

		<i>as described for those works above.”</i>		
4.8 Third Party Infrastructure Works				
10.63	Archaeology	4.8.9 <i>“These works would be expected to cause similar types of impacts to archaeology as for the 400 kV connection, although they would be reduced in area due to the smaller working areas and greater use of trackway required for the 132 kV works. Where practical archaeology would be avoided by these works, but archaeological mitigation would be required in any locations where this is not practicable.”</i>	This needs to say: “A programme of archaeological evaluation and mitigation would be required in any locations where this is not practicable.”	
10.64	Archaeology	4.8.14 <i>“These works would be expected to cause similar types of impacts to archaeology as for the 400 kV connection, although they would be reduced in area due to the smaller working areas and greater use of trackway required for the low voltage works. Where</i>	This needs to say: “A programme of archaeological evaluation and mitigation would be required in any locations where this is not practicable.”	

		<i>practical, archaeology would be avoided by these works but archaeological mitigation would be required in any locations where this is not practicable.”</i>		
10.65	Archaeology	4.8.16 <i>“These works are not expected to cause any new impacts to archaeology as the works areas would have been affected by construction of the original poles/pylons, and if archaeology were present it would have been removed at this time.”</i>	In the absence of final design submissions, the scope and significance of potential archaeological impacts remain uncertain and will require further assessment once detailed plans are available.	
4.9 Environmental Mitigation				
10.66	Archaeology	4.9 <i>Environmental Mitigation</i>	Query: Is this inclusive of Biodiversity Net Gain (BNG)? BNG areas are typically located beyond the Order Limits and, as such, would not be covered by the archaeological assessment and mitigation measures set out within those limits. However, any proposed BNG areas must be subject to archaeological assessment to ensure that potential impacts on the historic environment are appropriately addressed. It is important to note that certain habitat creation methodologies, such as soil inversion, can be highly damaging to buried archaeological remains. Therefore, archaeological considerations	

			must be integrated into the planning and design of the projects BNG proposals.	
5. Outline Written Scheme of Investigation				
5.1 Detailed Written Scheme of Investigation				
10.67	Archaeology	5.1.1 <i>“DWSIs would be prepared setting out in detail specific mitigation measures for the detailed design of the Project, informed by the strategy described in this Outline AMS-OWSI. Existing models and new datasets collected during fieldwork would inform design of mitigation works in the DWSIs during the investigations. These DWSIs would be prepared by the relevant Archaeological Contractor(s) in consultation with National Grid, the relevant Local Planning Authority Archaeological Advisors and Historic England. The DWSIs would be approved by the relevant Local Planning Authority (through the relevant Local Planning Authority Archaeological Advisors) and, if relevant, Historic England, prior to works</i>	This only sets out DWSIs for the purpose of archaeological mitigation and does not recognise that it will be process of further archaeological evaluation and mitigation informed by the results of evaluation.	

		<i>commencing in the area to which each DWSI applies. A period of 28 days for review and agreement of DWSIs will be included in the programme.”</i>		
10.68	Archaeology	5.1.2 <i>“The specification for the archaeological works contained within the DWSIs would be written in accordance with this Outline AMS-OWSI, and the complete suite of ClfA Standards and Guidance (ClfA 2020a-c, 2022b, 2023a–f). These documents cover archaeological evaluation, excavation, archaeological monitoring and recording (watching brief), and other related fieldwork and post-excavation activities. The DWSIs will also adhere to the current ClfA Code of Conduct (ClfA 2022a) and all other relevant best-practice guidance and standards.”</i>	This needs to make specific reference to Historic England Guidance and Local Guidance.	
10.69	Archaeology	5.1.3 <i>“DWSIs would be prepared for specific geographic areas of works,</i>	Separating DWSIs by specific scheme element would be confusing and unworkable.	

		<i>such as a section of overhead line construction, or for types of construction works, such as temporary construction compounds. The approach would depend on the requirements of the construction programme and the nature of archaeology to be mitigated.”</i>	Instead, DWSIs will be prepared for each archaeological phase (evaluation and mitigation) within defined geographic work areas.	
10.70	Archaeology	5.1.4 <i>“Each DWSI would set out the timing and order of the investigative works and include details of how the archaeological programme interacts with other construction activities, and the parties undertaking them. Each DWSI would include a programme for the archaeological work that would be referenced against key milestones/events in the overall design and construction programme.”</i>	The DWSIs should acknowledge that the archaeological programme is fluid, with timelines contingent on the extent and significance of archaeological remains, weather, site conditions, site access, and contractor availability.	
10.71	Archaeology	5.1.5 <i>“The Archaeological Clerk of Works (ACoW) and/or the Archaeological Contractor(s)</i>	Please remove “and generally” as the purpose of these documents is to ensure the protection of heritage assets.	

		would produce archaeological constraints maps and give Tool Box Talks to inform all site personnel of the archaeological and Historic Environment constraints on site, the protection measures that are required and their obligations under the Outline AMSOWSI, DWSI and generally [emphasis added], to ensure that these are put in place and complied with.”		
10.72	Archaeology	5.1.6 “The archaeological mitigation works would be delivered by an Archaeological Project Team under the leadership of an experienced Project Manager. The Archaeological Project Team would be provided by one or more Archaeological Contractor(s), to be appointed by National Grid. The Archaeological Contractor(s) would have prime responsibility for delivery of the full programme of archaeological mitigation as set out in the Outline AMS-OWSI including: all on and off-site works; technical and nontechnical	This should include: “The archaeological mitigation, including further phases of evaluation and palaeoenvironmental assessment, would...” This confirms that the Outline Written Scheme of Investigation will specify additional archaeological evaluation and palaeoenvironmental assessments to inform the formulation of appropriate mitigation	

		<i>publication and dissemination; and preparation and deposition of the archaeological Project archive with the recipient museum or other appropriate storage facility.”</i>		
10.73	Archaeology	5.1.7 <i>“The Archaeological Project Team would include named key specialists who would either be site-based or have a regular site presence, or who would be on-call at short notice. These would include (but not be limited to) the following roles:</i> <i>• Ceramics specialist with relevant period expertise”</i>	The Ceramic specialist should have relevant period and experience of local typologies.	
10.74	Archaeology	5.1.8 <i>“The names and qualifications of the individuals fulfilling these roles would be provided by the Archaeological Contractor(s) to National Grid for information and comment, immediately after their appointment. The postholders would be in place at the start of the mitigation programme. Any changes to the named</i>	CVs of the archaeological contractors staff and specialists should be included in the DWSIs for LPAAA approval.	

		<i>Archaeological Project Team postholders would be notified to National Grid, for information and comment.”</i>		
10.75	Archaeology	5.1.11 and 5.1.12 <i>Unexpected finds</i>	This appears to be in the wrong section and should be moved to the mitigation methodology section. This should also be retitled to Unexpected Finds During Construction. A robust protocol must be established to train operatives in identifying archaeological remains during construction works. While the commitment to notify the Local Planning Authority (LPA) upon the discovery of previously unknown or unexpectedly significant heritage assets is welcomed, it is essential to emphasise the importance of early-stage archaeological evaluation to minimise such risks.	
5.2 Communication, Monitoring and Sign-Off				
10.76	Archaeology	5.2.1 <i>“On a project of this size, effective communication between all parties is essential. A communication strategy for external communications about the archaeological mitigation would be developed and implemented in line with the Outline Stakeholder Communications Plan, Appendix E</i>	This should also incorporate appropriate and timely protocols for the dissemination of plans and photographic documentation.	

		<i>of the Outline CoCP (document reference 7.2)."</i>		
10.77	Archaeology	5.2.2 <i>"Regular progress meetings would be held monthly during the programme of archaeological mitigation works between key stakeholders, including the Local Planning Authority Archaeological Advisors and Historic England, the relevant Archaeological Contractor(s), the ACoW, National Grid and Main Works Contractor(s) as required."</i>	The principle of regular progress meetings should extend into the post-excavation analysis period, although the frequency of such meetings may be reduced.	
10.78	Archaeology	5.2.6 <i>"Site monitoring has two elements, firstly, the day-to-day liaison and monitoring between the ACoW and the Archaeological Contractor(s), National Grid, and the Main Works Contractor(s) (as relevant) to monitor progress and compliance with the requirements of the DWSIs, and secondly the monitoring of the archaeological mitigation works by the Local</i>	We would recommend the following amendment: <i>"Site monitoring would be the day-to-day liaison and monitoring between the ACoW and the Archaeological Contractor(s), National Grid and the Main Works Contractor, and regular monitoring of the progress and compliance with the requirements of the DWSIs and archaeological fieldwork and post-excavation work by the Local Planning Authority Archaeological Advisors"</i>	

		<i>Planning Authority Archaeological Advisors.”</i>		
10.79	Archaeology	5.2.7 <i>“The first element would include (but not be limited to):</i> • <i>Monitoring of all aspects of archaeological fieldwork by the ACoW</i> • <i>Monitoring of the installation and removal of protective measures, such as temporary fencing, and at sites where preservation of archaeological remains is required by the ACoW.”</i>	We would recommend the following amendment: “The responsibilities of the ACoW will include (but not be limited to): • Day to day monitoring of all aspects of the archaeological fieldwork. • Day to day monitoring of the instillation and removal of protective measures, such as temporary fencing and at sites where preservation of archaeological remains is required. Where issues are identified, the ACoW will report to the relevant LPAAA.”	
10.80	Archaeology	5.2.8 <i>“The archaeological mitigation works would be subject to ongoing monitoring by the ACoW, who would have unrestricted access to the sites, site records or any other information as may be required. The work would be inspected to ensure that it is being carried out to the required standard and that it</i>	We would recommend the following amendment: “The archaeological mitigation works would be subject to ongoing monitoring by the relevant LPAAA and ACoW, who would have unrestricted access to the sites, site records or any other information as may be required. The work would be inspected to ensure that it is being carried out to the required standard and that it would achieve the desired aims and objectives.”	

		<i>would achieve the desired aims and objectives.”</i>		
10.81	Archaeology	5.2.10 <i>“The second element would ensure that archaeological mitigation works meet the requirements of each approved DWSI.”</i>	We would recommend the following amendment: Monitoring by the relevant LPAAA would ensure that archaeological mitigation works meet the requirements of each approved DWSI.	
10.82	Archaeology	5.2.13 <i>“National Grid would act as coordinator of engagement between the Archaeological Contractor(s) and the relevant heritage stakeholders, to ensure the timely provision of on-site advice to the fieldwork team.”</i>	This should be the National Grid ACoW specifically. On other projects of similar scale and complexity, there have been significant and problem causing delays as a result of complexity of engagement through hierarchies.	
10.83	Archaeology	5.2.16 <i>“Once the Archaeological Contractor(s) determines the fieldwork to be completed, a sign-off meeting would be held on site (unless alternative communication is agreed) between the ACoW, National Grid, Local Planning Authority Archaeological Advisors (and Historic England, if</i>	We would recommend the following amendment: “Once the Archaeological Contractor(s) believes the fieldwork to be completed, a sign-off meeting would be held on site...” This then works with 5.2.17 as the LPAAA will determine completion of fieldwork.	

		<i>appropriate), the Archaeological Contractor(s) and the Main Works Contractor(s)."</i>		
10.84	Archaeology	5.2.18 <i>"Sites that have been completed would be subject to a formal signing off procedure. The Archaeological Contractor(s) would submit a completion statement to the ACoW. The ACoW would submit the accepted completion statement to National Grid and the appropriate Local Planning Authority Archaeological Advisor for confirmation (in consultation with Historic England, where required) that the relevant works have been completed in compliance with the relevant DWSIs."</i>	We would recommend the following amendments: "Sites that have been completed would be subject to a formal signing off procedure, in order to allow the mitigation areas to be released to the construction team. The Archaeological Contractor(s) would submit a completion statement to the ACoW. This statement will include a final site plan, showing locations of archaeological features and interventions (in both PDF and Shapefile format). The ACoW would submit the accepted completion statement to National Grid and the appropriate Local Planning Authority Archaeological Advisor for confirmation (in consultation with Historic England, where required) that the relevant works have been completed in compliance with the relevant DWSIs." These additions state the purpose of the signing off of mitigation areas and will allow for the submission of plans to detail the completion of the archaeological fieldwork.	
10.85	Archaeology	5.2.19 <i>"In the event of disagreement between the Archaeological Contractor(s), the ACoW, the relevant Local Planning Authority Archaeological Advisor and/or</i>	Schedule 4 sets out the appeal procedure. Any appeal would relate specifically to the content of the DWSI, since the DWSI defines the strategy that must be agreed before archaeological works commence, as required by the AMS-OWSI. For this reason, we consider Schedule 4 an impractical mechanism for resolving on-site disputes about sign-off.	

		<i>National Grid on the progress, strategy or completion of work, a form of arbitration would be proposed in accordance with Schedule 4 of the Draft DCO (document reference 3.1)."</i>	The LPAA's role is to ensure compliance with the DWSIs and to secure appropriate management and protection of archaeological heritage assets.	
10.86	Archaeology	5.2.20 <i>"National Grid would act as coordinator of engagement between the Archaeological Contractor(s) and the relevant heritage stakeholders, to ensure the sign-off meeting is held in a timely manner."</i>	Query: Can you clarify that this would be the ACoW?	
10.87	Archaeology	<i>Interim Statements, Post-Excavation Reporting and Publication</i>	We recommend the sub-title of this section be amended to clarify the content of this section: Review of Interim Statements, Post-Excavation Assessment Reporting, Updated Project Design and Publication.	
10.88	Archaeology	5.2.22 <i>"The Post-Excavation Assessment Report would be approved by the relevant Local Planning Authority (through the relevant Local Planning Authority</i>	We recommend the inclusion of the Updated Project Design: <i>"The Post-Excavation Assessment Report and Updated Project Design would be approved by the relevant Local Planning Authority (through the relevant Local Planning Authority Archaeological Advisors) and Historic England."</i>	

		<i>Archaeological Advisors) and Historic England.”</i>		
10.89	Archaeology	5.2.23 <i>“Details of the Interim Statements, post-excavation reporting and publication are set out in Chapter 6”</i>	Please include the Updated Project Design here as well: Details of the Interim Statements, post-excavation reporting, updated project design and publication are set out in Chapter 6.	
5.3 Methodology for Each Mitigation Technique				
10.90	Archaeology	5.3.2 <i>“Heritage assets and archaeological sites that will be protected by a combination of protection measures that will be put in place at the start of the construction programme to ensure their long-term survival will be identified in the DWSIs.”</i>	Please ensure that Historic Environment Management Plans (HEMPs) are included, as these documents are required to specify the measures for securing the long-term preservation of heritage assets throughout both the construction and operational phases and will set out the mechanisms for mitigation should preservation in situ not be achievable. “Heritage assets and archaeological sites that will be protected by a combination of protection measures that will be put in place at the start of the construction programme to ensure their long-term survival will be identified in the DWSIs and Historic Environment Management Plans (HEMPs). ”	
10.91	Archaeology	5.3.4 <i>“Avoidance would be undertaken where it would be practicable to amend design/construction works areas to allow for retention of the archaeological remains in situ and</i>	Archaeological evaluation will need to inform on the extent and significance of archaeological heritage assets, this will inform the appropriate protection measures for preservation in situ, to be detailed in the relevant HEMP. The required buffer zones will be dependent upon the nature of archaeological heritage assets and their significance.	

		<i>where those archaeological remains are found to be of significant value to require this form of mitigation. Relevant protection measures would include temporary protective fencing which will be maintained throughout the pre-commencement works and construction stages (incorporating an additional 10m buffer area for specific identified designated and non-designated assets where practicable). Some sites may require archaeological photographic recording prior to protection measures to ensure that there is a record of their existing condition, prior to the start of any groundworks.”</i>	We recommend the following amendment: Avoidance would be undertaken where it would be practicable to amend design/construction works areas to allow for retention of the archaeological remains in situ and where those archaeological remains are found to be of significant value to require this form of mitigation. Sufficient archaeological evaluation should have been undertaken to establish the extent and significance of archaeological heritage assets. Relevant protection measures would include temporary protective fencing which will be maintained throughout the pre-commencement works and construction stages (incorporating an additional 10m buffer area for specific identified designated and non-designated assets where practicable and a 20m buffer area for burials and structural remains). Some sites may require archaeological photographic recording prior to protection measures to ensure that there is a record of their existing condition, prior to the start of any groundworks.	
10.92	Archaeology	5.3.6 – 5.3.11 <i>“For each site or heritage asset, protection measures will be described in a DWSI prepared in consultation with the relevant Local Planning Authority Archaeological Advisors and, if</i>	We recommend the following amendment to add clarity and appropriate mechanisms for protection of heritage assets. “For each site or heritage asset, protection measures will be described in a DWSI and Historic Environment Management Plan (HEMP) prepared in consultation with the relevant Local Planning Authority Archaeological Advisors and, if appropriate, Historic England. This will also include arrangements for regular site	

		<i>appropriate, Historic England. This will also include arrangements for regular site inspections by the ACoW, maintenance requirements, and ‘Tool-Box Talks’ to inform all site personnel of the archaeological and Historic Environment constraints on site, the protection measures that are required and their obligations under this Outline AMS-OWSI and generally, to ensure that these are put in place and complied with. New sites may be added to the number of sites for preservation of archaeological remains, or existing sites may be adjusted.”</i>	inspections by the ACoW, maintenance requirements, and ‘Tool-Box Talks’ to inform all site personnel of the archaeological and Historic Environment constraints on site, the protection measures that are required and their obligations under this Outline AMS-OWSI and generally, to ensure that these are put in place and complied with, preservation in situ sites will also be recorded on project live constraints mapping. New sites may be added to the number of sites for preservation of archaeological remains, or existing sites may be adjusted.”	
10.93	Archaeology	5.3.6 – 5.3.11 Burial or Sealing of Remains	Reburial of exposed archaeological deposits is no longer considered best practice. Once stratigraphy has been disturbed and the original burial environment cannot be reinstated, preservation in situ will be compromised. The use of barrier membranes risks further damage by altering soil hydrology and introducing oxygen, thereby accelerating the deterioration of artefacts and palaeoenvironmental remains. Where temporary ground-raising above topsoil or ploughsoil level is unavoidable, comprehensive testing must first assess the potential for compaction and compression damage to buried deposits. The depth and character of the archaeological heritage assets should inform this assessment, since mechanical pressure can cause both	

			direct and indirect harm through compaction and plastic deformation. Any subsequent decompaction methodology must likewise be developed in response to the archaeological evaluation results and include appropriate mitigation measures prior to implementation.	
10.94	Archaeology	5.3.12 <i>“To demarcate those sites that require preservation of archaeological remains and to avoid unintentional damage during construction, temporary fencing will be installed during the start of the construction stage. The fencing will be installed by a fencing contractor(s) under the supervision of the relevant Archaeological Contractor(s).”</i>	Archaeological evaluation will need to inform on the extent and significance of archaeological heritage assets, this will inform the appropriate protection measures for preservation in situ, to be detailed in the relevant HEMP. We would recommend the following amendment: “To demarcate those sites that require preservation of archaeological remains, sufficient archaeological evaluation should have been undertaken to establish the extent and significance of archaeological heritage assets. To avoid unintentional damage during construction, temporary fencing will be installed during the start of the construction stage. The fencing will be installed by a fencing contractor(s) under the supervision of the relevant Archaeological Contractor(s).”	
10.95	Archaeology	5.3.13 <i>“The location and type of fencing for each site for preservation of archaeological remains will be set out in the DWSI (it may be helpful for the Archaeological Contractor(s) to combine various sites into a single DWSI). It will also</i>	We would recommend the following the amendment: The location and type of fencing for each site for preservation of archaeological remains will be set out in the DWSI (it may be helpful for the Archaeological Contractor(s) to combine various sites into a single DWSI), and the Historic Environment Management Plan (HEMP). It will also set out whether any preliminary archaeological investigative work is required (before or during the installation or	

		<i>set out whether any preliminary archaeological investigative work is required (before or during the installation or removal process). Requirements for archaeological investigation will be contained within the DWSIs.”</i>	removal process). Requirements for archaeological investigation will be contained within the DWSIs and the HEMP.	
10.96	Archaeology	5.3.15 – 5.3.18 Track Matting	Where the depth of topsoil and subsoil is sufficient, track matting may be employed to minimise direct disturbance of archaeological deposits and features. However, the necessity for subsequent remedial interventions, such as soil decompaction, will irrevocably alter the original burial environment and thus cannot be regarded as true preservation in situ. Accordingly, any area subject to decompaction or related soil-remediation measures must first be the focus of targeted archaeological mitigation prior to the commencement of those works. A paragraph outlining this constraint should be added to the relevant sub-section.	
10.97	Archaeology	5.3.22 <i>“Geoarchaeology studies should follow the guidance provided by Historic England (2015b), Norfolk County Council (2018), Suffolk County Council Archaeology Service (SCCAS) (2018) and Essex County Council (2020). Buried soils and sediment sequences may</i>	Please remove “where practicable” as the geoarchaeological assessment and mitigation will need to be delivered. There should be suitable mechanisms in place to allow safe recovery of geoarchaeological samples, e.g. coring and/or shuttered trenches.	

		<i>be inspected and recorded on site at all intrusive stages of the Project by a geoarchaeologist where practicable [emphasis added] in order to produce a geoarchaeological deposit model. Historic records of previous ground investigation, where available, may also be consulted to inform the deposit model. This model can then provide further understanding of site formation processes and subsequently reduce or avoid the collection and processing of redundant samples during further intrusive works or provide an outcome as mitigation.”</i>		
10.98	Archaeology	5.3.23 <i>“Samples will be collected for analysis of chemistry, magnetic susceptibility, particle size, micromorphology and/or other techniques as appropriate, following the outline strategy presented in a DWSI, and in consultation with the Archaeological Contractor(s)’s geoarchaeologist, ACoW, National</i>	Establishing the chronology for the stratigraphic sequences is essential. Accordingly, we recommend the incorporation of appropriate scientific dating methodologies. Samples will be collected for scientific dating, analysis of chemistry, magnetic susceptibility, particle size, micromorphology and/or other techniques as appropriate, following the outline strategy presented in a DWSI, and in consultation with the Archaeological Contractor(s) & geoarchaeologist, ACoW, National Grid, and Local Planning Authority archaeological advisors.	

		<i>Grid, and Local Planning Authority archaeological advisors.”</i>		
10.99	Archaeology	Geoarchaeological Deposit Modelling	We recommend that the sub-section heading be amended to: Geoarchaeological and Palaeoenvironmental Assessment This revision will clarify the purpose of the sub-section and distinguish it from the subsequent Geoarchaeological and Palaeoenvironmental Mitigation section.	
10.100	Archaeology	5.3.24	We would also recommend an additional bullet point: • To inform the development of the significance of deposits and of the potential for preservation of organic archaeological remains within deposits.	
10.101	Archaeology	5.3.26 <i>“Geoarchaeological and palaeoenvironmental investigation is also discussed below”</i>	This needs to reference the section where it is further discussed.	
10.102	Archaeology	5.3.33 <i>“The aims of geophysical surveys are set out in Table 2.1. The following general approach will apply for geophysical surveys.”</i>	Table 2.1 <i>“A non-intrusive archaeological survey technique used to identify differences between buried archaeological remains and surrounding soil. The purpose of this is to understand likely presence, extent and nature of buried archaeological remains.”</i> This does not discuss the aim. There are many different forms of geophysical survey, each with different survey outcomes and limitations. This paragraph should describe the types of survey available for the project and the limitations of the survey types.	

10.103	Archaeology	5.3.37 <i>“Project archives must be prepared in line with Schmidt (2013) and submitted to the relevant county archive.”</i>	These will need to be included with the relevant PXA and the UPD.	
10.104	Archaeology	5.3.38 <i>“The results of the geophysical survey will need to be placed fully within the context of known nearby archaeological findings of all kinds.”</i>	The results of the evaluation and resulting mitigation will need to be compared to the geophysical survey to confirm the accuracy of the survey results.	
10.105	Archaeology	5.3.40 <i>“At the pre-commencement stage additional trial trenching will be carried out in areas along the Project where, although all evaluation necessary for the purposes of the ES (Volume 6 of the DCO application) was completed, detailed evaluation was not completed due to access issues. The purpose of the trenching will be to determine the presence/absence, extent, character, condition and significance of the remains in order</i>	Archaeological trial trench evaluation has not been completed for very large areas of the project where significant project construction impacts will occur. We would recommend the following amendment to this sentence: <i>“The purpose of archaeological trial trenching will be to determine the presence/absence, extent, character, condition and significance of the remains in order to inform a mitigation strategy.”</i>	

		<i>to inform the detailed mitigation requirements at these locations should it be required.”</i>		
Intrusive Archaeological Fieldwork				
Trial Trenching				
10.106	Archaeology	Trial Trenching	Please insert a paragraph specifying that sampling shall cover 4 percent of the total area in sectors underlain by geophysical survey and 5 percent where no survey data exists. Trenches shall not exceed 30 metres in length, unless otherwise approved by the Local Planning Authority Archaeological Advisor (LPAAA) and, shall be at least 1.8 metres wide. Where geophysical survey results are available, trench positions shall be selected to investigate both identified anomalies and “blank” areas, to “ground truth” the results and shall be laid out in a systematic array to minimise gaps between adjacent trenches.	
10.107	Archaeology	5.3.41 <i>“The approach to be employed during this stage of additional trial trenching will be identical to that used during the archaeological evaluation stage (used to inform and confirm the ES findings), and as set out in the Overarching Written Scheme of Investigation for Pre-Commencement Trial</i>	Replace additional trial trenching with archaeological trial trenching as this will be a continuation of the trial trenching that is being undertaken pre-determination. This paragraph is confusing, as it sets out that the trial trenching will be identical to the pre-submission trial trenching, but then in the second sentence states that it will be different. Archaeological evaluation is to assess the archaeological resource, determining its presence or absence, its character, extent and significance. The archaeological trial trenching will inform archaeological mitigation and the development of mitigation DWSIs.	

		<i>Trenching (Headland Archaeology 2025). However, the approach shall consider specific provisions of the AMS-OWSI in respect of archaeological excavation, environmental sampling and scientific dating, where relevant.”</i>	We would recommend the following to clarify this paragraph: <i>The further stages of archaeological trial trenching will be implemented in accordance with the AMS-OWSI and will be detailed in DWSIs. The Post-Consent Archaeological Trial Trenching will replicate the methodology used in the pre-determination evaluation stage, detailed within the Overarching Written Scheme of Investigation for Pre-Commencement Trial Trenching (Headland Archaeology 2025). The evaluation DWSIs will apply the AMS-OWSI requirements for excavation, recording, environmental sampling and scientific dating to inform a mitigation strategy.</i>	
10.108	Archaeology	5.3.42 <i>“The scope and location of additional trial trenching will be described in a DWSI that will be prepared by the Archaeological Contractor(s) in consultation with National Grid, the relevant Local Planning Authority Archaeological Advisors and Historic England. The DWSIs will be approved by the relevant Local Planning Authority (through the relevant Local Planning Authority Archaeological Advisors) and Historic England, prior to works commencing in the area to which each DWSI applies.”</i>	We recommend that the following amendment be adopted to clarify the objectives of the trenching Detailed Written Scheme of Investigation (DWSI) and to define the role of the Local Planning Authority Archaeological Advisor (LPAAA) in advising the Local Planning Authority (LPA): The scope of archaeological trial trenching will be described in a DWSI that will be prepared by the Archaeological Contractor(s) in consultation with National Grid, the relevant Local Planning Authority Archaeological Advisors and Historic England. The DWSIs will be approved by the relevant Local Planning Authority (on the advice of the relevant Local Planning Authority Archaeological Advisors) and Historic England, prior to works commencing in the area to which each DWSI applies.	
Detailed Evaluation				

10.109	Archaeology	Detailed Evaluation	Paragraphs need to be added to ‘General Approach’ for working at depth, dewatering and plant control we would recommend the following: Working at depth <i>The hand-excavation of deep features or deposits on site will only proceed following the design of a suitable safe working practice methodology, as required by national health and safety guidance. The DWSIs will contain appropriate methodologies to achieve safe working at depth, these will include stepping of excavations and the use of shuttering where appropriate.”</i> Dewatering of features and sites <i>The DWSI will include details for the dewatering of features and removal of water from site, including (but not limited to) pumping.</i> Plant control <i>Areas defined for archaeological mitigation will be clearly demarked on site, and no plant or other vehicles not directly involved in the archaeological excavation process, will access these areas until the archaeological excavation has been completed, and the area has been formally signed off by the LPAAA and released by the LPA. All plant access to archaeological excavation areas must be supervised and directed by a suitably trained and experienced archaeologist.</i>	
10.110	Archaeology	“Sites that require investigation will be those that are identified in DWSIs and may include new areas that arise as a result of emerging	To clarify the process for defining areas for detailed excavation, we propose the following revision:	

		<i>results, detailed design and unexpected discoveries”</i>	“Sites that require detailed excavation will be identified through a programme of archaeological evaluation and defined in DWSIs for mitigation. ”	
10.111	Archaeology	<i>“Sites designated for detailed archaeological excavation will be stripped with mechanical plant as set out in the DWSI except in areas where further ploughzone sampling is taking place. The sequencing of stripping, location of soil storage areas and arrangements for backfilling, together with other relevant logistical considerations, will be set out in the DWSI.”</i>	Query: Can you explain what “further ploughzone sampling” would be?	
10.112	Archaeology	<i>“For sites where machine stripping is required (following completion of any ploughzone sampling), topsoil, subsoil and other overburden will be removed under the supervision of the relevant Archaeological Contractor(s) to the correct archaeological horizon. The relevant horizon will be informed by the evaluation results, the Research Framework, and the</i>	Please remove “correct” as machine excavation will stop at the first archaeological horizon. This may be different to the horizon identified at the evaluation stage, as the archaeological may differ across an excavation area. The Research Framework sets out research objectives and aims of archaeological fieldworks, it does not dictate the level/layer at which archaeological machine stripping will stop. Additionally, this paragraph reads as if you are expecting modern made-ground. The project mostly crosses greenfield sites, where significant modern made-ground layers are unlikely.	

		<i>aims and objectives described in the DWSIs.”</i>	Furthermore, all archaeology contained within a detailed excavation area will need to be investigated and recorded to mitigate the impacts of the development. We would advise the following amendment: “For sites where machine stripping is required (following completion of any ploughzone sampling), topsoil, subsoil and other confirmed non-archaeological overburden will be removed under the supervision of the relevant Archaeological Contractor(s) to the first archaeological horizon.” Query: again, please clarify what ploughzone sampling is?	
10.113	Archaeology	<i>“In accordance with the research aims and objectives outlined in the Research Framework, which will be further developed through the identification of site specific aims and objectives within the DWSIs in consultation with relevant archaeological Project team specialists, the archaeological site will then be subject to hand excavation of key features designed to recover artefactual and scientific dating evidence. All specialist samples will be accurately located in three dimensions. At the same time selected feature complexes would</i>	The wording of this paragraph is inappropriate for detailed archaeological excavation and project which will be predominantly on green field sites, we recommend the following paragraph: “The DWSIs will reflect research aims and objectives set out in the Regional Research Frameworks and will be further developed to identify site specific aims and objectives. The archaeological site will be subject to hand excavation of all archaeological features, structures and deposits unless previously agreed with the relevant LPAAA and where relevant Historic England” This amendment clarifies that the DWSIs will define the initial research questions and provide for their refinement as archaeological mitigation progresses. It also establishes detailed excavation as a mitigation methodology, requires all archaeological features and deposits within designated excavation zones to be fully excavated and recorded to mitigate the development impacts.	

		<i>be subject to further hand excavation designed to resolve stratigraphic relationships.”</i>	This also removes the sentence regarding Environmental Sampling, as this needs to be relocated to the Environmental Sampling section to maintain a clear and cohesive methodology. NB Small Finds Recording Additionally, as well as 3D recording for specialist environmental sampling, all small finds recovered during excavation should be recorded using 3D recording techniques to capture their precise spatial context. There should also be provision for full 3D recording of features which contain structured deposition. Please ensure that there is provision for this in the finds and recording methodology within this document.	
10.114	Archaeology	<i>“The works will also include sampling of archaeological remains for palaeoenvironmental and palaeo-economic indicators (for example, charred plant remains, molluscs, pollen, etc.) (see Environmental Sampling Strategy), in accordance with the DWSI and the Research Framework. Artefact and palaeoenvironmental assessments will be carried out during the course of the fieldwork; selected key features/structures will be subject to more detailed excavation and sample recovery to</i>	To provide clarification to this paragraph we would recommend the following amendment: “Excavation and recording of archaeological features and deposits will also include appropriate sampling for palaeoenvironmental and palaeo-economic indicators (for example, charred plant remains, molluscs, pollen, etc.) (see Environmental Sampling Strategy)...”	

		<i>address the evolving research objectives of the archaeological programme.”</i>		
10.115	Archaeology	<i>“The proportion of features excavated will be determined by the significance of the remains and the requirements of the research objectives set out in the DWSI. This iterative process is intended to allow the approach to excavation sampling to be both flexible and closely targeted to address specific questions, rather than being tied to a pre-determined excavation strategy. The proportion will be determined in consultation with National Grid.”</i>	The Local Planning Authority Archaeological Advisors (LPAAA) will assess whether the works to be undertaken/undertaken meets the appropriate standards. Therefore, National Grid are not suited to determine the suitability of their own work, and the sentence <i>“The proportion will be determined in consultation with National Grid.”</i> Should be removed. All archaeology within areas defined for detailed excavation must be excavated and recorded, unless otherwise agreed with the relevant LPAAA. Any initial research questions will be detailed within the DWSIs, however, it is expected that the initial research questions will need to be refined during the course of excavation as new information is identified, and new research questions are required. We would recommend the following, which clarifies the purpose of Detailed Excavation as a mitigation strategy: <i>“All features will be excavated and recorded, unless otherwise agreed with the relevant LPAAA.”</i> This clearly defines the purpose of Detailed Excavation as a mitigation methodology.	
10.116	Archaeology	<i>“The research objectives and excavation strategy will be kept under review during the</i>	There is no mention of the DWSIs within this paragraph, which will detail the sampling strategy. Additionally, please remove <i>“Decisions on further investigation at a given site will be made once sufficient</i>	

		<i>investigation at each site. In order to facilitate this approach, relevant data, artefact and environmental sample processing will be undertaken whilst the investigation proceeds on site (including artefact spot-dating and preliminary assessment of environmental samples, see section – Environmental Sampling Strategy). The preliminary assessment of materials, including faunal remains, ecofacts and palaeoenvironmental proxies recovered from samples, undertaken whilst the investigation is underway will support the outlined iterative approach to sampling. Decisions on further investigation at a given site will be made once sufficient information becomes available [emphasis added]</i>	<i>information becomes available” as this is confusing. All archaeology contained within a detailed excavation area will need to be excavated and recorded to appropriate national and local standards and guidance. We would recommend the following for clarity of the process:</i> <i>“The research objectives and excavation strategy set out within the DWSIs will be kept under review during the investigation at each site. A process will be set out within the DWSIs to facilitate this approach. Initial artefact and environmental sample processing will be undertaken whilst the investigation proceeds on site (including artefact spot-dating and preliminary assessment of environmental samples, see section – Environmental Sampling Strategy). The preliminary assessment of materials, including faunal remains, ecofacts and palaeoenvironmental proxies recovered from samples, undertaken whilst the investigation is underway will inform any updated sampling strategy. However, the minimum sampling requirements defined in the DWSIs will be adhered to”</i>	
10.117	Archaeology	<i>“Palaeoenvironmental sampling and environmental sequences of Pleistocene [emphasis added] date have the potential to recover information about past human</i>	We would recommend replacing “Pleistocene” with Quaternary (as this covers both Pleistocene and Holocene).	

		<i>environmental interactions, human activities and evidence of environmental change.”</i>		
10.118	Archaeology	<i>“The Archaeological Contractor(s) shall not excavate any area beyond those identified within the relevant DWSI. Should archaeological features revealed within the excavation area continue outside of the area and are likely to be subject to construction impact, the excavation area may need to be extended to fulfil the requirements of the DCO and National Policy Statement (NPS) (EN-1) (DESNZ, 2024). This will only be undertaken with the agreement of National Grid, the ACoW and the Main Works Contractor(s), in consultation with the relevant Local Planning Authority Archaeological Advisors and where appropriate Historic England.”</i>	We would recommend the following amendment to clarify this paragraph, all DWSIs will need to have provision to extend the defined excavation area where significant archaeological remains, features extend beyond the boundaries of the excavation area, within the areas of construction impact: “The Archaeological Contractor(s) shall not excavate any area beyond those identified within the relevant DWSI, unless archaeological features revealed within the excavation area continue outside of the area and are likely to be subject to construction impact, then the excavation area may need to be extended to fulfil the requirements of the DCO and National Policy Statement (NPS) (EN-1) (DESNZ, 2024). This will only be undertaken following consultation with National Grid, the ACoW, the Main Works Contractor(s), the relevant Local Planning Authority Archaeological Advisors and where appropriate Historic England.”	
10.119	Archaeology	<i>“Detailed archaeological excavation will be carried out at the locations identified in the DWSIs. Each detailed</i>	We would recommend the following amendment: <i>Detailed archaeological excavation will be carried out at the locations identified in the DWSIs. Each detailed archaeological excavation area will be positioned using electronic survey-grade</i>	

		archaeological excavation area will be positioned using electronic survey-grade equipment. The initial stage of excavation will be undertaken using a 360° mechanical excavator or other similar back-acting plant fitted with a toothless bucket, used in such a manner as to expose cleanly the archaeological surface. The Archaeological Contractor(s) shall ensure that hired-in plant and operators have the capability to achieve a consistently high standard of work. All operatives will receive an induction outlining the nature of any archaeological remains likely to be encountered and the expectations of the Archaeological Contractor(s), Main Works Contractor(s), the wider Project Team, and National Grid. The DWSIs for each site will include proposals for the stockpiling, handling and replacement of topsoil with reference to the Outline Soil Resource Plan, Appendix C of the	equipment. Overburden will be removed using a 360° mechanical excavator or other similar back-acting plant fitted with a toothless bucket, under continuous supervision and direction of an appropriately qualified archaeologist. Removal of overburden should be undertaken to the first archaeological horizon and expose a clean archaeological surface. The Archaeological Contractor(s) shall ensure that hired-in plant and operators have the capability to achieve a consistently high standard of work. All operatives will receive an induction outlining the nature of any archaeological remains likely to be encountered and the expectations of the Archaeological Contractor(s), Main Works Contractor(s), the wider Project Team, and National Grid. The DWSIs for each site will include proposals for the stockpiling, handling and replacement of topsoil with reference to the Outline Soil Resource Plan, Appendix C of the Outline CoCP (document reference 7.2). Note: The archaeological horizon will likely vary across a site, and there will likely be colluvial and alluvial deposits which will mask archaeological features, or have archaeological features stratified within them. This may result in sites requiring more than one mechanical strip, and the archaeologists should be aware that the level will likely not remain constant across one site. The DWSIs will need to contain methodologies for investigation of colluvium and alluvium.	

		<i>Outline CoCP (document reference 7.2)."</i>		
10.120	Archaeology	<i>"The surface achieved through machine excavation will be inspected for archaeological remains. The resulting surface will be cleaned by hand in order to identify or define the extent of archaeological remains present. Areas where hand cleaning is likely to be required will be identified in the DWSI; decisions regarding where additional hand cleaning is required will be made on site."</i>	This paragraph is confusing as it states that there will be hand cleaning immediately following machine strip but then goes on to say that not all areas are to be hand cleaned. To avoid confusion on site, we would recommend the following amendment: "Where the surface exposed through machine stripping does not provide clarity of the exposed archaeological remains, hand cleaning will be required to define the extent and nature of archaeological features. Where sites are left open and previously clean horizons have become silted or unclear, re-cleaning of these areas by hand will be required to re-define the extent and nature of archaeology. Provision for hand cleaning will be identified in the DWSI"	
10.121	Archaeology	<i>"Topsoil within detailed excavation areas will be subject to a rapid metal detector scan prior to stripping, to identify and recover metal objects within the topsoil. All archaeological metal artefacts (except those that cannot be X-rayed, such as lead artefacts) will be subject to X-ray, which will be used to rapidly scan material for</i>	Please remove the sentence on find retention and x-ray of metal artefacts as this is more suited for inclusion within the finds post-excavation analysis section. All finds should be recovered from site and assessed by the relevant specialist at the post-excavation assessment stage. Specialist advisors will recommend a discard policy following assessment, in accordance with the ClfA selection tool kit and other relevant guidance.	

		<i>retention or disposal (with reference to the ClfA selection toolkit 2019 (rev. 2022)).</i> <i>The finds co-ordinator/processing specialist and the Conservation specialist will be consulted.</i> <i>Stripped surfaces and archaeological features will also be subject to a rapid metal detector scan to identify loose artefacts from uncleaned surfaces, and on cleaned surfaces to help identify areas for careful excavation. Hand-excavated spoil will also be scanned. This will be undertaken by an appropriately qualified or experienced metal detectorist. The DWSIs will set out how metal detecting will be used as part of the artefact recovery strategy for individual sites. Provision will also be made for 3D location recording of artefacts within features, but also within unstratified deposits where significant quantities are identified. The Archaeological Contractor(s) will consider the use of metal</i>		

		<i>detecting at the end of each day in order to assist in site security.”</i>		
10.122	Archaeology	<i>“Hand excavated trenches and test pits will be opened using hand tools instead of mechanical plant in circumstances where sensitive/fragile archaeological remains are predicted to survive based on the results of ploughzone artefact sampling and/or trial trenching. These circumstances may include, for example, in situ lithic assemblages whose fabric could be damaged by the use of mechanical equipment, or distortion of spatial distributions, or where the scale of the investigations is significantly smaller, or where greater control is required (for example where deposits of buried colluvium have been exposed).”</i>	This is confusing, we would recommend the following amendment to clarify: “Where ploughzone artefact sampling or trial trenching suggests sensitive or fragile remains may survive, trenches and test pits shall be opened with hand tools rather than mechanical plant. Circumstances requiring this approach include: • In situ lithic assemblages at risk of fabric damage or spatial distortion. • Investigations on a very small scale where fine control is essential. • Exposed buried colluvial or alluvial deposits with potential to contain or seal archaeological remains. Hand excavation in these scenarios ensures maximum protection and accurate recording of delicate archaeological contexts. Hand excavations of test-pits or slots will inform a design for removal of deposits, created in consultation with the relevant LPAAA and Historic England where required.”	
10.123	Archaeology	<i>“Hand excavation will be used to establish the presence/absence of remains/artefact distributions, the extent and condition of the remains or concentrations of</i>	This is very confusing and the way it has been written seems to suggest it is best suited for an evaluation methodology rather than mitigation. This paragraph will need to be re-written to define it as part of the mitigation strategy. We would recommend the following:	

		artefacts, and to inform additional mitigation requirements. It may be necessary to limit the depth of the investigation so as not to compromise the integrity of a high value potential resource, such as a buried ground surface. Hand excavation will be conducted with due regard to the potential survival of cultural material at the interface with the topsoil and the potential survival of microtopographic features, as identified in the DWSIs. It may also be necessary to excavate deposits using spits of predetermined thickness to allow cross-site comparisons with work undertaken at the evaluation stage. The proposed use of spits will be set out in the DWSIs.”	<i>“Where deposits with archaeological potential, such as colluvium, alluvium, buried soils and occupation layers etc. are encountered during the mitigation works, these will need to be assessed by hand-excavation of test pits, or where appropriate slots, to inform an appropriate strategy for their full excavation and recording, which will need to be agreed with the relevant LPAAA and if required Historic England. This process will be defined within the DWSIs.”</i>	
10.124	Archaeology	“As well as the routine collection of artefacts that will be carried out during normal site works, other techniques may be deployed as identified in the DWSI, to recover datasets relevant to the	This is confusing and doesn't provide any methodology for finds of special value (small finds). We recommend the following to clarify: <i>“Finds will be recovered and will be bagged and labelled according to the context from which they were recovered.</i>	

		<i>investigation and site specific or Project-wide research objectives.”</i>	Where finds of specific value (small finds) are identified, e.g. metal artefacts, grave goods, structured deposition etc. their position will be recorded three-dimensionally prior to removal from the context.”	
10.125	Archaeology	<i>“The Archaeological Contractor(s) will consult the specialists during the preparation of the DWSIs, regarding the artefact recovery strategy. If changes are required during the course of the investigation at a site, then these will be developed as an iterative process at site consultation meeting(s) between the Archaeological Contractor(s), National Grid, and the relevant Local Planning Authority Archaeological Advisors and where appropriate Historic England.”</i>	All finds, unless of demonstrably 20th century or later date, will be recovered from site. The discard policy will need to be agreed with the relevant LPAAA, and will be informed by specialist assessment of the finds during the post-excavation analysis stage. NB In some instances, 20th century finds may also be recovered e.g. finds relating to military sites, WW1, WW2 and Cold War.	
10.126	Archaeology	<i>“Archaeological features, layers or deposits identified for excavation will be hand excavated in an archaeologically controlled and stratigraphic manner, to meet the aims and objectives of the investigation as set out in the DWSIs. Machine assisted excavation of large deposits will</i>	Should consent be granted for this NSIP, the discharging authority would be the Local Planning Authority. As advisors to the LPA the Local Planning Authority Archaeological Advisors (LPAAA) will assess whether the works to be undertaken/undertaken meets the appropriate standards. Therefore, National Grid are not suited to determine the suitability of their own work. We would recommend the following amendment:	

		<i>only be permitted at the discretion of National Grid, in consultation with the relevant Local Planning Authority Archaeological Advisors.</i> <i>Sufficient deposits/features will be investigated through hand excavation in each archaeological excavation area to record the horizontal and vertical complexity of the stratigraphic sequence to the level of underlying sterile geological strata. Excavation will also target the inter-relationships between features and major feature intersections to understand and record their relationships.</i>	<i>“Archaeological features, layers or deposits identified for excavation will be hand excavated in an archaeologically controlled and stratigraphic manner, to meet the aims and objectives of the investigation as set out in the DWSIs.</i> <i>Where excavation of deep features or deposits is required, a methodology to achieve this will be agreed by the relevant LPAAA in consultation with National Grid, Historic England and other relevant stakeholders. This may take the form of machine assisted excavation following suitable hand investigation.</i> <i>All deposits/features will be investigated through hand excavation in each archaeological excavation area to record the horizontal and vertical complexity of the stratigraphic sequence to the level of underlying sterile geological strata. Excavation will also target the inter-relationships between features and major feature intersections to understand and record their relationships.”</i>	
10.127	Archaeology	<i>The excavation sampling strategy will be dictated by the significance of the remains, their stratigraphic complexity and their artefactual and palaeoenvironmental content (including absence of artefactual content). The Archaeological Contractor(s), in consultation with National Grid, the relevant Local Planning Authority Archaeological Advisors and, if appropriate,</i>	We would recommend the following amendment to clarify this paragraph: <i>The excavation sampling strategy of individual features/deposits will be dictated by the significance of the remains, their stratigraphic complexity and their artefactual and palaeoenvironmental content (including absence of artefactual content). The Archaeological Contractor(s), in consultation with National Grid, the relevant Local Planning Authority Archaeological Advisors and, if appropriate, Historic England will describe in their DWSIs an appropriate sampling strategy informed by the results of the archaeological</i>	

		<i>Historic England will describe in their DWSIs an appropriate sampling strategy as determined by the results of the archaeological evaluation and key research questions, prior to works commencing in the area to which the DWSI applies.</i>	<i>evaluation and key research questions. DWSIs will be approved by the relevant LPAAA prior to works commencing in the area to which the DWSI applies.</i>	
10.128	Archaeology	<i>The strategy will be kept under review during the investigation. Site data, artefact and environmental sample processing will be undertaken whilst the investigation proceeds on site (including artefact spot-dating and preliminary assessment of environmental samples). Initially, the minimum sample sizes will be implemented on site by the Archaeological Contractor(s) in accordance with the approved DWSI. The reflexive process will allow the recovery of finds and samples for dating and assessment for their palaeoenvironmental and geoarchaeological potential. Changes to the strategy will be</i>	To clarify the procedure for deviating from the approved DWSI methodology, we propose the following amendment: “The excavation sampling strategy will remain under continuous review throughout all field investigations. The strategy outline in the approved DWSIs will be implemented unless otherwise agreed in writing by the relevant LPAAA. Site data, artifacts, and environmental samples will be processed as the investigation progresses. This should include provision for spot-dating of finds and preliminary assessment of environmental samples. Provision should be made within the DWSIs to employ a reflexive approach to recover additional finds and samples for radiocarbon dating and palaeoenvironmental or geoarchaeological analysis as needed. Any deviation from the approved DWSI strategy will be developed through regular site consultation meetings involving project stakeholders and the relevant LPAAA and Historic England were required, and will require approval in writing by the relevant LPAAA.”	

		<i>developed as an iterative process at site consultation meeting(s) between the Archaeological Contractor(s), National Grid, and the relevant Local Planning Authority Archaeological Advisors.</i>		
10.129	Archaeology	<i>The following minimum sampling requirements will be used as a standard, within the iterative excavation sampling strategy; these may be varied to suit the research value of the remains, subject to agreement with National Grid, the relevant Local Planning Authority Archaeological Advisors and, if appropriate, Historic England at a site consultation meeting. The DWSI will identify the initial minimum sample for excavation.</i>	The Local Planning Authority Archaeological Advisors (LPAAA) will advise the discharging authority and will assess whether the works to be undertaken/undertaken meets the appropriate standards. Therefore, National Grid are not suited to determine the suitability of their own work. We would recommend the following amendment: <i>“The following minimum sampling requirements will be used as a standard, within the iterative excavation sampling strategy; these may be varied to suit the research value of the remains, subject to agreement with the relevant Local Planning Authority Archaeological Advisors and, if appropriate, Historic England at a site consultation meeting with National Grid and relevant Stakeholders. The DWSI will identify the minimum sample for excavation.”</i>	
10.130	Archaeology	<i>Sufficient sections though linear features will be targeted in key locations to address research questions. It may be necessary to increase percentage excavation to address research questions where</i>	The purpose of archaeological interventions into features is to characterise the feature. Anywhere where ditches interact with other features (including other ditches), these will need to be investigated to provide a stratigraphic relationship. We would recommend the following amendment:	

		a higher volume sample would achieve this. Segments will be hand excavated along the length of the feature to understand its depositional sequence and character. Each segment will be not less than 1 m long and will be regularly spaced along its length. Segments will be located away from intersections with other features, although key intersections will also be targeted to provide an understanding of the deposit sequence and the relationship between different feature types/classes. All ditch ends will be investigated. A minimum of 10% of each linear feature will be excavated (increasing to 40% for enclosure ditches and 100% for smaller curvilinear features).	<i>“The DWSIs will detail the minimum requirement for investigating linear features, sufficient numbers of sections though linear features will be targeted to fully characterise the archaeological feature. It may be necessary to increase percentage excavation to address research questions where a higher volume sample would achieve this. Segments will be hand excavated along the length of the feature to understand its depositional sequence and character. Each segment will be not less than 1 m long and will be regularly spaced along its length. Segments will be located away from intersections with other features, although intersections will also be targeted to provide an understanding of the deposit sequence and the relationship between different feature types/classes. All ditch ends will be investigated. A minimum of 10% of each linear feature will be excavated (increasing up to 50% for enclosure ditches) and provision for 100% excavation for ditches with burial or structural context.”</i>	
10.131	Archaeology	Pits, post-holes and other isolated features (including natural features that have been shown to contain significant archaeological remains) will normally be completely (100%) excavated (unless otherwise	We would recommend the following amendment: Pits, post-holes and other discrete features (including presumed natural features) will be half-sectioning (50% excavated) as a minimum. There will be provision to fully excavate (100% excavate) where significant archaeological remains have been identified or to	

		<i>agreed in consultation with National Grid, and the Local Planning Authority Archaeological Advisors. Half-sectioning (50%) of general features may be excavated and sampled for environmental evidence as a minimum, in consultation with National Grid and the Local Planning Authority Archaeological Advisors, subject to the significance of the remains and the research questions identified in the DWSIs.</i>	address research questions. Structural post-holes will be 100% excavated and sampled to recover evidence to aid in the dating and use of structures.	
10.132	Archaeology	<i>Buried ground surfaces, floor surfaces and hearths have the potential to contain important remains, including finds distributions, ecofacts and palaeoenvironmental remains. It may be possible to recognise individual turves or deposits representing dumped material; if laminated sequences are identified e.g. turves, the Geoarchaeologist will attend site with the Environmental Specialist to devise a sampling strategy, which may include recovery of</i>	This needs to be separated into different topics as methodology for investigating Buried Ground Surfaces, floor surfaces and hearths is very different from one another. We would recommend the following: Buried soils (ground surfaces) <i>Buried soils have the potential to contain important archaeological remains, including finds distributions, ecofacts and palaeoenvironmental evidence.</i> <i>Where buried soils are identified, a suitably qualified geoarchaeologist and environmental specialist will design an excavation and sampling methodology in consultation and agreement with the relevant LPAAA and Historic England where appropriate.</i>	

		<i>monoliths. Grid sampling and bulk sampling may be adopted depending upon the significance of the remains and the research questions identified in the DWSIs. Hearths and areas of in situ burning will be completely excavated (in plan or by quadrant) and sampled for palaeoenvironmental remains and to recover material suitable for scientific dating, such as archaeo-magnetic dating, to address key research aims.</i>	Floor surfaces and working surfaces (this could be included in the section on structures) <i>Floor surfaces and working surfaces relate to structural remains and have the potential to contain important archaeological remains, including finds distributions, ecofacts and palaeoenvironmental evidence which will inform on the date and use of the structure. Where floor surfaces and working surfaces are encountered, these will be excavated in grids and should be fully excavated (100% excavated) by hand. There is potential for stratigraphic sequences of multiple floor surfaces and working surfaces, the excavation methodology must account for this.</i> Hearths, Ovens, Kiln structures <i>Heat effected features, such as Hearths, Ovens, Kilns etc. will need a careful and specific excavation methodology. Once features have been identified on site, the potential need for archaeomagnetic dating should be assessed prior to the feature being excavated, to allow time to gather control samples before the excavation process. Features will be hand excavated to fully characterise and achieve 100% recovery of remains. Appropriate samples must be taken, to address research questions and identify the nature of the feature. There will be provision to consult the Historic England Regional Science Advisor for advice on specific sampling strategies and dating techniques.</i>	
10.133	Archaeology	<i>Where structured deposits or animal bone groups are identified during excavation, the Archaeological Contractor(s) will</i>	Structured deposits and animal bone groups require different approaches to excavate. For example animal bone groups might include retting pits or pits containing waste from horn core working	

		<i>follow Historic England guidance Animal Bones and Archaeology: Recovery to archive (Baker and Worley, 2019) and will consult with National Grid and the Local Planning Authority Archaeological Advisors and where appropriate Historic England.</i>	or midden. Where structured deposits will contain animal burial, possible human burial and other artefacts in structured sequences. We would recommend the following: Animal bone groups <i>Where animal bone groups are identified during excavation, the Archaeological Contractor(s) will follow Historic England guidance Animal Bones and Archaeology: Recovery to archive (Baker and Worley, 2019). Sufficient sampling to extrapolate total quantities and understand the nature of the deposit(s). Where animal bone groups are identified the excavation and sampling strategy should be designed in by a qualified animal bone specialist and environmental specialist in consultation with the relevant LPAAA and where required Historic England.</i> Structured Deposits <i>Where features are identified to contain structured deposition of archaeological remains and artefacts (including Human and/or animal bone). A methodology for excavation of the feature should be developed which fully records the location and stratigraphic sequences of the structured deposition, this will require three-dimensional recording and can be assisted by photogrammetry and will require 100% sampling of each stratigraphic layer. The excavation and sampling methodology will need to be agreed by the relevant LPAAA and where relevant Historic England.</i>	
Structures				
10.134	Archaeology	5.3.71	We would recommend the following minor amendment:	

		<i>“Each structure, including stone structures, will be investigated/sampled to define the extent, form, stratigraphic complexity and depth of the component features and its associated deposits. Intersections between components will be investigated to determine their relationship(s). Particular care will be taken to ensure that areas of in situ burning are not investigated prior to the consideration of scientific dating.”</i>	<i>Each structure, including stone structures and foundations, will be investigated and sampled to define the extent, form, stratigraphic complexity and depth of the component features and its associated deposits. Intersections between components will be investigated to determine their relationship(s). Particular care will be taken to ensure that areas of in situ burning are not investigated prior to the consideration of scientific dating.</i>	
10.135	Archaeology	5.3.72 <i>“If dwelling structures are found or suspected after topsoil stripping, careful hand cleaning will be undertaken at the level of initial definition to establish the full extent of the structure and any associated or related contemporary features, to understand its complexity, state of preservation, significance and to contribute to answering research questions set out in the DWSIs. It may be necessary to re-clean</i>	We would recommend the following amendment as not all structures will be dwellings e.g. industrial structures, religious structures. <i>“Where structures are found or suspected after topsoil stripping, machine excavation will stop and careful hand cleaning will be undertaken at the level of initial definition to establish the full extent of the structure and any associated or related contemporary features, to understand its complexity, state of preservation, significance and to contribute to answering research questions set out in the DWSIs. It may be necessary to re-clean areas to achieve an acceptable level of feature definition. Features/contexts that are part of the structure or which may have contributed to its construction (such as drip gullies, post holes, internal or external surfaces, hearths, etc.) will be 100% excavated. Contexts will be</i>	

		<i>areas to achieve an acceptable level of feature definition. Features/contexts that are part of the structure or which may have contributed to its construction (such as drip gullies, post holes, internal or external surfaces, hearths, etc.) will be 100% excavated. Contexts will be routinely sampled for ecofacts, palaeoenvironmental remains and dating material.”</i>	<i>routinely sampled for ecofacts, palaeoenvironmental remains and dating material.”</i>	
10.136	Archaeology	5.3.73 <i>“The hand excavation of wells, or similar deep structures, will only proceed following a safe working practice, as required by national health and safety guidance, and as recorded in the DWSI to be prepared by the Archaeological Contractor(s) and approved by National Grid, the ACoW and the relevant Main Works Contractor(s). Preliminary hand augering of potential deep deposits may be able to identify depth and would inform an excavation strategy which may include machine</i>	The AMS-OWSI needs provision for working at depth, regardless of the feature type. This also should include provision for removal of water from features/sites, stepping of excavation slots and/or shuttering of deep excavation to allow safe hand excavation and recording of archaeology. We would recommend the following amendment: The hand excavation of wells, or similar deep structures, will only proceed following design of a suitable safe working practice methodology, as required by national health and safety guidance, and as recorded in the DWSI to be prepared by the Archaeological Contractor(s) and approved by National Grid, the ACoW and the relevant Main Works Contractor(s). Preliminary hand augering of potential deep deposits may be able to identify depth and would inform an excavation strategy which may include machine excavation or stepping-out to ensure that there is no depth restriction in areas subject to archaeological mitigation. The	

		<i>excavation or stepping-out to ensure that there is no depth restriction in areas subject to archaeological mitigation. The excavation sampling strategy will be developed at site consultation meeting(s) between the Archaeological Contractor(s), National Grid, and the relevant Local Planning Authority Archaeological Advisors and where appropriate Historic England.”</i>	excavation sampling strategy will be developed at site consultation meeting(s) between the Archaeological Contractor(s), National Grid, and the relevant Local Planning Authority Archaeological Advisors and where appropriate Historic England.	
Burials				
10.137	Archaeology	5.3.73	This requires further information, or should be included in the Human Remains section, as Burials covers the controlled investigation of burial features and funerary contexts (e.g. grave cuts, burial fills and associated grave goods). Furthermore, more detail is required on what the procedure would be when suspected burial or burials are identified and believed to extend beyond the area defined for excavation. There would need to be provision in the DWSIs for a minimum 20m buffer from the last burial within an area of impact and order limits to ensure that the extent of the cemetery/ burial group has been defined and can be appropriately mitigated. The project team must include the relevant expertise and capacity from the outset: this must include specialists in mineral-preserved textiles and other MPOs, an archaeological conservator with	

			access to the necessary laboratory space and equipment, and the appropriate academic advice, oversight and co-ordination. These specialists must be included in the archaeological contractor(s) specialist list and consulted before excavation begins on research potential and approaches and agree appropriate recording and retrieval strategies for the DWSI. Please reference the relevant sections with the AMS-OWSI rather than say “below” refers to the excavation of human remains, which denotes biological material. NB due to the acidic nature of many soil types in Suffolk, bone preservation is relatively poor and, in some instance, does not survive. There should also be adequate provision for the excavation and recording of body stains and/or body shadows, as well as coffins and coffin shadows We would therefore recommend the following amendment: Burials (including features suspected of being burials) will be investigated in accordance with a strategy detailed in the DWSIs for the excavation of burials and the recovery of human remains. A methodology for the recovery of human remains is expanded upon in the Strategy for the Recovery of Human Remains.	
Tree Hollows				
10.138	Archaeology	5.3.75 <i>“Tree hollows, where encountered, may relate to historic ploughing, topography and drainage, or possibly to specific prehistoric</i>	Tree hollows, where encountered, may relate to historic ploughing, topography and drainage, or possibly to specific prehistoric land use. The distribution of tree hollows has potential to contribute to studies of landscape evolution and change across the landscape. The comprehensive mapping and investigation of a representative	

		<i>land use. The distribution of tree hollows has potential to contribute to studies of landscape evolution and change across the landscape. The comprehensive mapping and investigation of a representative sample of tree hollows for artefactual, ecofactual and palaeoenvironmental evidence is therefore proposed, comprising:</i> <i>Mapping of all possible tree hollows encountered in mitigation areas (i.e.interpretation)</i> <i>Archaeological excavation of a sample of confirmed tree hollows</i> <i>Recovery of a sample of the fill of excavated tree hollows to be sieved for small artefact recovery. If sieving produces significant quantities of settlement debris, particularly hazelnut shell, then flotation samples will also be processed”</i>	sample of tree hollows for artefactual, ecofactual and palaeoenvironmental evidence is therefore proposed, comprising: - Mapping of all possible tree hollows encountered in mitigation areas (i.e.interpretation) - Archaeological excavation of a sample of potential tree hollows to assess the archaeological significance of these features within the excavation area, and inform a full mitigation strategy in consultation with the relevant LPAAA and Historic England where appropriate. - Recovery of a sample of the fill of excavated tree hollows to be sieved for small artefact recovery. A proportion of samples will be wet-sieved to identify whether significant ecofacts e.g. grains, hazelnut shells are present to inform a full sampling strategy.	
Recording				

10.139	Archaeology	5.3.78 <i>“A full written, drawn and photographic record will be made of the archaeological remains, in accordance with the Archaeological Contractor(s)’s recording system and standard archaeological methodologies.”</i>	This should include the following: A full written, drawn and photographic record will be made of the archaeological remains, in accordance with the Archaeological Contractor(s)’s recording system and standard archaeological methodologies and national and local guidance. Details of the recording system to be used must be included in the DWSIs.	
10.140	Archaeology	5.3.79 <i>“The Archaeological Contractor(s) will be expected to use digital recording methods to ensure the smoothest transfer of information between the on-site work and the Local Planning Authority Archaeological Advisors.”</i>	This needs further details: The Archaeological Contractor(s) will be expected to use digital recording methods to ensure the smoothest transfer of information between the on-site work and the Local Planning Authority Archaeological Advisors. Digital records will be backed up daily to ensure that no data is lost due to technical issues. Where digital recording is un-deliverable, manual recording by paper record and hand-drawn sections and plans will be substituted. All written records and hand drawn plans will be tied to the Ordnance Survey Datum.	
10.141	Archaeology	5.3.81 <i>“Site photography will be used to record all archaeological remains that are under investigation. In addition, photographs will be taken to assist in interpretation and publication, and to give an overview of the site, the progress of</i>	This needs further details to expand on to set the minimum standards for photographic equipment, to ensure an appropriate photographic record of the work is undertaken, please include: A photographic record of the work is to be made, consisting of high-resolution digital images. All cameras must have sensors of APS-C (or larger) and all images must be at least 10 megapixels in size. All digital images for archiving purposes must be high quality non-	

		<i>the investigations and site activities. Overhead (drone) photography will also be used to record progress, relationships between structures and to put the investigations within a wider landscape context. Particular attention will be paid to obtaining photographs suitable for displays, exhibitions and other publicity material, dependent on Health and Safety considerations.”</i>	<i>altered RAW files (.DNG) or TIFF images. JPG images must not be used for archiving.</i>	
Environmental Sampling Strategy				
10.142	Archaeology	5.3.82 <i>“An Environmental Archaeology Coordinator will develop the detailed environmental sampling strategy in consultation with all relevant specialists and will oversee the work at the fieldwork stage. The Environmental Archaeology Coordinator will liaise with the variety of specialists who may be involved, to develop fully the strategy and tactics for environmental research and to ensure the smooth running of this</i>	To clarify this paragraph and the role of the Environmental Archaeology Coordinator we would recommend the following amendment: <i>An Environmental Archaeology Coordinator will be appointed to develop, manage and oversee all aspects of the environmental sampling strategy. Their core responsibilities will include:</i> <i>Consulting with qualified environmental specialists, the Local Planning Authority Archaeological Advisor (LPAAA) and Historic England (as required) to define sampling methodologies and research aims</i> <i>Supervising the implementation of the strategy during fieldwork to ensure methodological consistency and data quality</i>	

		aspect of the investigations. The nominated Coordinator may be a member of the Archaeological Contractor(s)'s specialist team responsible for a particular aspect of the proposed work (such as geoarchaeologist), with suitable experience and training and the ability to convey accurate information about a site and the deposits to specialists. The Environmental Archaeology Coordinator will be present at site visits and meetings with National Grid, and Local Planning Authority Archaeological Advisors as necessary."	• <i>Liaising with the archaeological contractor's specialist team, of which they may be a member, to coordinate resources and maintain smooth progress</i> <i>The nominated Coordinator must hold formal qualifications and demonstrable experience in environmental archaeology. They will also attend site visits and stakeholder meetings with National Grid and the LPAAA, where required, to integrate sampling activities into the wider palaeoenvironmental framework and address any emerging issues.</i>	
10.143	Archaeology	5.3.83 <i>"The Environmental Archaeology Coordinator will take charge of the routine processing of samples and the supervision of routine sampling in connection with the investigations."</i>	We would recommend the following amendment: <i>The Environmental Archaeology Coordinator will oversee all routine sample collection and manage the subsequent processing of environmental samples throughout the investigations.</i>	
10.144	Archaeology	5.3.84	We would recommend the following amendment for clarity:	

		<i>“The detailed environmental sampling strategy for each DWSI will be based upon the results of previous assessment work and the potential of the materials to address key research questions. Specialists (such as a zooarchaeologist for animal bones, archaeobotanist for charred plant remains, archaeomalacologist for molluscs), National Grid, the relevant Historic England Regional Science Advisor and Local Planning Authority Archaeological Advisors will be consulted regarding site specific requirements.”</i>	<i>Each Detailed Written Scheme of Investigation (DWSI) will include an environmental sampling strategy informed by previous assessment results. The Environmental Archaeology Coordinator will develop this strategy in consultation with specialists such as (but not limited to) zooarchaeologists for animal bones, archaeobotanists for charred plant remains, and archaeomalacologists for molluscs, as well as National Grid, the Historic England Regional Science Advisor, and Local Planning Authority Archaeological Advisors to establish site-specific requirements. The strategy will remain adaptable throughout excavation; as new evidence and deposits emerge, sampling methods, priorities, and coverage will be reviewed and refined to ensure all key research questions are addressed.</i>	
10.145	Archaeology	5.3.85 <i>“Environmental sampling will be carried out in accordance with current national guidelines including Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation (English Heritage, 2011), Geoarchaeology, Using earth sciences to understand the</i>	Environmental sampling will adhere to current national and local guidance, including (but not limited to): • Historic England (2025) Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation (3rd edition). Supersedes - English Heritage, Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation (2011) • Historic England, Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record (2015)	

		archaeological record (<i>Historic England, 2015b</i>), and the current ClfA Standard and guidance for the collection, documentation, conservation and research of archaeological materials (ClfA, 2020a).”	• ClfA Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (2020) • Relevant Historic England Good Practice Advice and ClfA standards for field evaluation, excavation, and post-excavation reporting Where necessary, specialist guidance (for example) for archaeobotany, zooarchaeology, osteoarchaeology, geoarchaeology or waterlogged deposits, will be integrated to ensure all phases of sampling, recovery and analysis meet professional quality and consistency.	
10.146	Archaeology	5.3.86 <i>“The processing of samples and their assessment will feed back into the sampling strategy that is employed in the field. The processing and initial assessment of all samples (except for specialist samples) would be undertaken at a site compound to facilitate the rapid feedback to the field team. Processing will be supervised by the Archaeological Contractor(s)’s finds coordinator/processing specialist.”</i>	We would recommend the following amendments to add in the Environmental Archaeology Coordinator, as set out in 5.3.82 and it is unlikely that there would be on site facilities to undertake environmental sample processing on site, such as wet-sieve and floatation as this would need suitable facilities to deal with waste water and silt generated, therefore we would recommend the following amendments, as this doesn’t limit the processing of samples to onsite only: <i>The processing of samples and their initial assessment will feed back into the sampling strategy that is employed in the field. Except for specialist samples, the processing and initial assessment of environmental samples would be undertaken during the archaeological fieldwork to facilitate the rapid feedback to the field team. Processing will be supervised by the Archaeological Contractor(s) Environmental Archaeology Coordinator and relevant specialists as required.</i>	

10.147	Archaeology	5.3.87 <i>“All flotation samples and coarse sieved samples should be processed and assessed to inform the sampling strategy within a timescale agreed between the Archaeological Contractor(s) and National Grid, but not greater than two weeks, except for specialist samples which will need a specific approach. Finds, ecofacts and biological artefacts from sample residues should be recorded to sample fraction.”</i>	This section needs to separate flotation and coarse sieving into two sections, as these require different approaches, one that can be delivered on site and one that will need specific facilities to deliver it. Please see below definitions of both strategies: Coarse Sieved Samples Following consultation and agreement with the relevant LPAAA, coarse sieving may be employed to recover small or fragmented bones, larger Mollusca, substantial charcoal fragments, robust plant macrofossils (e.g., hazelnut shell fragments, fruit stones, and pips), and some wood. However, coarse sieving is not appropriate as the sole method of sample processing and will not reliably retrieve the full range of palaeoenvironmental and bioarchaeological material present within archaeological deposits. Coarse sieved samples are usually sieved on a minimum sieve mesh size of 2mm. Samples may be processed dry or wet, subject to prevailing soil conditions. Coarse sieving is typically used on deposits rich in larger animal bone or shell, which are readily retained by sieves of this aperture. Full recovery requires smaller mesh apertures, which require Flotation sample processing. Flotation Flotation sampling enables the recovery of charred and mineralised plant macrofossils, charcoal fragments, and small bones from well-drained deposits. Larger, denser remains are retained in the wet-sieved residues generated by the flotation process. Sample volumes should be a minimum of 40L (as per Historic England Guidance) or more may be taken due to feature/deposit significance and where	

			context size allows, whereas smaller contexts should be completely sampled. Sample size and strategy should be agreed with specialists during project planning, based on expected preservation, frequency, and fragment size. Where facilities permit (water supply, drainage, silt disposal, drying space), flotation processing can be carried out at the site compound. Molluscan shells are generally processed in the laboratory using 0.5 mm sieves. All residues must then be carefully examined for any remains not captured by the sieves. Flotation operates by washing samples through sieves of decreasing mesh size, retaining both the float (the flot) and the residue. Two methods are employed: • Hand flotation • Machine flotation (water pumped from below) Standard mesh sizes: • Flot collection: 300 µm; 500 µm; 1 mm • Residue collection: 1 mm or 2 mm (use 500 µm if mineralised remains are anticipated) Both the flot and residue are typically sorted under a microscope to maximise recovery of bioarchaeological materials. Therefore, we recommend the following: <i>All environmental samples will be processed and assessed unless otherwise agreed with the relevant LPAAA and Historic England (where required). Initial samples will be processed and assessed to inform the sampling strategy within an agreed timescale, agreed between National Grid, Archaeological Contractor(s), the relevant</i>	

			<i>LPAAA and Historic England (where required). Realistic timescales for initial sample processing will be detailed within the DWSIs.</i>	
10.148	Archaeology	5.3.88 <i>“The aims of the environmental strategy will be to address the Research Framework. Site based studies that could aid the investigations will include the following (this list is not exhaustive, and other studies may be relevant):</i> <i>• Pedological (including micromorphology) study of soils (or other suitable deposits) deeply buried beneath or within colluvium would provide information relating to the status of the soil at the time of burial and should be able to detect and characterise aspects of previous land use and will provide information on erosion and on the contribution of colluvium and wind-borne material to the soil</i>	The aim of the environmental strategy will be to examine the environmental evidence produced by the archaeological works. This will be informed by the Regional Research Frameworks, but will not be limited to specific research questions. We would advise the following amendment: <i>The aims of the environmental strategy will be to examine the environmental evidence produced by the archaeological works. Site based studies that could aid the investigations will include the following (this list is not exhaustive, and other studies may be relevant)...</i> The descriptions of the types of Environmental sampling could be discussed separately.	

		• <i>Pollen and diatom/phytolith analysis</i> • <i>Detailed wet sieving/flotation of buried ground surfaces and other selected contexts and features for the recovery of charcoal/wood, plant macrofossils, small animal bones, molluscs, coleoptera, small artefacts, etc. The retrieval of a reliable sample will be achieved by the routine sampling of a set proportion of each selected context/deposit excavated. Sampling will also be systematic and extensive.</i>		
10.149	Archaeology	5.3.90 <i>“If organic rich archaeological remains are encountered during the investigations, the Environmental Archaeology Coordinator will be contacted for advice and to devise an appropriate strategy for excavation</i>	This needs to include the following: <i>If organic-rich archaeological remains are encountered during the investigations, the Environmental Archaeology Coordinator will be contacted for advice and to devise an appropriate excavation and sampling strategy. The Archaeological Contractor(s) will inform the Archaeological Clerk of Works (ACoW) immediately, who will then notify the Main Works Contractor(s) and National Grid. All proposed</i>	

		and sampling. In addition, the Archaeological Contractor(s) will inform the ACoW immediately, who will then notify the Main Works Contractor(s) and National Grid.”	<i>strategies must be developed in consultation with, and agreed by, the Local Planning Authority Archaeological Advisor (LPAAA).</i>	
10.150	Archaeology	5.3.91 “Environmental assessment at the reporting stage will include consideration of scientific methodologies alongside traditional recording. For example, zooarchaeological assessment will include the potential of biomolecular methodologies where there is a clear research question which could be addressed through biomolecular analysis, determined through the assessment of animal bones. The Archaeological Contractor(s) will consult with National Grid, the relevant Local Planning Authority Archaeological Advisors and the Historic England Regional Science Advisor. National Grid will approve the proposals for scientific study at	Should consent be granted for this NSIP, the discharging authority would be the Local Planning Authority. As advisors to the LPA the Local Planning Authority Archaeological Advisors (LPAAA) will assess whether the works to be undertaken/undertaken meets the appropriate standards. National Grid and their advisors will be consulted, but National Grid or other project stakeholders cannot determine the scope of any analysis and assessment of the work to mitigate the impacts of their development. Therefore, we would recommend the following amendment: <i>At the post-excavation assessment (PXA) reporting stage, the Environmental Assessment will contribute to the understanding of the archaeology and site formation processes, and inform the development of strategy for further investigation, detailed within the Updated Project Design (UPD). For example, zooarchaeological assessment at the PXA reporting stage will include the potential of biomolecular methodologies where there is a clear research question which could be addressed through biomolecular analysis, determined through the assessment of animal bones, and detailed within the UPD. Samples for radiocarbon dating will be identified from material sampled for environmental analyses during the post-</i>	

		<i>the assessment and analysis stages, in consultation with the relevant Local Planning Authority Archaeological Advisors and the Historic England Regional Science Advisor. Samples for radiocarbon dating will be identified from material sampled for environmental analyses.”</i>	<i>excavation assessment stage, and detailed for full analysis in the UPD.</i> <i>The Archaeological Contractor(s) will consult with National Grid, the relevant Local Planning Authority Archaeological Advisors and the Historic England Regional Science Advisor throughout the post-excavation assessment process to develop a programme of further investigation and reporting detailed in the UPD.</i> <i>The UPD will be submitted for approval with the relevant LPA in consultation with the relevant LPAAA and, where required, Historic England.</i>	
Strategy for Scientific Dating				
10.151	Archaeology	5.3.92 <i>“Statistical modelling will be combined with a comprehensive scientific dating programme and the archaeological evidence to address the aims and objectives identified in the DWSIs. Each Scientific Dating Specialist will develop the detailed strategy for scientific dating in consultation with all relevant specialists, the Historic England Regional Science Advisor, the relevant Local Planning Authority Archaeological Advisors and National Grid. The Scientific Dating Specialist will</i>	This is confused. The DWSIs will set out provision for scientific dating, and the provision for spot dates (using multiple dating methods, which can include scientific dating). Scientific dating would also be undertaken at the post-excavation stage, in order to aid the development of an Updated Project Design (UPD), final reporting and refine dating, as recommended by relevant specialists and the relevant LPAAA and historic England where required. Therefore, the DWSI cannot detail the entire scope of dating that may be required, which will be informed by what is found on site. We recommend the following amendment to clarify the scientific dating strategy within the DWSI, fieldwork and post-excavation process: <i>An initial scientific dating strategy will be developed by the scientific dating specialist, and this will be detailed in the DWSI. Where scientific dating is required during fieldwork stage to inform the</i>	

		devise a strategy (prior to the commencement of the works to which the dating strategy will apply) so that it can be incorporated into the DWSIs to ensure that the right contexts are excavated and to ensure a comprehensive programme of scientific dating is possible, with specific research objectives. Although scientific dating will be undertaken at post-excavation it will also be prioritised at the fieldwork stage to inform decision making and develop the strategies used on site.”	<i>scientific dating strategy or provide spot dates to inform the excavation strategy, the initial scientific dating strategy may need to be amended to reflect this.</i> <i>The Updated Project Design will set out the programme of a comprehensive scientific dating programme, based upon the results of the archaeological fieldwork and post-excavation assessment (PXA). At the Post-excavation Assessment (PXA) reporting stage, each Scientific Dating Specialist will develop a detailed strategy for scientific dating in consultation with relevant specialists, the relevant LPAAA, Historic England and National Grid.</i> <i>The UPD will be submitted for approval with the relevant LPA in consultation with the relevant LPAAA and, where required, Historic England.</i>	
10.152	Archaeology	5.3.94 “Scientific dating will also be utilised to provide spot dates to inform the excavation strategy, contribute to understanding of stratigraphic sequences, or to provide precision/resolution for statistical modelling. The Scientific Dating Specialist will provide advice and guidance throughout the life-cycle of the Project (preparation of the DWSIs, site	For clarity: Scientific dating will also be utilised to provide spot dates to inform the excavation strategy, contribute to understanding of stratigraphic sequences, or to provide precision/resolution for statistical modelling. The Scientific Dating Specialist will provide advice and guidance throughout the life-cycle of the Project (preparation of the DWSIs, site investigations, and at the post-excavation assessment and analysis stages <i>and production of the Updated Project Design</i>). The Historic England Regional Science Advisor, the relevant Local Planning Authority Archaeological Advisors and National Grid will be	

		investigations, and at the post-excavation assessment and analysis stages). The Historic England Regional Science Advisor, the relevant Local Planning Authority Archaeological Advisors and National Grid will be consulted during preparation of the DWSI and during the Project.”	consulted during preparation of the DWSI, <i>throughout the fieldwork, post-excavation stages, production and delivery of the UPD.</i>	
10.153	Archaeology	5.3.95 “Scientific dating techniques will include the following: • Radiocarbon (¹⁴C) dating which can be used to date any carbon-based organic materials, such as wood, bone, or plant remains. If remnant peat is found, reliable and high-resolution dating will be essential and multiple methods will be employed unless otherwise justified • Luminescence dating for suitable features • Archaeomagnetic dating for highly fired structures	Scientific dating techniques will include <i>(but not limited to)</i> the following: • Radiocarbon (¹⁴C) dating <i>(C-14)</i> which can be used to date any carbon-based organic materials, such as wood, bone, or plant remains. If remnant peat is found, reliable and high-resolution dating will be essential and multiple methods will be employed unless otherwise justified • Luminescence dating for suitable features • Archaeomagnetic dating for highly fired structures such as kilns or ovens and <i>in situ burning.</i> • A range of other absolute techniques, such as amino acid racemization, or tephrochronology (dating volcanic ash from deposits) If preserved wood is present, for example, in waterlogged deposits then dendrochronology may be able to provide precise and accurate dates <i>(suitable on-site provision to retain the wood in stable condition will be required).</i>	

		<i>such as kilns or ovens and burnt soil</i> <i>A range of other absolute techniques, such as amino acid racemization, or tephrochronology (dating volcanic ash from deposits)</i> <i>If preserved wood is present, for example, in waterlogged deposits then dendrochronology may be able to provide precise and accurate dates.”</i>		
10.154	Archaeology	5.3.96 <i>“Scientific dating will be undertaken on the recovered samples in accordance with an explicit sampling strategy designed, in consultation with a chronological modelling specialist, to address the research questions set out in the Research Framework and the DWSI, using simulation of the results that could be obtained from the available samples and Bayesian chronological modelling to combine these with the other</i>	Should consent be granted for this NSIP, the discharging authority would be the Local Planning Authority. As advisors to the LPA the Local Planning Authority Archaeological Advisors (LPAAA) will assess whether the works to be undertaken/undertaken meets the appropriate standards. Therefore, National Grid are not suited to determine the suitability of a scientific dating strategy for their own work. Additionally, this needs to include reference to Historic England (2022) <i>Radiocarbon Dating and Chronological Modelling</i>. We would recommend the following amendment: <i>Scientific dating will be undertaken on the recovered samples in accordance with an sampling strategy designed, in consultation with a scientific dating specialist and chronological modelling</i>	

		available information. A sequential sampling strategy will be adopted (Bayliss, 2009). Multiple laboratories/techniques will be employed to ensure that robust chronologies are produced. Different strands of evidence will be combined using formal statistical modelling to produce quantitative estimates for chronologies that address the Project objectives. Reporting will follow Historic England guidelines such as Historic England 2015c. The strategy will be devised in consultation with the Historic England Regional Science Advisor, the relevant Local Planning Authority Archaeological Advisors and National Grid and will be approved by National Grid.”	specialist, to address the research questions set out in the Research Framework and the DWSI, <i>and any research questions identified during the excavation and post-excavation analysis process. This strategy should follow guidance set out in Historic England (2022) Radiocarbon Dating and Chronological Modelling and should be set out within an Updated Project Design.</i> Multiple laboratories/techniques will be employed to ensure that robust chronologies are produced. Different strands of evidence will be combined using formal statistical modelling to produce quantitative estimates for chronologies that address the Project objectives. Reporting will follow Historic England guidelines such as Historic England 2015c. The strategy will be devised in consultation with the Historic England Regional Science Advisor, the relevant Local Planning Authority Archaeological Advisors and National Grid.	
Strategy for the Recovery of Human Remains				
10.155	Archaeology	5.3.97 “The DWSIs will describe a detailed strategy for the investigation, treatment, recovery and assessment/analysis of	Article 23 The approach to human remains recovered in an archaeological context (over 100 years old) should require the developer to obtain a Ministry of Justice Burial License under the 1857 burial act (section 25). The DWSIs would need to	

		<i>human remains (neonate/young infants, inhumations, cremations, is articulated/charnel remains) which will be developed by the human remains specialist. Any investigation of human remains must comply with Article 23 of the Draft DCO (document reference 3.1). The investigation of human remains will be undertaken in accordance with national and local guidelines (Historic England, 2018; Advisory Panel on the Archaeology of Burials in England, 2017; Historic England, 2023; McKinley and Roberts, 1993; and McKinley and Brickley, 2004; SCCAS 2023a), under the guidance of the human remains specialist. If scattered cremated remains are present, for example in subsoil or colluvium, it may be necessary to use a combination of methodologies and techniques (including sample sieving) to identify the source of the deposit. At the post-fieldwork stage (assessment and analysis) the Archaeological Contractor(s) will consider the application of</i>	accommodate the exhumation or removal of buried human remains under a burial license from the Ministry of Justice. We would therefore recommend the following amendment to AMS/OWSI: The DWSIs will describe a detailed strategy for the investigation, treatment, recovery and assessment/analysis of human remains (neonate/young infants, inhumations, cremations, disarticulated/charnel remains) which will be developed by the human remains specialist. Any archaeological investigation of human remains must comply with section 25 of the 1857 Burial Act. The investigation of human remains will be undertaken in accordance with national and local guidelines (Historic England, 2018; Advisory Panel on the Archaeology of Burials in England, 2017; Historic England, 2023; McKinley and Roberts, 1993; and McKinley and Brickley, 2004; SCCAS 2023a), under the guidance of the human remains specialist. An appropriate methodology for the recovery of cremated human remains will be developed and detailed in the DWSI. At the post-excavation assessment (PXA) stage the Archaeological Contractor(s) will consider the application of modern scientific studies, such as DNA work and isotope analysis. It is expected where other dating cannot be obtained for this material that C-14 will be applied. A programme of full assessment of human remains will be detailed in the Updated Project Design (UPD), which will be approved by the relevant LPAAA and where required Historic England.	

		<i>modern scientific studies, such as DNA work and isotope analysis.”</i>		
10.156	Archaeology	5.4.98 <i>“In the event of the discovery of human remains the Archaeological Contractor(s) will notify National Grid and the ACoW immediately. The ACoW will immediately notify the relevant Local Planning Authority Archaeological Advisors. Remains will be covered and protected and left in situ in the first instance, in accordance with current good practice.”</i>	This requires further details: In the event of the discovery of human remains the Archaeological Contractor(s) will notify National Grid and the ACoW immediately. The ACoW will immediately notify the relevant Local Planning Authority Archaeological Advisors. Remains will be covered and protected and left in situ in the first instance, in accordance with current good practice guidance. A strategy for recovery of remains will be developed, with reference to the DWSI, and in consultation with the LPAAA and Historic England where appropriate, and a licence from the Ministry of Justice will be applied for.	
10.157	Archaeology	5.3.99 <i>“In general, excavation of human remains will not extend beyond the limits of the investigation work area; however, it may be followed under the baulk so that it may be lifted in its entirety, provided this will not result in disturbance of further burials, or extend beyond the Order Limits.”</i>	This is incorrect as the archaeological mitigation will need to mitigate the impacts of the development upon archaeology. Therefore, extensions to the excavation areas will be necessary where human remains are shown to or believed to, extend beyond the limits defined in the DWSI. Within the order limits, SCCAS typically recommend 20m extensions from last human burial to define the extent of burials, burial groups, cemeteries. Therefore, we recommend the following: <i>The excavation of human remains should be in their entirety, therefore where human remains are partially exposed, extensions to the excavation area will be required. Extensions for the purpose of mitigating human remains will follow national and local guidance,</i>	

			<i>and a 20m archaeologically sterile area from the last human burial will be required to identify the presence/absence of further human remains, define the extent of burials, and mitigate the impacts of the development. Extensions would not exceed the project Order Limits.</i>	
10.158	Archaeology	5.3.102 <i>“If grave goods are identified and are not subject to block lifting, additional specialist samples should be taken from the areas around the grave goods.”</i>	If grave-goods are identified, additional specialist advice should be sought with regards to the potential for Mineral Preserved Organics (MPO), guidance on this has been produced by SCCAS. We would therefore recommend the following amendment to clarify this: <i>Where artefacts are identified within the burial context, additional specialist advice should be sought with regards to the potential for mineral preserved organics. Appropriate block lifting and sampling should be taken where required.</i>	
10.159	Archaeology	5.3.103 <i>“Cremation deposits should be subject to sampling and assessment for charcoal, charred plant remains, artefacts and the recovery of human bone.”</i>	These are human remains, cremation burials or suspected cremation will be 100% sampled. We therefore recommend the following amendment: <i>Cremation deposits, or deposits suspected to contain cremated human material, will be subject to 100% excavation and sampling to enable assessment of charcoal, charred plant remains as well as recovery of artefacts and human bone at the post-excavation assessment (PXA) phase.</i>	
10.160	Archaeology	5.3.104 <i>“Where un-urned cremations are suspected or identified, these will be subject to 100% sampling.</i>	This paragraph is unclear and appears to conflate un-urned cremations with pyre debris/locations. We would recommend the following amendment for clarity: <i>Were large deposits of pyre debris are identified the human</i>	

		Where large deposits of pyre debris are identified the human remains specialist will be contacted to devise an appropriate strategy for excavation and sampling. The strategy will be developed at site consultation meeting(s) between the Archaeological Contractor(s), National Grid, the relevant Historic England Regional Science Advisor and the relevant.”	remains specialist will be contacted to devise an appropriate strategy for excavation and sampling. The strategy will be developed <i>in consultation</i> with the Archaeological Contractor(s), National Grid, the relevant Historic England Regional Science Advisor and the relevant <i>LPAAA</i>. NB Bustum burials contain large amount of pyre debris along with the entire cremated individual.	
10.161	Archaeology	5.3.105 “Local Planning Authority Archaeological Advisors. It may be beneficial to consider half sectioning the excavation of un-urned cremations to aid an understanding of the vertical distribution of the deposit; the deposit may then be excavated in spits.”	This is confusing. We would recommend the following to define the correct methodology for the excavation of un-urned cremations or features suspected to be cremation burials: Where un-urned cremation deposits are encountered or anticipated, each cremation or suspected cremation burial will first be half-sectioned in 5cm spits to document the depositional sequence and spatial distribution of cremated remains. Once this half-section is recorded, the feature will be excavated in full to its natural base continuing in 5cm spits until the entire feature has been excavated. Each of the 5cm samples will be retained as separate samples to inform on depositional sequences and concentration of bone.	
10.162	Archaeology	5.3.107 “It is good practice to block lift cremation urns to allow for X-	This should be amended to: Urned cremations will be block lifted to allow...	

		<i>radiography and excavation under laboratory conditions. The conservator or field staff experienced in lifting cremation urns will be present when lifting takes place. In the first instance, the conservator will be contacted for advice.”</i>		
10.163	Archaeology	5.3.108 <i>“In addition to traditional osteological recording, post-excavation osteological assessment will include consideration of recently developed microscopic, biomolecular, imaging and other methods for the study of human remains and the potential of these techniques to meet the research questions relevant to the Project. Where research questions of the Project and the aims and objectives identified in the DWSIs can be addressed through recently developed microscopic, biomolecular, imaging and other methods for the study of human remains, the Archaeological</i>	National Grid are not the appropriate authority to make decisions on the analysis and assessment of human remains. Please remove this from this paragraph. We recommend the following for clarification of the process during the post-excavation assessment phase: <i>In addition to standard osteological recording, post-excavation assessment will evaluate advanced analytical techniques, including but not limited to, microscopic, biomolecular, imaging, and other emerging methods. To determine their potential to develop the projects research questions and develop a programme of full analysis and reporting in the Updated Project Design (UPD). The Archaeological Contractor(s) will consult National Grid, the Historic England Regional Science Advisor, and the relevant Local Planning Authority Archaeological Advisor.</i>	

		<i>Contractor(s) will consult with National Grid, the Historic England Regional Science Advisor and the relevant Local Planning Authority Archaeological Advisors for further advice prior to analysis being undertaken. National Grid will approve the proposals for scientific study at the assessment and analysis stages.”</i>		
Strip, Map and Sample Excavation				
10.164	Archaeology	5.3.110 <i>“Strip, Map and Sample Excavation (SMS) is defined in Table 2.1. The following general approach will apply for SMS. Sites that require investigation by SMS are identified in DWSIs.”</i>	Please see SCCAS comments on Table 2.1 section 4.3.	
10.165	Archaeology	5.3.111 <i>“Sites designated for SMS will be stripped with mechanical plant as set out in the DWSIs. Topsoil, subsoil or other overburden that does not contain material relevant to the research objectives will be removed to the correct</i>	This is confusing and doesn't add clarity of machine type to be used during archaeological works. We would recommend the following to clarify this process: <i>Sites designated for SMS in the DWSI will be stripped by a suitably sized back-acting tracked excavator fitted with a toothless ditching bucket and operated by an experienced operator under the continuous supervision and direction of an experienced archaeologist; machine excavation will proceed to the first</i>	

		archaeological horizon under archaeological supervision. The relevant horizon will be informed by the evaluation results, the research framework, and the research aims and objectives identified in the DWSIs. The sequencing of stripping, location of soil storage areas and arrangements for backfilling, together with other relevant logistical considerations, will be set out in a DWSI.”	<i>archaeological horizon with overburden continuously examined for artefacts and ecofacts, and metal-detector surveys carried out before, during and immediately after stripping and prior to any hand excavation of the horizon; topsoil, subsoil and other non-archaeological overburden will be kept separate, the depth of the archaeological horizon will be confirmed on site (informed by evaluation results where available), and the sequencing of stripping, soil storage locations, backfilling and other logistics will be detailed in the DWSI.</i>	
10.166	Archaeology	5.3.112 “Following stripping, the exposed archaeological remains will be surveyed using electronic survey-grade equipment to create a detailed digital pre-excavation plan. In accordance with the research framework and the research objectives identified in the DWSIs, a strategy based on this plan will be implemented for hand excavation of key features to recover artefactual and scientific dating evidence. At the same time selected feature complexes would	There is confusion here regarding the process of SMS excavation. We would recommend the following amendment to clarify the process of mitigation by SMS excavation: <i>Following stripping, the exposed archaeological remains will be surveyed using electronic survey-grade equipment to create a detailed digital pre-excavation plan, to inform an excavation strategy which will be agreed with the relevant LPAAA and where required Historic England, in discussion with National Grid.</i> <i>The agreed strategy will be implemented for hand excavation of features/deposits to recover artefactual, stratigraphic, environmental and scientific dating evidence. The DWSI will set out provision for where complex features, complexes of features and/or significant archaeology is identified, excavation will follow the detailed excavation methodology.</i>	

		<i>be subject to further hand excavation designed to resolve stratigraphic relationships.”</i>		
10.167	Archaeology	5.3.113 <i>“The proportion of features excavated will be determined by the significance of the remains, the research framework, and the site-specific research objectives developed in the DWSIs and in consultation with relevant specialists.”</i>	The proportion of features excavated will need to be agreed with the relevant LPAAA and where required Historic England. Therefore, we would recommend the following: <i>The proportion of features excavated will be determined by the significance of the remains, the research framework, and the site-specific research objectives developed in the DWSIs, and in consultation with relevant specialists and approved by the relevant LPAAA and where appropriate Historic England. Sufficient hand excavation must be undertaken to understand and characterise any features and deposits identified.</i>	
10.168	Archaeology	5.3.114 <i>“The following minimum sampling requirements will be used as a standard, but these may be varied to suit the research value of the remains, subject to agreement between National Grid, the Archaeological Contractor(s), the ACoW and the relevant Local Planning Authority Archaeological Advisors and Historic England if required.</i>	This whole section is inappropriate for Strip, Map and Sample Excavation (SMS) methodology as the sample excavation strategy will be determined after the site has been opened and the archaeological resource can be quantified to determine level of excavation required to sufficiently characterise any features and deposits identified. Where significant archaeology is identified, those parts of the site will revert to the Detailed Excavation Methodology. Strip, Map and Sample Excavation (SMS) methodology is used to expose and quantify the archaeological resource within a given area before a programme of targeted excavation is determined, which will need to be agreed with the relevant LPAAA. Under an SMS methodology sufficient hand excavation will be undertaken to	

		• <i>Linear features: A minimum sample in length not less than 1 m long, where the depositional sequence is consistent along the length. Linear features with complex variations of fill type will be sampled sufficiently to understand the sequence of deposition – a minimum of 10% along the length. If appropriate all intersections will be investigated to determine the relationships between features. All termini will be investigated</i> • <i>Discrete features: Pits, post-holes and other isolated features will normally be half-sectioned. If large pits or deposits (over 1.5 m diameter) are encountered, then the sample excavated should be sufficient to define the extent and maximum depth of the feature and to achieve the objectives of</i>	characterise features identified. For examples, field systems sufficient interventions will be targeting relationships and provide sufficient sections to record the form of the field system ditches. Where exposed archaeology or areas of archaeology are determined to be significant or greater complexity than expected the mitigation methodology for that area would need to transfer to a targeted Detailed Excavation methodology. This will subject a specified area to a higher level of investigation and recording (as stated above in our comments on paragraphs 5.3.112 and 5.2.113). Therefore, the DWSIs must include clear triggers and procedures for the escalation from SMS to Detailed Excavation methodology. SMS is not a suitable methodology for all types of archaeology and cannot be used on the excavation of Human remains, flint scatters, structures, industrial features or other complex archaeology. Therefore, we would recommend removal of this paragraph, as the requirements are detailed in the SCCAS amendments to paragraphs 5.3.112 and 5.2.113. NB Ridge and Furrow cannot be identified in plan. For example, in Suffolk it is similar to Roman planting beds. Therefore, sufficient excavation and environmental sampling must be undertaken to characterise and date these features.	

		<i>the sampling but should not be less than 25%</i> • <i>Structures: Each structure will be sampled sufficiently to define the extent form, stratigraphic complexity and depth of the component features and its associated deposits to achieve the objectives of the evaluation. All intersections will be investigated to determine the relationship(s) between the component features. The remains of all upstanding walls will be hand cleaned sufficient to understand their dimensions, extent, composition, sequence and relationships</i> • <i>Special or burnt features: These features should be the subject of 100% excavation. Such features will be identified during pre-excavation planning to enable the input and</i>		

		<i>advice of appropriate archaeological specialists. Where in situ burning is identified no excavation shall take place until the possible recovery of samples for scientific dating has been considered.</i> • <i>Flint scatters: These should be the subject of 100% excavation. Where associated with buried land surfaces, in situ flint scatters will require hand cleaning and will need to be spatially defined in three-dimension to determine the limits of the scatter within the area of investigation. All lithic artefacts with a Maximum Linear Dimension (MLD) of 10 mm will require three-dimensional plotting prior to recovery and individually bagged and recorded as registered finds. Non-tool fragments of less than the</i>		

		<i>MLD should be bagged according to an appropriate spatial recording system consistent with context</i> • <i>Human remains: refer to paragraphs 5.3.98 – 5.3.108</i> • <i>Tree hollows: refer to paragraph 5.3.76 above</i> • <i>Ridge and furrow: Ridge and furrow will only be recorded to note its alignment. No excavation of furrows is proposed.”</i>		
Geoarchaeological and Palaeoenvironmental Investigation				
10.169	Archaeology	5.3.115 <i>“Each area requiring geoarchaeological or palaeoenvironmental assessment should have an array of boreholes or cores, designed in a grid or transects as appropriate to ensure full evaluation across the area. This design should be undertaken by the Archaeological Contractor(s), who must have a</i>	We would recommend the following amendment: Areas requiring geoarchaeological or palaeoenvironmental assessment will be subject to investigation using boreholes and cores, laid out in grids or transects as appropriate to ensure comprehensive coverage. Sleeved cores should be recovered using a percussion coring rig, to facilitate full analysis of the deposits/sediments. Details and full methodology will be defined within the DWSI.	

		<i>geoarchaeologist and environmental specialists as part of the Project team. The borehole design must take into account the results of the evaluation excavations in ES Appendix 11.5: Trial Trenching Results Report (document reference 6.11.A5) and any geotechnical boreholes in the vicinity to maximise data recovery. The methodology, design and any revised or site-specific aims must be detailed in a DWSI to be prepared by the Archaeological Contractor(s)."</i>		
10.170	Archaeology	5.3.116 <i>"Each borehole column will be recovered using a windowless sampling rig (for example a Terrier Drilling Rig, Dando Rig or for shallower deposits a power auger) that will be provided by the Main Works Contractor(s) and under the supervision of the Archaeological Contractor(s). The diameter of the borehole shall be approximately 100 mm and the core shall be</i>	The windowless sampling rig would be suitable for collecting shallow samples as well. Power Auger at shallow depths would not be suitable to allow for full analysis and dating of shallow sequences as sleeved samples must be retrieved. Additionally, two boreholes at each location will be required to allow for failure and retention for further analysis if required. We therefore recommend the following amendment: <i>All borehole columns will be recovered using a windowless sampling rig (for example a Dando Terrier Rig) that will be provided by the Main Works Contractor(s) and under the supervision of the Archaeological Contractor(s). The diameter of the borehole shall be approximately 100mm and the core shall be recovered in plastic</i>	

		<i>recovered in plastic tubes (or an appropriate substitute)."</i>	<i>tubes (or an appropriate substitute). Two cores will be recovered in each location, to allow for failure and further analysis.</i>	
10.171	Archaeology	5.3.122 <i>"The core sample shall be sealed, labelled, transported as soon as practicable, and stored securely and in appropriate controlled conditions either on site (temporary) or off-site at the assessment stage. It may be necessary to store the core long-term if it is likely to contribute to any future analyses."</i>	This needs additional details: The core sample shall be sealed, labelled, transported as soon as practicable, and stored securely and in appropriate controlled conditions (refrigerated) either on site (temporary) or off-site at the assessment stage. It may be necessary to store the core long-term if it is likely to contribute to any future analyses. Facilities to achieve appropriate storage will be detailed in the DWSIs.	
10.172	Archaeology	5.3.123 <i>"Where warranted, areas identified for geoarchaeological assessment may be stripped to reveal archaeological features sealed by the colluvium. The requirement will be dependent upon the results of the boreholes and further focus of stripping can be achieved by controlled broad transect samples (2 m+). The results of this approach will guide the requirement for removal of overlying deposits by machine, which may need to be</i>	This is confusing and in places incorrect, we would recommend the following for clarity: Where archaeological remains are suspected to be sealed by colluvium, alluvium, peats or other sediments. Appropriate techniques will be applied, including (but not limited to), boreholes and test pits to inform on depth and extent of buried archaeological remains. The results of this approach will guide the requirement for removal of overlying deposits by machine or hand, which may need to be undertaken in stages for the exposure of archaeological horizons and features over a wide area. Where palaeochannels are suspected/identified the hand-excavated transects should be orientated perpendicular to the course of the streams in question, so that they capture in section	

		<i>undertaken in stages for the exposure of contemporary surfaces and features over a wide area. The hand- excavated transects should be orientated perpendicular to the course of the streams in question, so that they capture in section sedimentary processes such as colluviation and headland formation. In all cases, the requirement for work should be guided by the Archaeological Contractor(s)'s geoarchaeologist."</i>	sedimentary processes such as colluviation and headland formation. In all cases, the requirement for work should detailed the DWSIs, guided by the Archaeological Contractor(s)'s geoarchaeologist and agreed with the relevant LPAAA and Historic England where relevant.	
10.173	Archaeology	5.3.124 <i>"All work must be taken in line with guidance on Geoarchaeology (Historic England, 2015b) and Environmental Archaeology (English Heritage, 2011)."</i>	This should also include provision for consultation with the Historic England Regional Science advisor. And include reference to the 3rd draft edition of Historic England's Environmental Archaeology (currently under review). All work must be undertaken with the most recent guidance on environmental archaeology. We would therefore recommend the following: All work must be taken in line with guidance on Geoarchaeology (Historic England, 2015b), Environmental Archaeology (Historic England 2025 3rd edition). Provision will be included within the DWSIs for consultation with the Historic England Regional Science Advisors.	

10.174	Archaeology	5.3.125 <i>“A preliminary interpretation of the soil and sediment characteristics of the core will be made, including a summary of the stratigraphy that will characterise the deposit sequence and identify soil/ sediment formation processes. The description of each deposit will include sediment type, inclusions, colour, bedding and nature of contacts to overlying and underlying units. The report will also include appropriate lithological diagrams.”</i>	This is something that would need to be agreed and detailed within the DWSIs.	
10.175	Archaeology	5.3.126 <i>“If suitable organic sediment is recovered from the core, samples will be taken for radiocarbon dating, to provide a dating framework for the stratigraphic sequence. The Archaeological Contractor(s) shall make provision for submitting a justified proposal and number of samples for radiocarbon dating.”</i>	This should also include provision for consultation with the Historic England Regional Science advisor.	

10.176	Archaeology	5.3.127 <i>“If suitable deposits exist, samples will be submitted for specialist assessment (pollen, diatom/ foraminifera) to identify the potential for past environmental reconstruction.”</i>	Samples will need to be assessed by specialists to inform on the suitability of the samples to inform an appropriate mitigation strategy. Therefore, we would recommend the following amendment: <i>Samples will be submitted for specialist assessment to define geoarchaeological and palaeoenvironmental objectives and mitigation aims, for example dating, landscape reconstruction, depositional sequencing, human impact and palaeoclimate indicators and, to determine the required analyses, minimum sample densities, reporting format and curation arrangements; analyses will include, but are not limited to, pollen, macrofossil and charcoal identification, diatoms/ foraminifera, phytoliths, chironomids, sedaDNA, geochemical profiling (XRF, Loss On Ignition) and grain-size analysis and appropriate dating of all sequences.</i> <i>Based on the results of the assessment stage, further geoarchaeological and palaeoenvironmental site investigations may be required and, provision for this will be set out in the DWSIs.</i>	
10.177	Archaeology	5.3.128 <i>“An interim summary assessment report will be produced shortly after completion of the fieldwork to inform the design of any subsequent archaeological mitigation.”</i>	Further details are required to secure an appropriate level of interim reporting to aid in the formulation of a suitable mitigation strategy. It is essential that sufficient scientific dating is available to determine the significance of deposits/sequences identified. Therefore, we would recommend the following amendment: <i>An interim summary assessment report will be produced by a suitably qualified geoarchaeologist shortly after completion of the fieldwork, and include sufficient specialist analysis and scientific</i>	

			<i>dating, to inform the design of any subsequent archaeological mitigation.</i>	
10.178	Archaeology	5.3.129 <i>“The final geoarchaeological assessment report will illustrate the sub-surface topography and shall characterise the sediments present on the site and indicate the potential of the core sample taken for environmental reconstruction. If appropriate, it will include a fully justified and costed proposal for analysis and publication.”</i>	This should a post-excavation assessment report (PXA) and inform the production of the Updated Project Design (UPD) which will detail further work required to fully analyse, report and curate samples recovered. Therefore, we would recommend the following amendment to clearly set out the purpose of post-excavation assessment and reporting: <i>The final geoarchaeological and palaeoenvironmental assessment report will provide a detailed deposit model, which will characterise the sediments present on the site and provide an assessment of the paleoenvironmental record. The report will include all aspects of the fieldwork associated with geoarchaeological and palaeoenvironmental investigation. This will inform the production of the Updated Project Design for full analysis and publication, which will include costings and timescales to complete this work.</i>	
Monitoring During Construction				
10.179	Archaeology	5.3.131	For clarity:	

		<i>“The following general approach will apply for Archaeological Monitoring and Recording during pre-commencement and main works stages.”</i>	<i>The following general approach will apply for Continuous Archaeological Monitoring and Recording during pre-commencement and main works stages on very small construction impacts where no other mitigation methodology is practicable.</i>	
10.180	Archaeology	5.3.132 <i>“Sites that require monitoring during construction activities and investigation will be those that are identified in DWSIs but may also include new areas that arise as a result of emerging results, detailed design and unexpected discoveries.”</i>	This methodology will not be employed on a site wide basis, as it is only suitable for very small construction impacts, where no other mitigation methodology can be implemented (i.e. monitoring of GI investigations). It is inappropriate to implement this methodology to mitigate unexpected discoveries during the construction process. Therefore, we recommend the following amendment to clarify the purpose of Continuous Archaeological Monitoring and Recording: <i>The location of pre-commencement and construction activities that require continuous archaeological monitoring and recording during construction activities and investigation will be identified in DWSIs.</i>	
10.181	Archaeology	5.3.133 <i>“Sites designated for Archaeological Monitoring and Recording will be stripped with mechanical plant as set out in the DWSIs. The Main Works Contractor(s)’ preferred method of working will be subject to archaeological supervision and control. Topsoil, subsoil or other overburden that does not contain datasets relevant to the research</i>	Continuous Archaeological monitoring and recording is only applied to construction activities, therefore this paragraph should be removed.	

		<i>objectives will be stripped by a mechanical excavator fitted with a toothless bucket to the correct archaeological horizon, under the supervision of the Archaeological Contractor(s). The relevant horizon will be informed by the evaluation results, the Research Framework and the research aims and objectives identified in the DWSIs. The sequencing of stripping, together with other relevant logistical considerations will be set out in the DWSI."</i>		
10.182	Archaeology	5.3.134 <i>"Following stripping, if archaeological remains are identified they will be surveyed using electronic survey-grade equipment to create a detailed digital pre-excavation plan. In accordance with the aims and objectives that will be identified in each DWSI, a strategy based on this plan will be implemented for hand excavation of key features to recover</i>	Continuous Archaeological monitoring and recording is only applied to construction activities, therefore this paragraph should be removed.	

		<i>artefactual and scientific dating evidence. At the same time selected feature complexes would be subject to further hand excavation designed to resolve stratigraphic relationships.”</i>		
10.183	Archaeology	5.3.135 <i>“The Main Works Contractor(s) will allow opportunity for the investigation of the archaeological remains. National Grid and the ACoW in consultation with the relevant Local Planning Authority Archaeological Advisors and if appropriate, Historic England, will determine the scope of work and timetable for the completion of the investigation at each site. Vehicles and other plant will not be permitted to track over areas that contain remains until archaeological investigations are complete, or until the ACoW has given permission.”</i>	This is unclear, as it sets out a methodology more suited to Strip, Map and Sample Excavation (detailed above). Continuous archaeological monitoring and recording is applied to small construction activities where no other form of mitigation can be undertaken. A suitably qualified archaeologist will monitor the construction groundworks and will need to be able to hand excavate and record archaeology encountered during groundworks. To facilitate this, plant will be stopped in the area of investigation. Where significant archaeological remains are identified works in the area will cease, and a meeting arranged between the relevant LPAAA, ACoW and National Grid, and where appropriate Historic England to determine an appropriate methodology, which may involve the implementation of targeted Detailed Excavation methodology to appropriately mitigate the impacts of the development upon archaeology. We therefore recommend the following amendment: The Main Works Contractor(s) will allow sufficient time and access for the investigation of the archaeological remains identified during the monitoring process. Should significant archaeological remains be identified during monitoring, groundworks in that area will stop and a methodology will be agreed to appropriately mitigate the	

			impacts of the development. This will be agreed with the relevant LPAAA, in consultation with the National Grid, ACoW and where appropriate Historic England. This may include reversion of the methodology to Detailed Excavation of defined and targeted areas. Vehicles and other plant will not be permitted to track over areas that contain remains until archaeological investigations are complete, or until the ACoW has given permission.	
10.184	Archaeology	5.3.137 <i>“Modification of the works specification may be required during the investigations to enable detailed recording to take place, and to allow adequate time within the construction programme in the event of important discoveries. In this situation a revised DWSI will be prepared by the Archaeological Contractor(s) in consultation with National Grid, the ACoW, the relevant Local Planning Authority Archaeological Advisors and if appropriate, Historic England, prior to works commencing in the area to which the DWSI applies. Written notice will be provided by the Archaeological Contractor(s) to the Main Works Contractor(s) to give</i>	The DWSIs will be approved, and any revisions will require significant delays to the programme as they will need to be resubmitted through the LPA for approval. Therefore, we would recommend a different approach which allows greater flexibility and reduces delays to the construction programme. We recommend the following amendment and approach: There will be provision within the DWSIs methodology for continuous archaeological monitoring and recording methodology to allow for the modification of work specification should significant archaeological remains be identified during the monitoring process. In this event, a Contractors Method Statement will be produced, inline with the DWSI and AMS-OWSI Detailed Excavation Methodology detailing the extent of archaeological works to be undertaken. This will be approved by the relevant LPAAA in consultation with National Grid, ACoW and where appropriate Historic England. Written notice will be provided by the LPAAA to the ACoW, to give clearance for construction works to (re)commence in the defined area once archaeological mitigation has been completed. A mechanism for authorising continued construction, under	

		<i>clearance for construction works to (re)commence in the area.”</i>	<i>archaeological supervision, beyond the defined mitigation area will be detailed within the DWSIs.</i>	
10.185	Archaeology	5.3.138 <i>“In the event of an unexpected discovery requiring further investigation (that is, a significant find that was not predicted as a result of the evaluation), the provisions set out above will apply. A site consultation meeting will be held which will consider the specific nature of any unexpected archaeological remains and the potential impacts of any construction activity on the unexpected archaeological remains. The outcomes of this meeting will inform any further archaeological work and the extent of any stand-off that may be required. The area will be fenced off, cleaned archaeologically and recording works completed, in line with a revised DWSI prepared by National Grid and the ACoW in consultation with the relevant Local Planning Authority Archaeological Advisors and if</i>	This is not appropriate for areas where archaeological evaluation has been undertaken. In areas where evaluation has been undertaken, archaeological mitigation would either be by Detailed Excavation or Strip, Map and Sample Excavation. Continuous Archaeological Monitoring and Recording is only appropriate for small construction impacts where other forms of archaeological mitigation cannot be applied (e.g. monitoring of GI investigations). Please remove this section from archaeological monitoring and recording as it is not appropriate. This should be included in the Unexpected Archaeology Section, as mitigation methodology will be dependent upon what archaeology has been identified and the significance of the archaeology.	

		<i>appropriate, Historic England. This document, as secured through Requirement 5 of the Draft DCO (document reference 3.1), requires that any unexpected finds must be retained in situ and reported to the relevant Local Planning Authority as soon as reasonably practicable. No construction can take place in the location of the unexpected finds until a suitable approach is agreed with the Local Planning Authority and executed, as appropriate.”</i>		
6. Reporting and Publication				
10.186	Archaeology	6.1.1 <i>“Following the completion of the fieldwork, all finds and samples would be processed (cleaned and marked). Each category of find or environmental/industrial material would be examined by a suitably qualified specialist so that the results can be included in the Post-Excavation Assessment Report produced at the end of the investigations.”</i>	For clarity we would advise the following amendment: All finds and samples will be processed, cleaned and marked within appropriate timescales, following removal from the excavation site. It is expected that a programme of finds processing will be undertaken simultaneously with the excavations to ensure appropriate curation of the archaeological evidence. Following completion of the fieldwork, each category of find or environmental/industrial material would be examined by a suitably qualified specialist so that the results can be included in the Post-Excavation Assessment Report produced at the end of the investigations and inform the production of the Updated Project Design.	

6.2 Interim Statements				
10.187	Archaeology	6.2.1 <i>“Interim statements would be prepared and submitted to National Grid within six weeks of completing fieldwork at each site. The purpose of each interim statement is to provide a basic account of the results of the investigations at each site to inform the progress meetings. The interim statement would include:</i> <i>• A summary of the results</i> <i>• A draft or sketch plan of each archaeological area or site</i> <i>• A quantification of the primary archive including finds and samples</i> <i>• Identification of any issues that have arisen to ensure that there is integration</i> <i>• across the Project between sites and phases</i> <i>• A programme of work and schedule for the completion of the Post-</i>	Interim statements would be prepared and submitted to National Grid and the relevant LPAAA within six weeks of completing fieldwork at each site. The purpose of each interim statement is to provide a basic account of the results of the investigations at each site to inform the progress meetings. The interim statement would include: • A summary of the results • A plan of each archaeological area or site showing features, interventions and sample locations. • Provisional dating of features. • A quantification of the primary archive including finds and samples • Identification of any issues that have arisen to ensure that there is integration across the Project between sites and phases • An initial programme of work and schedule for the completion of the Post-Excavation Assessment Report. NB Full analysis and proposals for publication and archive deposition will be detailed within the Updated Project Design (UPD) following completion of the Post Excavation Assessment Report.	

		Excavation Assessment Report.”		
6.3 Post-Excavation Assessment Report				
10.188	Archaeology	6.3.1 <i>“The Archaeological Contractor(s) would meet the set time frames in order that the post- excavation assessment, analysis, and publication phases can be programmed and resourced properly, and so that the completion date for all construction and post excavation works can be met.”</i>	This seems more of a contractual obligation rather than something that should be defined within the AMS-OWSI and doesn't secure a timeframe for completion and delivery of the Post-Excavation Assessment Reports and Updated Project Design. The AMS-OWSI should define a timeframe for delivery. We would recommend a more suitable statement: <i>The Post-Excavation Assessment (PXAs) reports will be completed within <u>six months</u> of the completion of the archaeological mitigation for the relevant development phase, detailed within the relevant DWSI. The Updated Project Design (UPD) will be completed within <u>one year</u> of the completion of development. The UPD will provide details of timescales and costs for delivery of the archaeological project and detail full publication and archive deposition.</i>	
10.189	Archaeology	6.3.2 <i>“The results from several fieldwork interventions may be combined as one site for the purposes of the post-excavation assessment and analysis stages or the results for the entire Project assessed in a single Post Excavation Assessment Report. The results from earlier investigations (evaluation surveys</i>	This paragraph is unclear and does not represent the post-excavation process that would be required to fully mitigate the development. We would recommend the following paragraph which clearly defines the purpose of the PXA and UPD: <i>Where practical, results from multiple sites may be presented together in a single PXA document, but each site must be assessed on its own merits and recorded separately within that PXA.</i> <i>The PXAs will:</i> • <i>Set out the assessment and analysis of fieldwork results.</i>	

		and excavations) would also be assessed/reviewed by the Archaeological Contractor(s) where they contribute to an understanding of the site and address the research framework and aims and objectives of the DWSI(s). Following the completion of the post-excavation assessment, the original Project objectives would be reviewed to determine the scope of any analysis and publication that may be appropriate.”	• Identify revised research questions and priorities derived from the Regional Research Frameworks. • Inform the production of an Updated Project Design (UPD). The Updated Project Design (UPD) will: • Consolidate findings from the PXAs across the project and define a programme of further analysis and specialist study. • Detail the required work, including further analysis, scientific dating and specialist reporting. • Provide a clear delivery timetable and costed programme for completion of the post-excavation work, including publication of results and archive deposition (including provision to add the vast amount of information to each of the relevant county Historic Environment Records). • Secure archive deposition with the relevant LPAAA’s archaeological archive repository and digital archiving with the Archaeological Data Service (ADS). The PXAs and UPD will be approved by the LPAAAs.	
10.190	Archaeology	6.3.3 “The preparation of the Project archive, post-excavation assessment and subsequent analysis and publication phases would be undertaken in accordance with the DWSI(s), Historic England guidelines (Historic England, 2016a), and ClfA guidelines (ClfA 2014b; 2020;	The Detailed Written Scheme of Investigation (DWSI) cannot set out the exact scope or level of post-excavation analysis because it is approved before fieldwork commences and cannot predict the character or quantity of material recovered. The AMS-OWSI must therefore set out a mechanism to secure a programme of post-excavation reporting to inform the production of an Updated Project Design (UPD). The DWSI will set out the scope of initial assessment to facilitate the production of a Post-Excavation	

		<i>2023a-f) and other relevant archaeological standards and national guidelines. The different phases would be completed within a set time frame following completion of fieldwork, as agreed between the Archaeological Contractor(s) and the National Grid in consultation with relevant Local Planning Authority Archaeological Advisors and, if relevant, Historic England.”</i>	Assessment Report (PXA). However, the UPD is the appropriate document to define and secure the full post-excavation analysis, publication phases as well as preparation and deposition of the project archive. The statement “<i>The different phases would be completed within a set time frame following completion of fieldwork, as agreed between the Archaeological Contractor(s) and the National Grid</i>” reads more as a contractual obligation between National Grid and their chosen archaeological contractor(s). This is not suitable for the AMS-OWSI to secure a timeframe for completion of the assessment reporting phase. We therefore recommend the following amendment: <i>Post-excavation Assessment reports and the Updated Project Design will be prepared in accordance with all relevant national and local guidance, including but not limited to: Historic England guidelines Historic England, 2016a, MoRPHE 2015, and ClfA guidelines ClfA 2014b; 2020; 2023a-f, and with reference to the approved AMS-OWSI and approved DWSIs.</i> <i>Timescales for production of the Post-excavation Assessment Reports (PXA)s and Updated Project Design (UPD) will be decided in consultation with the relevant LPAAA, National Grid, the Archaeological Contractor(s). It is expected that delivery of the PXAs and UPD to the relevant LPAAAs for approval will occur within a period not exceeding <u>one year</u> post completion of project construction.</i> NB SCCAS provide local guidance on the preparation of archives for deposition in the County Archaeology Store.	

10.191	Archaeology	6.3.4 <i>“The precise format of the reports is dependent upon the findings of the investigations, but the Post-Excavation Assessment Report would contain the following:”</i>	This section needs to reference MoRPHE 2015	
10.192	Archaeology	6.3.5 <i>“The Post-Excavation Assessment Report would be submitted to National Grid for review and comment. National Grid would issue the revised draft report to relevant Local Planning Authority Archaeological Advisors and Historic England for comment.</i> <i>In finalising the report, the Archaeological Contractor(s) would take account of these comments.”</i>	This paragraph needs to recognise that the LPAAAs will need to approve each of these documents to fulfil the requirements of the DCO. Therefore, we recommend: <i>The Post-Excavation Assessment Report would be submitted to National Grid for review and comment. National Grid would issue the revised draft report to relevant Local Planning Authority Archaeological Advisors and Historic England for comment and approval.</i> <i>In finalising the report, the Archaeological Contractor(s) would take account of these comments.</i>	
10.193	Archaeology	6.3.7 <i>“In accordance with the principles of Management of Research Projects in the Historic</i>	All of the referenced guidance documents in this paragraph have been superseded. The relevant documents is MoRPHE (2015) https://historicengland.org.uk/images-books/publications/morphe-project-managers-guide/heag024-morphe-managers-guide/	

		<i>Environment) (Historic England, 2006) and the Management of Archaeological Projects, 2nd Ed (Historic England, 1991), a staged programme of post-excavation assessment and reporting would be carried out, to commence on completion of archaeological mitigation fieldwork. The terminology used in relation to this is ‘Project design’ (PD) and ‘updated Project design’ (UPD). The PD and UPD would be developed in consultation with key stakeholders and agreed by the relevant Local Planning Authority Archaeological Advisors.”</i>	Therefore, the paragraph needs amending to reflect current national guidance: <i>In accordance with the principles of Management of Research Projects in the Historic Environment (Historic England, 2015), a staged programme of post-excavation assessment and reporting would be carried out, to commence on completion of archaeological mitigation fieldwork of each archaeological mitigation site. This would inform the production of an Updated Project Design (UPD). The UPD would be developed in consultation with key stakeholders and agreed by the relevant Local Planning Authority Archaeological Advisors.</i>	
10.194	Archaeology		Given the project's duration, a significant interval may elapse, therefore, we strongly recommend commissioning an up-to-date Historic Environment Record (HER) data request at the Post-Excavation Assessment stage so that any records added in the interim can be incorporated into the assessment reports.	
6.4 Conservation and Assessment				
10.195	Archaeology	6.4.1 <i>“Following (or, where suitable, during) fieldwork, the findings</i>	The document currently refers to a Project Design (PD) only in paragraph 6.3.7, creating inconsistency in terminology across the text. The use and role of the PD should be removed as it should refer to the AMS-OWSI and DWSIs which will align this section with the	

		<i>would be assessed against the original PD to determine the extent to which the original research aims have been met, and to identify any new research questions to be incorporated in a post-excavation UPD.”</i>	rest of the document to ensure consistent terminology and clear cross-references throughout the document. We would therefore recommend the following amendment: <i>Following (or, where suitable, during) fieldwork, the findings would be assessed against the original AMS-OWSI and DWSIs to determine the extent to which the original research aims have been met, and to identify any new research questions to be incorporated in a post-excavation Updated Project Design (UPD).</i>	
10.196	Archaeology	6.4.2 <i>“A Post-Excavation Assessment Report would be produced, and this report would form part of the Project archive. It would include a statement of the quantity and perceived quality of the data in the site archive, a statement of the archaeological potential of the data to answer the Project research aims, and recommendations on the analysis and data storage and curation requirements.”</i>	This paragraph needs further clarification; it is anticipated that there will not be a single Post-Excavation Report for the whole project due to its scale and crosses multiple authorities. The post-excavation assessments should commence as soon as fieldwork for a site has been completed. Therefore, we recommend: A Post-Excavation Assessment Reports (PXAs) will be produced, and these reports will form part of the Project archive. The PXAs will include a statement of the quantity and perceived quality of the data in the site archive, a statement of the archaeological potential of the data to answer the Project research aims, and recommendations on the analysis and data storage and curation requirements.	
10.197	Archaeology	6.4.3 <i>“After processing, including conservation, recording and marking, the finds assemblage</i>	This paragraph needs amending to reflect the scale and nature of the project, we therefore recommend: After processing, including conservation, recording and marking, each finds assemblage type from all mitigation and evaluation	

		<i>from the mitigation must be assessed to give an overview of its potential to meet the research aims of the Project. The recommendations for the extent or depth of further analysis of all, or selected components of, the finds assemblage will be given and justified at this stage and would contribute to the UPD. The assessment would also determine the resource requirements for analysis and identify conservation needs both for analysis and long-term storage and curation. Further analysis should not proceed without the assessment.”</i>	phases of work must be assessed to give an overview of their potential to meet the research aims of the archaeological project. The specialists recommendations for further analysis of all, or selected components of, the finds assemblages will be given and justified at this stage and would contribute to the development of an Updated Project Design (UPD). The specialists assessments will also determine the resource requirements for analysis and identify conservation needs both for analysis and long-term storage and curation. Further analysis should not proceed without the specialists assessments.	
10.198	Archaeology	6.4.4 <i>“Specialist assessment and site narratives would be prepared for inclusion in an UPD. This would be prepared on completion of the specialist assessment, providing a scope for the analysis, reporting and publication of the findings.”</i>	This paragraph requires further detail: Specialists assessments and site narratives would be prepared for inclusion in an Updated Project Design (UPD). This would be prepared on completion of the specialist assessment, providing a scope for the full analysis, reporting and publication of the findings, as well as archive deposition (both physical and digital). In addition to reporting, digital vector plans of processed geophysical survey data (greyscale and interpretation plots), trial trenches and mitigation areas, recorded archaeological features and excavated sections, should be provided as georeferenced	

			(EPSG: 27700) ESRI shape or QGIS GPK files. These files should have the relevant attributes attached to them including; HER Parish/Site Code, Primary Reference Number eg (Section Number; Context Number; Sample Number; Small Find number; etc); Group or Feature Number; Archaeological Periods and Phases. These GIS files should be provided to the relevant HER following approval of the Post-Excavation Assessment Report(s).	
10.199	Archaeology	6.4	This section needs a paragraph to be added between 6.4.3 and 6.4.4 to cover environmental sampling, we would recommend the following paragraph: Samples taken from each archaeological context will be processed and assessed by the relevant specialists for palaeoenvironmental, industrial and agricultural potential. This must include appropriate scientific dating. The specialists' assessments will also determine the resource requirements for analysis and identify conservation needs both for analysis and long-term storage and curation. Further analysis should not proceed without the specialists' assessments.	
6.5 Analysis and Reporting				
10.200	Archaeology	6.5.1 <i>"The Project-specific research aims would be addressed in determining the scope for further specialist analysis. This would be carried out in line with the agreed UPD and against measurable programme milestones, to ensure</i>	This paragraph requires further detail: The updated project specific research aims would be addressed in determining the scope for further specialist analysis. This would be carried out in consultation with the relevant LPAAA and in line with the approved Updated Project Design (UPD). The UPD will set out measurable programme milestones to ensure a reasonable and timely programme for the final publication of the results and secure archive deposition (both physical and digital).	

		<i>a reasonable and timely programme for the final publication of the results.”</i>		
10.201	Archaeology	6.5.2 <i>“As a minimum, reports would be produced and deposited with the relevant HER within a reasonable and agreed timescale from completion of fieldwork.”</i>	This paragraph requires further details, we would recommend the following: <i>The Updated Project Design (UPD) will define a programme of publication and the number and nature of publications, e.g. journal articles and monographs, appropriate to the significance and extent of archaeology investigated by the project. As a minimum all results will be published as summaries in a regional publication such Proceedings of the Suffolk Institute for Archaeology and History. This will be undertaken within agreed timescales set out within the UPD.</i>	
6.6 Archiving				
10.202	Archaeology	6.6.1 <i>“All reasonable steps would be taken to obtain the agreement of the landowner to the deposition of the full Project archive, and transfer of title to the relevant repository or repositories before mitigation commences.”</i>	<i>This requires further detail:</i> <i>All reasonable steps would be taken to obtain the agreement of the landowner to the deposition of the full Project archive, and transfer of title to the relevant repository or repositories before mitigation commences. The Archives must be appropriately maintained and publicly accessible for future research.</i>	
10.203	Archaeology	6.6.2 <i>“An archiving strategy, including digital archiving would be</i>	This needs further detail: An archiving strategy, including digital archiving would be developed prior to the preparation of any DWSI(s) <i>and be further developed in</i>	

		<i>developed prior to the preparation of any DWSI(s). Each DWSI will outline the specific requirement for use of accession/event number or parish code per site, which will be used as a reference on all material to be archived. Generally the following will apply:</i> <i>Norfolk - Archives will be deposited with The Norfolk Museums Service. An Event number will be obtained prior to commencement of site works. An accession number will be obtained during reporting phases of works.</i> <i>Suffolk - Archives will be deposited with Suffolk County Council Archaeological Archive, and in line with SCCAS (2024) guidelines for deposition within Suffolk. A HER Parish Code will be obtained prior to commencement of site</i>	the Updated Project Design (UPD). Each DWSI will outline the specific requirement for use of accession/event number or parish code per site, which will be used as a reference on all material to be archived. The following will apply: - Norfolk - Archives will be deposited with The Norfolk Museums Service. An Event number will be obtained prior to commencement of site works. An accession number will be obtained during reporting phases of works. - Suffolk - Archives will be deposited with Suffolk County Council Archaeological Archive, and in line with SCCAS (2024) guidelines for deposition within Suffolk. A HER Parish Code will be obtained prior to commencement of site works for each parish within which a site falls. An archive deposition form will be completed and submitted to the SCCAS Archive Team - Essex and Colchester – Archives will be deposited with Essex Museums Service or Colchester and Ipswich Museum Service (as appropriate). A unique site code will be agreed with the Local Planning Authority Archaeological Advisor prior to commencement of site works for each site. An accession number will be obtained in conjunction with the site code for deposition. It will need to be determined whether a single combined deposition location for the archives is practicable. This will be ascertained on a site-specific basis as required. If an agreement cannot be reached between the districts within Essex, individual deposition requirements will be determined per district.	

		<i>works for each parish within which a site falls. An archive deposition form will be completed and submitted to the SCCAS Archive Team</i> • <i>Essex and Colchester – Archives will be deposited with Essex Museums Service or Colchester and Ipswich Museum Service (as appropriate). A unique site code will be agreed with the Local Planning Authority Archaeological Advisor prior to commencement of site works for each site. An accession number will be obtained in conjunction with the site code for deposition. It will need to be determined whether a single combined deposition location for the archives is practicable. This will be ascertained on a site-specific basis as required. If an agreement</i>		

		<i>cannot be reached between the districts within Essex, individual deposition requirements will be determined per district.”</i>		
10.204	Archaeology	6.6.3 <i>“The relevant repository or repositories would be consulted before the archive is prepared regarding the specific requirements for the archive deposition and curation, and regarding any specific cost implications of deposition, including the long-term storage of material requiring special conditions, such as relative humidity and temperature.”</i>	This needs further detail for clarity: The relevant repository or repositories would be consulted before the archive is prepared regarding the specific requirements for the archive deposition and curation, and regarding any specific cost implications of deposition, including the long-term storage of material requiring special conditions, such as relative humidity and temperature. This will typically occur at the Post-Excavation Assessment and Updated Project Design Stage.	
10.205	Archaeology	6.6.4 <i>“If no relevant repository or repositories are identified, the Project would ensure the storage of the archive until an appropriate repository is available.”</i>	This needs further details: If no relevant repository or repositories are identified, the Project would ensure the storage of the archive until an appropriate repository is available. All repositories will need to be approved by the relevant LPAAA.	

10.206	Archaeology	6.6.5 <i>“In addition to the deposition of Project reports and archive with the relevant Local Planning Authority Archaeological Advisors, an electronic record of the Project details would be created through OASIS. The Project record would include technical details for each technique used in the Project. Subject to any contractual requirements on confidentiality, copies of the OASIS record would be integrated into the relevant local and national records and published through the Archaeology Data Service.”</i>	Following the completion of the project, all reports will need to be published and made publicly available as the data has been generated through the planning process. We would therefore removal of the reference to confidentiality and would recommend the following wording: In addition to the deposition of Project reports and archive with the relevant Local Planning Authority Archaeological Advisors, an electronic record of the Project details would be created through OASIS. The Project record would include technical details for each technique used in the Project. Copies of the OASIS record would be integrated into the relevant local and national records and published through the Archaeology Data Service.	
6.7 Digital Data				
10.207	Archaeology	6.7.1 <i>“A strategy for digital data would be developed setting out the requirements for the management and preservation of digital data created during the course of the Project. Digital data and digital finds information will be archived to national standards and would</i>	Currently ADS are the only digital repository that meet national standards. Suffolk specifically require deposition of the Digital Archive with ADS, for inclusion on the ADS Suffolk Landing Page. Further details are required to set out the provision of a digital management plan. We would recommend the following: A strategy for digital data would be developed setting out the requirements for the management and preservation of digital data created during the course of the Project. This would require the	

		<i>be transferred at the end of the Project to a suitable facility or collections repository where it can be properly accessed, curated and maintained (such as Archaeology Data Service University of York), or other cloud based service)."</i>	production of a Digital Management Plan, which will be included within the DWSIs. The Digital Management Plan will be updated during the Post-Excavation Assessment and full requirements for digital archiving will be included in the Updated Project Design (UPD). All relevant digital data generated by the project will be archived to national standards and would be transferred at the end of the Project to a suitable facility or collections repository where it can be properly accessed, curated and maintained (such as Archaeology Data Service (University of York)).	
6.8 Publication and Outreach				
10.208	Archaeology	6.8.1 <i>"The Project is likely to provide scope for additional and more complex reporting, through for example a periodical or regional journal, stand-alone 'monograph' publication and/or popular publication. In addition, popular publications that include, for example, reconstruction drawings and non-technical summaries could be provided to make the results of the on-site mitigation recording more publicly accessible. A programme and strategy for the publication, and public dissemination of the results</i>	The project scale will provide scope for more complex reporting, therefore we recommend the following amendment: The Project will provide scope for additional and more complex reporting, through for example a periodical or regional journal, stand-alone 'monograph' publication and/or popular publication. In addition, popular publications that include, for example, reconstruction drawings and non-technical summaries could be provided to make the results of the on-site mitigation recording more publicly accessible. A programme and strategy for the publication, and public dissemination of the results of the archaeological programme of works would be provided in the UPD.	

		<i>of the archaeological programme of works would be provided in the UPD.”</i>		
10.209	Archaeology	6.8.2 <i>“Opportunities should be considered and undertaken as appropriate to disseminate the results in the community, for example a public talk about the results of the excavations to take place locally. Other ideas for public benefit should also be explored.”</i>	In previous projects of equivalent scale and complexity, the delivery of public outreach has been coordinated by a dedicated Archaeological Outreach Officer. This individual has either been part of the principal archaeological contractor’s staff or been directly employed by the developers. This requires further details, we would advise the following amendment: Opportunities should be considered and undertaken as appropriate to disseminate the results publicly, this should be coordinated by a dedicated Archaeological Outreach Officer and detailed within the DWSIs for example public talks to take place locally during the excavation phase of the project, the use of social media to disseminate information, engagement with national archaeological programmes TV, Radio and Magazines. If the results present significant information a public facing conference at the end of the project. Other ideas for public benefit should also be explored and detailed in the DWSIs and Updated Project Design (UPD). NB Suffolk have a heritage explorer and Blog posts should be provided with updates as the project progresses.	
10.210	Archaeology	Bibliography	A lot of the referenced documents are out of date and have been superseded. Please ensure you are referencing the up-to-date guidance and documents.	

NORWICH TO TILBURY

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Joint Local Impact Report

Annex B (Waveney Valley, Rationale for Additional Measures)

Suffolk County Council FC74BF695

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Glossary of Acronyms

<i>DCO</i>	<i>Development Consent Order</i>
<i>EN-5</i>	<i>National Policy Statement for Electricity Networks Infrastructure</i>
<i>ES</i>	<i>Environmental Statement</i>
<i>LEI</i>	<i>Landscape Enhancement Initiative</i>
<i>NSIP</i>	<i>Nationally Significant Infrastructure Project</i>
<i>PPA</i>	<i>Planning Performance Agreement</i>
<i>VIP</i>	<i>Visual Improvement Programme</i>
<i>WaLOR</i>	<i>Waveney and Little Ouse Recovery (Project)</i>

“The Council” / “SCC” refers to Suffolk County Council.

Purpose of this Submission

The document has been prepared by Suffolk County Council to provide additions to the main content of the Local Impact Report (“**LIR**”). Examination Library references are used throughout to assist readers.

Appendices

Policies, Strategy, and Reference Documents

- 1 National Grid East Anglia GREEN, Case for Additional Undergrounding Report
- 2 National Grid’s RIIO-T3 Business Plan, 2024
- 3 National Grid’s Visual Impact Provision (D6), 2021

1 The Waveney Valley (to the west of Diss)

The rationale for additional measures for the sensitive landscape of the Waveney Valley that is outside of a nationally designated landscape

- 1.1 During the pre-application engagement with the Applicant regarding this project, Suffolk County Council has sought to take a proportionate, iterative, and evidence-led approach to the application of the mitigation hierarchy to the proposed scheme for a predominantly overhead pylon route between Norwich and Tilbury.
- 1.2 The Council and the Applicant have engaged in a constructive and effective dialogue on these issues throughout the pre-application stages. The Council considers that it has taken a robust but reasoned approach to testing the Applicant's emerging proposals, and that the Applicant has been prepared to fully engage with that challenge in an open and constructive manner.

The development of embedded mitigation

- 1.3 Initial discussions regarding routing embedded mitigation and the strategic use of undergrounding, focused on an appropriate approach to and, routing through, the Dedham Vale National Landscape safeguarding the setting of that landscape. Initial concerns were also raised in respect of the alignment of routing through the Waveney Valley and the Gipping Valley.
- 1.4 In order to develop more a comprehensive basis for mutual discussion of these issues, Suffolk County Council, in collaboration with the relevant local authorities in Norfolk, Suffolk, and Essex (collectively, "**the Councils**"), commissioned an initial study by Alison Farmer Associates to review the preliminary routing proposals, between Diss and Lawford, (**Appendix 1**, National Grid East Anglia GREEN Case for Additional Undergrounding Report) to consider the landscape and visual effects and the initial analysis published by the Applicant, and subsequently to present issues, impacts and alternatives, to inform discussions between the Councils and the project team.
- 1.5 Subsequent discussions, based on these findings, informed routing changes, additional undergrounding in north Essex, and a refinement of the location of the sealing end compound to the north of the Dedham Vale National Landscape, it was also identified that the routing to the west of Diss was of particular concern.

The option of undergrounding in the Waveney Valley

- 1.6 As part of a backcheck and review by the Applicant, considering again alternative routing to the east of Diss, Suffolk County Council, in collaboration with the relevant Councils commissioned a further study to ensure all parties understood, in greater detail, the special qualities and sensitivities of the Waveney Valley.

- 1.7 As a result of these discussions, the backcheck and review by the Applicant, and the provision of further evidence by the Councils (**Appendix 22 of the Joint LIR**, Valued Landscape Assessment – Waveney Valley), the Applicant was able to put forward at the next public consultation, an alternate option for undergrounding the scheme through the Waveney Valley, given that the Secretary of State may reasonably consider undergrounding outside nationally designated landscapes when there is *“high potential for widespread and significant adverse landscape and/or visual impacts”* (**“EN-5”**, paragraph 2.11.6).
- 1.8 However, despite the Councils’ support for this option the technical challenges of delivering undergrounding through the Waveney Valley, in particular because of the complex and difficult geology that proved incompatible with the use of horizontal directional drilling, this has meant that this option could not, according to the Applicant, be delivered.

The need for an alternative mitigation strategy in the Waveney Valley

- 1.9 The Councils consider, given that all parties have recognised and sought to work constructively together to respond to the additional sensitivities of the Waveney valley but have been unable to secure mitigation through either avoidance or embedded mitigation, that other options must be considered.
- 1.10 The Councils recognise that there are inherent problems when seeking to mitigate the visual impacts of the scheme receptors in and around the Waverley west of Diss. Whilst additional planting may ameliorate to some extent some of the visual impact, such planting would in many, but perhaps not all instances, detract significantly from the character of place.
- 1.11 Therefore, the Councils consider that an appropriate package of measures to enhance landscape quality, improve access and amenity, and remove visual detractors, would be appropriate and proportionate given the sensitivity of the receiving landscape and the visual receptors who use it. As such, a package of costed measures is included in an emerging planning obligation with the Applicant. This would provide funding for the Waveney and Little Ouse Recovery (**“WaLOR”**) Project. This aims to, amongst other things, restore fen and woodland habitats across the Waveney Valley floor and to restore previous human interventions to the course of the River Waveney by reducing meanders.
- 1.12 The Councils consider that this approach is reasonable on the basis of the evidence developed during their pre-application engagement with the Applicant, and preceded by the approach of the National Grid/Ofgem Visual Improvement Programme (**“VIP”**) which seeks to remove existing pylons from nationally designated landscapes.
- 1.13 This scheme includes a scheme called the Landscape Enhancement Initiative (**“LEI”**) which seeks to mitigate and offset the harm of existing pylons built in the

past in designated landscapes in those instances where it is not possible to remove them under the terms of the VIP. Information regarding VIP and LEI is set out in **Appendix 2** and **Appendix 3** for the benefit of the Examination.

1.14 In summary the Councils note that as set out in National Grid’s RIIO-T3 Business Plan, December 2024 (**Appendix 2**):

1.15 *“The LEI makes a positive contribution to natural beauty, wildlife and biodiversity, cultural heritage, and public enjoyment by carrying out improvements that shift emphasis away from the impact of existing transmission infrastructure, such as tree planting, changes to public access (cycleways, footpaths, etc.) and enhance historic features.”*

1.16 In addition, the Councils note that the Business Plan also states that:

1.17 *“We have followed Ofgem’s recommendation not to initiate any new VIP projects during RIIO-T3 as it would limit our work elsewhere. Instead, we expect to complete the three in-flight projects that have been agreed by the VIP Stakeholder Advisory Group since these initiatives deliver improved visual impact and upgraded capacity needed for the connection of renewable generation.”*

1.18 Given the stated focus of the Applicant on the delivery of new projects/initiatives elsewhere (i.e. in non-designated landscapes) during the business plan period (2026-2031), rather than with legacy issues in designated landscapes, the application of the *principle of the LEI* to offset the harm in this part of the route is not only supported by evidence and is reasonably necessary to make the scheme acceptable in planning terms, but is also consistent with the past and current practise of the Applicant and the regulator.

NORWICH TO TILBURY

EN020027

Joint Local Impact Report

Appendix 1 (National Grid East Anglia GREEN, Case for Additional Undergrounding)

Suffolk County Council FC74BF695

**National Grid East Anglian GREEN
Case for Additional Undergrounding**

Final Report



November 2022

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1 Introduction

1.1 Appointment and Scope

- 1.1.1 This report has been prepared by Alison Farmer Associates on behalf of Suffolk County Council and has been based on a review of the National Grid (NG) Consultation documents¹ associated with route selection for the East Anglia Green Energy Enablement (GREEN) high voltage transmission network reinforcement between Norwich, Bramford and Tilbury. The proposals include the burial of the cables where they cross the Dedham Vale Area of Outstanding Natural Beauty (DVAONB). Elsewhere the proposal is for overhead lines (OHL) consisting of 400kV lattice pylons and overhead wires.
- 1.1.2 The purpose of the study has been to:
- Contribute to the knowledge and evidence base in order to inform National Grid's design of the project;
 - Determine key landscape and visual sensitivities in the vicinity of the proposed route; and
 - Identify opportunities for the reduction of effects including options for undergrounding and appropriate mitigation through reconfiguration of existing network where there is scope to close parallel and realignment, and mitigation planting.
- 1.1.3 This review has looked in detail at five specific areas to determine the case for additional undergrounding of the line outside of national landscape designations (National Park and Areas of Outstanding Natural Beauty). The five areas which have been considered in detail include:
- Waveney Valley in the Diss area
 - Gipping Valley in the Stowmarket area
 - Area surrounding Bramford substation
 - Area north of the DVAONB at Capel St Mary and Little Wenham
 - Land south of DVAONB at Lawford Substation and Ardleigh
- 1.1.4 This assessment has been undertaken in accordance with best practice, drawing on published guidance relating to landscape character assessment and landscape and visual impact assessment as well as current practice in assessment of the impact of pylon lines undertaken recently in relation to Bramford to Twinstead² and guidance provided in the Holford Rules (routing of high voltage overhead transmission lines) and Horlock Rules (approach and guidelines for the design and siting of substations including sealing end compounds and line entries).
- 1.1.5 The aim of this study is to provide additional information and understanding of landscape issues to inform and assist National Grid's ongoing assessment of route options and 'back checking'.

¹ East Anglian Green Energy Enablement (GREEN) Corridor and Preliminary Routing and Siting Study Report and Appendices, National Grid, April 2022

² Bramford to Twinstead 2.1 Preliminary Environmental Information Report, Vol 1, Main Report, National Grid, Jan 2022

1.2 Proposed Development

- 1.2.1 The proposed overhead transmission lines comprise 400kV lines supported by steel lattice pylons which are c. 45-50m in height. Para 3.3.4 of the EA GREEN consultation report states that *'the main impact of overhead lines is generally considered to be visual, with effects on landscape and views.'*
- 1.2.2 Where cables are to be undergrounded a large cable swathe, up to 65m in width is required which may be wider when jointing of the cables is required every 500-1000m. The landscape impacts during construction can therefore be significant but temporary. Areas of undergrounding also require a permanent Cable Sealing End Platform which is 30x80m to enable the transition from cable conductor to overhead line conductor.

Discussion Document Only

2 Methodology and Approach

2.1 Policy Background

2.1.1 National Grid has duties placed upon it by the Electricity Act 1989 ('the Electricity Act') and operates under the terms of its transmission licence. Those duties and terms are of particular relevance to the development of the proposed connection. In the instances that National Grid is developing new infrastructure, it is required to have regard to these following statutory duties:

- Electricity Act 1989 – Schedule 9 (preservation of amenity including: taking into account impacts upon communities. Landscape, visual amenity, cultural heritage and ecological resources).
- Section 38 and Schedule 9 of the Electricity Act 1989 which state that:

“(1) In formulating any relevant proposals, a licence holder or a person authorised by exemption to generate, distribute, supply or participate in the transmission of electricity:

- (a) shall have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and*
- (b) shall do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.”*

2.1.2 The regulatory context within which the routeing and siting for electricity infrastructure networks is undertaken is set out in National Policy EN-1³ and draft EN-5⁴. Taken together they provide the primary basis for decisions on applications for electricity networks infrastructure, which are classified as Nationally Significant Infrastructure Projects.

2.1.3 National Grid employs two sets of rules/guidelines for the routeing and siting of new energy transmission infrastructure:

- The Holford Rules, which provide guidelines for the routeing of high voltage overhead transmission lines; and
- The Horlock Rules, which provide the approach to and guidelines for, the design and siting of substations (in addition to cable sealing end compounds and line entries).

2.1.4 When considering new electricity infrastructure, National Grid have regard to the degree to which options comply or deviate from these rules.

2.1.5 Furthermore, the draft EN-5 at para 2.11.20 states that in areas outside of National Landscape Designation *‘where there is a high potential for widespread and significant*

³ Overarching National Policy Statement on Energy

⁴ National Policy Statement for Electricity Networks Infrastructure

landscape and/or visual impacts, the Secretary of State should also consider whether undergrounding may be appropriate, now on a case-by-case basis'....

2.2 Current Approach Adopted by National Grid

- 2.2.1 The Consultation Documents set out the method and approach adopted by National Grid to determine a preferred route option. Between Norwich and Bramford the preferred route option is NB1. Between Bramford and Lawford Substation the preferred route option is BE5.
- 2.2.2 The identification of the preferred route option has included an assessment of various environmental topics including landscape and visual.
- 2.2.3 In relation to the latter this has included a desk-based review as well as some limited field assessment to identify key viewpoints. This site assessment provided additional information to inform the Options Appraisal.
- 2.2.4 Existing landscape character assessments⁵ for each of the relevant Local Authority areas were reviewed. For NB1, professional judgment was used to determine a 'high-level' sensitivity rating for relevant landscape types. Following communication with National Grid's landscape consultants it has been established that sensitivity has been determined with reference to the Holford Rules and in particular consideration of landform, scale, distribution of woodland and settlement pattern⁶. Landscape types for NB1 were awarded a sensitivity rating to the introduction of OHLs. No detailed definition of the sensitivity categories has been provided although similar categories were used in the Bamford to Twinstead assessment, and these are provided in Appendix A.
- 2.2.5 The assessment of likely landscape and visual effects was undertaken in the context of being subject to development of mitigation at later stages of project design (inc. pylon type and use of underground cable). In other words, the anticipated effects of the proposed preferred swathe are unmitigated.
- 2.2.6 Furthermore, it is understood that as a general principle, the assessment and establishment of corridor options by National Grid takes account of potential opportunities including:
- The potential to route parallel in close proximity⁷ to existing 400kV overhead lines, and thus restrict the geographic extent of environmental effects associated with such infrastructure; and
 - The potential to provide mitigation through the rationalisation of existing 132kV overhead lines, and thus reduce the level of environmental effects arising from electricity transmission and distribution infrastructure.
- 2.2.7 Importantly the consideration of mitigation is undertaken in accordance with National Grid's mitigation hierarchy. The mitigation hierarchy is sequential, meaning that measures are not considered unless measures that precede them in the hierarchy have been considered first and deemed to be inadequate.

⁵ These have included South Norfolk LCA, Suffolk LCA and Tendring LCA.

⁶ Pers comm

⁷ The definition of a close parallel route can be found in EA Green Consultation Documents at para 4.3.11, first bullet which states 'a corridor of approximately 100m either side of the existing 4YM route would facilitate a 'parallel' alignment allowing for an 80m centreline separation between new and existing overhead lines.'

2.2.8 The sequence in which measures are considered is as follows:

- Careful routing;
- Landscape mitigation planting;
- Different lattice pylon design / conductor configuration;
- Alternative pylon design (low height or T-pylon);
- Reduction of 'wire-scape;' through distribution network rationalisation./ undergrounding;
- Reduction of 'wire-scape' through transmission network rationalisation; and
- Alternative technology (gas insulated lines, undergrounding).

2.2.9 The assessment of landscape and visual effects is set out in the tables in the appendices associated with the Consultation Documents. Consideration is given first to landscape effects and then to visual effects.

2.2.10 A number of general observations have been made regarding the approach and reporting of landscape and visual effects in the NG Consultation Documents and include the following:

- There is a difference in reporting and analysis between the Norwich to Bramford Section (NB1) and the Bramford to Lawford Section (BE5). The former sets out the sensitivity rating for each of the relevant character types in any given section of the route, but no detailed explanation of the sensitivity is given, nor any analysis of the likely landscape effects which may arise as a result of the proposed development. The latter does not give sensitivity ratings at all but does provide more analysis on the likely effects which may arise.
- A further key difference is the weight given to past landscape designation. In the Norwich to Bramford section consideration has been given to local landscape designations in South Norfolk but not Mid Suffolk Special Landscape Areas (SLAs) whereas the SLA designation in Babergh has been given weight. These variations of approach are important as the reporting indicates some circumstances where it has been determinative in selecting a preferred route.
- The NG assessment tables conclude that it is possible to carefully route and mitigate, (through planting or pylon design), the preferred route options NE1 and BE5. On this basis there are no proposals to reduce 'wire-scapes' through rationalisation or undergrounding. The assessment tables on occasion refer to the likely cumulative effects of wire-scapes being an issue (e.g. in the area around Bramford), and that this may reduce the capacity of a landscape to accommodate further OHLs. However, no consideration appears to have been given to the magnitude of change which may arise from the introduction of a new 400kV line where there is one already (i.e. close parallel option) as a pose to the introduction of a new 400kV line where there is currently none. The assessment and comparisons of different routes does not appear to have taken this into account.

2.2.11 Furthermore, the Holford Rules were established in 1956 and updated by National Grid in the 1990's. At the time of their original drafting the landscape did not contain the number of overhead lines that it does today. Had it done so and given reference to wire-scape and coherent appearance set out in Holford Rule 6, it is likely that there

would be a rule which states that where possible routes should be placed together where they can be demonstrated to reduce the overall landscape and visual effects of development.

2.3 Approach Adopted in this Assessment

Landscape Sensitivity

- 2.3.1 The approach adopted in this assessment builds on the work undertaken by National Grid in their options appraisals and seeks to provide additional information which will constructively assist NG in design development.
- 2.3.2 In order to understand why a landscape may be sensitive to the introduction of a new 400kV line, consideration has been given to the influence of landform, scale, distribution of woodland and settlement pattern, in accordance with the approach adopted by NG.
- 2.3.3 However, an understanding of landscape sensitivity is informed by an assessment of landscape value and also an understanding of the existing power networks (inc. 400kV and 132kV OHL) within the receiving landscape and thus scope for rationalisation. These aspects have therefore formed part of the approach adopted in this review.

Landscape Value

- 2.3.4 Consideration has been given to local landscape designation (including those that are no longer supported in Local Plans). This is because these designations known locally as Special Landscape Areas (SLA) highlight landscapes which have particular value and sensitivity which will not necessarily have changed, even if the policy position has changed.
- 2.3.5 SLAs were identified initially by Suffolk in Structure Plan (2001) and then subsequently in Local Plans. SLAs were defined as:
 - a) River valleys which still possess traditional grazing meadows with their hedgerows, dykes, and associated flora and fauna;
 - b) Areas of Breckland including remaining heathland, and the characteristic lines and belts of Scots Pine;
 - c) Historic parklands and gardens;
 - d) Other areas of countryside where undulating topography and natural vegetation particularly broadleaved woodland, combine to produce an area of special landscape quality and character.
- 2.3.6 Other local studies also contribute to an understanding of valued landscape and special qualities. These include:
 - Little Ouse Headwaters Project;
 - Stowmarket Environmental Appraisal;
 - Copdock and Washbrook Landscape Appraisal; and
 - Dedham Vale Landscape Qualities Assessment.

- 2.3.7 More recently the Landscape Institute has published guidance on Landscape Value outside of National Designation⁸. This Technical Guidance Note sets out the factors which can be taken into account, and these have been considered in general during this review.

Power Networks and Rationalisation

- 2.3.8 Reference is also made to the UK Power Networks interactive mapping (https://dgmap.ukpowernetworks.co.uk/site/?q=dgmapping_ext_open) which sets out the existing usage of 132kV lines. Those routes which are 'highly utilised and/or [where] reinforcement [is] required', are considered in the assessment of mitigation i.e. those routes which correspond to the new 400kV route and could be integrated with it, providing reinforcement of the network whilst at the same time reducing the effects of 'wire-scape' on the landscape. This is regarded as an increasingly important part of the assessment, given that this landscape already has a significant number of powerlines crossing it, not least in the Bramford area. There is therefore a strong and reasonable case for bringing the 'rationalisation of existing networks' up the mitigation hierarchy (refer to para 2.2.8 above), when determining preferred routes.
- 2.3.9 The significant number of OHL in the study area (including 400kV and 132kV lines), presents opportunities for rationalisation and has been considered as part of this review demonstrating that it can tip the balance in favour of one route option over another.

The East Anglian Landscape and the Holford Rules

- 2.3.10 This review has utilised the East of England landscape typology – a character assessment which provides a consistent classification of landscape types across the study area and between administrative areas.
- 2.3.11 The Suffolk landscape has some general characteristics which are helpful to understand at the outset. In simple terms the proposed route will pass through plateau and valley landscapes. With the Holford Rules in mind, the following general observations can be made:
- In Suffolk there is a **dispersed pattern of settlement** – routing OHL through this pattern is problematic and it is unlikely that any given route will avoid impact on individual properties altogether. Decisions should therefore not be based on whether individually properties are affected but rather how many and to what degree. Relevant to this judgement is whether the property is currently affected by the same type of development. In such circumstances the magnitude of change resulting from the addition of a further OHL of the same type is likely to be less than the addition of a new OHL into a landscape where there currently is none.
 - The **topography of the Suffolk landscape is subtle** and yet where there is variation it is locally distinctive and contributes to special qualities and has, as a result, been the focus of local landscape designation in the past. Rarely is the change in topography of river valleys more than 50m and yet the height of proposed OHL is 50m plus. This again creates problems in accommodating OHL and means that **rarely are pylons seen against a land backdrop and more often they break the skyline at least partially, if not wholly**.

⁸ Assessing Landscape Value Outside National Designations, Technical Guidance Note 02/21, Landscape Institute
National Grid East Anglian GREEN
Case for Additional Undergrounding
Final Report
November 2022

- The **plateau landscapes are often simpler in terms of their landscape pattern, larger scale, less populated and associated with blocks of woodlands**. Although pylons which pass through these landscapes are seen against the sky, they nevertheless are often more successfully integrated, their scale being accommodated in the relatively expansive agricultural landscape. On this basis, **in the Suffolk context the plateau landscapes generally have a greater capacity to accommodate OHL development, subject to their local special qualities, such as tranquillity, which is often high**. This is reflected in the existing 400kV routes.

2.3.12 The presence of an existing overhead line may reduce the sensitivity of the landscape to an additional development of the same type and the magnitude of change may be less where the landscape is currently impacted by this type of development. Equally the introduction of further OHL lines can give rise to visual confusion where pylons may be of different scales or traveling in different directions or where the landscape has already reached capacity to accommodate this type of development. Holford Rule 6 states that a concentration of wire-scapes can arise when high voltage lines combine with smaller lines, converging routes, distribution poles, masts etc. In all locations, confusing appearance should be minimised, and a coherent appearance should be achieved. This is particularly important in the study area given the existing number of OHLs which exist, and also the convergence of lines towards Bramford and Lawford substations.

2.4 Structure of Report

2.4.1 The remainder of this report considered each of the areas listed in para 1.1.3 above in turn. The structure of the review has been based on answering the following questions:

- What was concluded in National Grid Assessment in terms of the preferred swathe?
- What are the sensitivities of the preferred swathe?
- Is there a case for undergrounding along this route?
- Is there a case for considering alternatives?

2.4.2 For each area a map has been produced and annotated with notes. These notes combine findings from the National Grid assessment along with other factors identified during the course of this review. These maps also include mapping of the landscape types defined in the East of England typology, SLA designations and existing 132kV and 400kV lines.

3 Assessment of Diss to Bramford

3.1 Overview of NB1

- 3.1.1 The preferred option route between Norwich and Bramford is NB1. The existing 400kV line which runs north-south between Norwich and Bramford is referred to as 4YM throughout this report. NG discounted an end-to-end close parallel option for technical reasons (para 4.3.12 of the NG Consultation Report) but noted that options for potential parallel arrangements in certain sections were taken forward. Options associated with a close parallel route are NB2/NB3 and NB5 and NB6.
- 3.1.2 Issues associated with an end-to-end close parallel option were noted in paragraphs 4.3.13 to 4.3.19. These included reference to:
- Engineering construction risks;
 - Multiple diversions to avoid or substantially reduce proximity to and oversailing of residential and commercial properties;
 - Reduced compliance with Holford Rule 2 and socio-economic effects; and
 - Cost and programming.
- 3.1.3 It was concluded that *'any end-to-end close-parallel corridor option would perform poorly relative to other options'*.
- 3.1.4 For routes between Norwich and Bramford, the NG Consultation Document stated in relation to landscape and visual that:
- 'it is considered that landscape character is not generally a differentiating feature across the Norwich to Bramford Study Area.....The exception to this was in regard to the Rural River Valleys Landscape Character Type identified in the South Norfolk Landscape Assessment, subject to the protection via Policy BM4.5 of the South Norfolk Local Plan....Option NB1 avoids this designation as the corridor is routed further to the west. This is determinative in decision making about which corridor to take forward, albeit only to a marginal degree.'*
- [emphasis added]
- 3.1.5 It goes on to state that deviations from a close-paralleling route with 4YM, illustrated in Options NB2, NB5 and NB7, would mean *'substantially greater potential that these options would not achieve sufficient separation from the 4YM route to limit the effects on properties and features between the lines.'* In other words, these other route options may affect properties and features. However, no information on the numbers of properties or extent of features affected are given and no comparison with preferred route option NB1 is made to demonstrate that the preferred option has any lesser effect.
- 3.1.6 It was concluded that NB1 and NB4 were preferred in landscape terms with NB1 marginally better on the basis it avoids the locally protected landscape. The conclusions set out in para 4.5.35 state *'Option NB1 avoids the potential for residential properties to be surrounded in close proximity by overhead lines to a greater extent than the other options....this weighs considerably in favour of Option NB1'* and *'Option NB1 also avoids a locally protected landscape'*.

3.2 Waveney Valley – Diss Area

- 3.2.1 The National Grid Consultation Documents (Appendices), refer to the Diss area as Section C, in the Norwich to Bramford Route.
- 3.2.2 The preferred route crosses the Waverley Valley to the west of Diss and Roydon and to the west of Wortham Ling.
- 3.2.3 The graduated swath in this section around Diss reflects a convoluted route which changes direction (potentially seven times) in order to navigate and avoid the settlements of Diss, Wortham, Mellis and Gislegham.
- 3.2.4 The preferred route and the existing 400kV route to the west are illustrated in Figure 1. The issues noted in the NG Consultation Documents associated with a close parallel route with the existing 400kV line, are noted on this drawing.
- 3.2.5 The conclusions reached in the NG Consultation Documents in relation to Section C of NB1 are summarised below
- The Waveney Rural River Valley in South Norfolk is noted as a valued landscape in policy terms and is awarded a high sensitivity.
 - The continuation of this landscape into Suffolk is not recognised with the Wooded Valley Meadowlands and Fens and Rolling Valley Farmlands and Furze and is awarded a medium sensitivity.
 - The route would pass within c. 250m of residences where it crosses Bressingham Road.
 - Sensitive visual receptors include users of rights of way including Angles Way recreational route and Wortham Ling.
 - The heritage assessment notes the presence of a number of high-grade churches, listed buildings and the conservation area at Mellis, noting that Section C is 'more constrained'.
- 3.2.6 The NG assessment concluded that the route would give rise to some landscape and visual effects, but that these could be mitigated. The heritage assessment also noted appropriate mitigation could include amending route alignment and screen planting. This is considered in more detail below.

Baseline Landscape and Sensitivity

- 3.2.7 The Waveney Valley west of Diss comprises a shallow intimate landscape made up of a distinct valley floor and gentle valley sides. The County boundary between Norfolk and Suffolk runs along the course of the river. The landscape has previously been designated a Special Landscape Area within Mid Suffolk and is currently a valued landscape as set out in the South Norfolk Local Plan. The extent of the valued landscape (past and present) is illustrated on Figure 1.
- 3.2.8 The upper valley slopes start around the 50m contour and drop into the valley floor at c. 25m AOD. The change in landform is therefore shallow and subtle comprising just a 25m differential. This topographic variation affords views across the valley from the valley sides where historic routes extend down the slopes and across the valley

floor. From here there are views to church landmarks which are sited on the upper valley slopes e.g. Raydon Church and Bressingham Church.

- 3.2.9 The receiving landscape is a small-scale landscape contained and framed by the valley sides. Built structures are domestic in scale with the exception of larger scale farm buildings and nursery along the A1066. The majority of the road routes are rural single-track lanes.
- 3.2.10 The valley floor is well wooded comprising blocks of carr woodland and some poplar plantations, the fringes of Wortham Ling are also vegetated. Nevertheless, there are also open expanses of heathland habitat on the Ling, where wider views along the valley are possible. When travelling along the edge of the valley floor, there are views to open arable valley sides, often framed by woodland blocks on the upper valley slopes or adjacent plateau.
- 3.2.11 This area contains a dispersed pattern of rural dwellings and more concentrated settlement on the northern valley slopes along Common Road and Bressingham Road as well as at Snow Street and Roydon. Elsewhere on the valley slopes the settlement is dispersed and rural. South of Bressingham Steam and Gardens is a concentration of outstanding historic buildings including Ling Farm, Hill Barn, The Manor House, Church of St Mary the Virgin and a number of cottages. These historic buildings and their intact pattern of parkland, traditionally grazed meadows and pre 18th century enclosure contributes strongly to the sense of place. Other factors which contribute to sensitivity include tranquillity, and ease of public access.
- 3.2.12 The above analysis demonstrates that this landscape has special qualities and forms a high-quality landscape which is remarkably intact. It is a popular area for those wanting to enjoy the natural environment and is currently devoid of large-scale infrastructure. On this basis, this landscape is particularly sensitive to the introduction of a new overhead 400kV line.
- 3.2.13 The introduction of this type of development would impact on the intact, historic and small-scale nature of this landscape and undermine perceptions of tranquillity. Given the nature of the proposed development comprising 50m high pylons, it is not considered possible to microsite the pylons to reduce the nature of effects predicted. This is an accessible landscape where it is unlikely the positioning of a pylon to avoid landscape effects from one location would not give rise to effects from another. The introduction of pylons into this landscape would be visually dominant. Even if woodland within the valley floor could reduce the effects of the pylons to some degree, they would undoubtedly remain visible above woodland given their scale and would appear large in comparison to the gentle subtle valley slopes that define this landscape. For these reasons it is not considered possible to mitigate the proposed development through careful siting or mitigation planting.
- 3.2.14 Given that mitigation is unlikely to be effective, and the effects of the OHL across the Waveney Valley at this point is likely to give rise to unacceptable landscape and visual effects, two further options exist – firstly the undergrounding of the route for this section of NB1 swathe or secondly reconsideration of Option NB2 – close parallel route. Both are considered below.

The case for undergrounding NB1 where it crosses the Waverley Valley

- 3.2.15 Undergrounding along the preferred swathe would require the introduction of two cable end compounds, one to the north and one to the south. Given the nature of the valley slopes it is recommended that these end compounds are located within the adjoining plateau landscape, set back beyond the 50m contour. Existing woodland blocks and the addition of new woodland planting would help mitigate the effects of this infrastructure on the valley landscape. Overall, the undergrounding distance would be c. 5km and would have a physical effect on the valley floor and valley side land uses and habitats as well as enclosure pattern across a 65m wide swathe. The possible location Cable End Compounds is illustrated on Figure 1.
- 3.2.16 However, this option does not solve the issue of what happens to the proposed OHL line south of the Waveney Valley where the route must make several angled turns in order to avoid settlement and other natural and cultural assets.
- 3.2.17 Furthermore, if route NB1 is pursued, consideration should also be given to the incorporation of the existing 132kV route which extends from the Diss substation and is noted as *'highly utilised and reinforcement required.'* The rationalisation of this 132kV route and incorporation into the proposed 400kV route would reduce the effects of pylon infrastructure south of Diss and avoid a crossing of these lines further south between Burgate and Mellis.

Reconsideration of the Close Parallel Route Between Diss and Needham Market

- 3.2.18 An alternative to the undergrounding option includes a close parallel OHL east of Diss (NB2). The NG Consultation Documents set out reasons why this route would not be feasible, and these are annotated on Figure 1 along with other observations. The following conclusions have been reached for the Diss area:
- The valley landscape is a valued landscape as defined in the South Norfolk Plan and in the past SLA designation, however to the east of Diss these landscapes are narrower in extent than to the west of Diss.
 - The valley slopes to the south are more gradual such that the valley is less clearly defined as a valley unit.
 - The valley landscape is affected by the presence of development on the edge of Diss, road infrastructure and junctions (A1066, A140 and A143), golf course and the existing 400kV line. As a result, this landscape is less intact and less tranquil than the landscape to the west and arguably has a lower sensitivity.
 - The Rolling Valley Claylands to the south of the Waveney Valley as defined in the Suffolk LCA was awarded a low sensitivity in the NG Consultation Document Appendices and the plateau landscape to the south around Eye Airfield is also considered to have a lower sensitivity due to the influence of business park development, road infrastructure, wind farm development and the existing 400kV line.
- 3.2.19 On balance the above analysis leads to the conclusion that the landscape to the east of Diss is less sensitive to the introduction of a new 400kV line than land to

the west of Diss. This strengthens the argument for undergrounding the western route if it is pursued and highlights the need for 'back checking' of the options for a close parallel route (NB2/NB3) to the east, which whilst technically complex, may ultimately be comparatively more cost effective than undergrounding. Furthermore, the number of properties affected by the close proximity of the existing and proposed 400kV routes is relatively small and not any more than is likely to occur with a western route (NB1).

3.3 Gipping Valley (Stowmarket to Bramford)

- 3.3.1 The National Grid Consultation Documents (Appendices) refer to the Stowmarket and Needham Market area as Sections D and E of the Norwich to Bramford Route. The dividing line between the Sections runs along the northern valley slopes of the Gipping Valley, splitting it in two, and between the settlement of Creeting St Mary to the north and Needham Market to the south.
- 3.3.2 The NB1 graduated swath crosses the Gipping Valley in a straight line north-south between Creeting St Peter and Barking. From the Gipping the preferred route then crosses over a relatively complex landscape, comprising a series of tributary valleys to the main Gipping Valley, in order to reach the Bramford Sub Station.
- 3.3.3 The NB1 route and NB2 route (a close parallel option associated with the existing 400kV OHL to the east) are illustrated in Figures 2 and 3. The issues noted in the NG Consultation Documents associated with both options, are annotated on these figures.
- 3.3.4 The conclusions reached in the NG Consultation Documents in relation to Section D and E of NB1 (Gipping Valley to Bramford) are summarised below
- The Ancient Plateau Claylands (plateau landscapes to the north and south of the Gipping Valley) were assessed as having a medium sensitivity.
 - The Rolling Valley Farmlands and Furze (northern valley sides) were assessed as medium sensitivity while the Rolling Valley Claylands (southern valley sides) were assessed as having a low sensitivity.
 - The Valley Meadowlands (valley floor) was assessed as having a medium (borderline high) sensitivity.
 - The sensitivity of the valley landscape as a single valley unit (i.e. valley sides and valley floor taken together) is not considered.
 - The NB1 route would pass within c. 125m of residences in Flowton.
 - Sensitive visual receptors include users of rights of way such as the Gipping Valley River Path.
 - The heritage assessment notes the presence of a number of high-grade churches, listed buildings including St Peter's Church, Creeting which sits on the northern valley slopes, and Church of St Mary, Badley on the southern valley slopes.
- 3.3.5 The NG assessment summary demonstrates that this part of the route is likely to give rise to landscape and visual effects but concludes that these can be mitigated. This is considered in more detail below.

Baseline Landscape and Sensitivity

- 3.3.6 The Gipping Valley to the east of Stowmarket comprises a shallow and open valley where development associated with the edge of Stowmarket is clearly visible. On the northern valley slopes the enclosure pattern comprises pre 19th century irregular enclosure while in the west, closer to Stowmarket, there has been field boundary loss creating a more open landscape. An existing 132kV line extends across the valley to the west of the NB1 graduated swathe, and the land adjacent to the A1120 is allocated for employment which is currently being built out. This part of the Gipping Valley is therefore influenced by the proximity to the urban edge and A14 corridor and is likely to experience further change.
- 3.3.7 To the south of the Gipping River the valley sides rise to a distinctive ridge with wooded copses which form an important setting to the valley, and to the settlements of Stowmarket and Needham Market⁹. Again, there is evidence of field boundary loss close to the urban edge but otherwise the landscape pattern on the southern valley slopes and the tributary valley that extends towards Battisford, is more intact than that to the north of the Gipping.
- 3.3.8 Beyond the Gipping Valley the landscape forms a series of small tributary valleys and elevated interfluvies. The preferred swathe crosses two distinct tributary valleys (one in the north around Battisford and one in the south at Offord). It also crosses a 132kV line and depending on direction of the route around Middle Wood, it may be required to cross a second 132kV line to the west of Offton. It would also pass close to the rural settlements of Barking, Barking Tye, Ringshall Stocks, Willisham Tye, Willisham, Offton and Flowton.
- 3.3.9 This landscape of small-scale intimate tributary valleys and plateau landscape, with a high concentration of ancient woodland, (many of which are county wildlife sites), has previously been recognised as a valued landscape and designated as the Gipping Special Landscape Area (SLA). The extent of this area is illustrated on Figures 2 and 3. Although no longer supported in policy terms, it is evident from site assessment that this landscape has an intact wooded character, historic incised lanes and settlement and scenic variety, as a result of its varied topography, elevated views, and high degree of tranquillity. These qualities increase the sensitivity of this landscape to large scale pylons. A length of up to c. 6.5km of the preferred swathe would pass through this SLA, c.5km in the north and c.1.5km in the southwest.
- 3.3.10 NB1 preferred swathe closely follows the route of an existing 132kV line. This means that the landscape it passes through is already affected by overhead lines and pylons. However, the existing pylons are notably smaller than the proposed 400kV line, and the effects of the 400kV pylons would therefore be greater and less easy to accommodate within the valley landscapes. Furthermore, the preferred swathe would give rise to cumulative effects and potentially confusing appearance with the smaller line (contrary to Holford Rule 6). Forming a coherent appearance is likely to be challenging given the topography of the area and different scale pylons.
- 3.3.11 South of Offton the NB1 moves away from the existing 132kV line, extending over more open undulating farmland, on its approach to Bramford. This area has not been previously recognised as a valued landscape, although it forms attractive

⁹ Stowmarket Environmental Assessment, 2008, Figure 5 highlighted the Graduated Swathe passes through open countryside separating settlements and landscape forming an important landscape setting, as well as visually important ridgelines.

countryside which is relatively unaffected by pylons, despite its proximity to Branford substation. The preferred route would pass close to the village of Flowton.

3.3.12 Within 1.5km of the substation, the cumulative effects of converging pylons gives rise to a pylon dominated landscape.

3.3.13 The Gipping SLA is also affected by two other OHLs. These include:

- a further 132kV line (highly utilised/reinforcement required) which extends between the southern edge of Stowmarket to Bramford (referred to as the eastern 132kV); and
- a 400kV line between the River Gipping at the junction of the A14/A120 to Bramford (4YM).

3.3.14 These two routes converge around Ditch Wood in the centre of the former SLA and have a cumulative effect on the tributary valleys to the south.

3.3.15 Based on the above analysis the key issues relating to this part of the preferred swathe include:

- the scale of the proposed 400kV line in relation to the convoluted tributary valleys;
- the qualities of the SLA;
- the cumulative effects of existing 132kV routes; and
- the effects of other OHLs on this landscape more generally.

3.3.16 Those areas most affected by existing OHLs occur where the eastern 132kV line intersects and parallels the existing 400kV line (4YM) across the plateau interfluvium, and then tributary valleys on approach to Bramford sub-station. Similarly, greater effects occur in the south of the area where the converging lines of 132kV and 400kV lines are seen together in a relatively open farmed landscape.

3.3.17 In terms of future rationalisation, there is scope for the new 400kV line to incorporate the existing eastern 132kV line, which is noted as being at capacity, thus reducing wire-scape and pylons in this landscape.

The case for undergrounding between Stowmarket and Bramford

3.3.18 The open valley slopes of the Gipping Valley southeast of Stowmarket afford views to existing development on the edge of the town, current development and the existing 132kV route (which is highly utilised and requires reinforcement). There are opportunities to rationalise this 132kV line with any new 400kV line, and for mitigation planting to assist with restoring landscape structure to this area. There is therefore little justification for underground in this location.

3.3.19 To the south of the river the valley sides are more intact and have a higher scenic quality, reflected in the previous SLA designation. Two 132kV lines extend southward from the Stowmarket substation. There is scope for the eastern 132kV (which is highly utilised and requires reinforcement) to be rationalised as part of the introduction of a new 400kV line. Consideration could be given to

pushing the preferred swathe to the west of Keyfield Groves and integrating it with the OHL corridor. However, this would result in cumulative effects with smaller lines (contrary to Holford Rule 6) unless the new 400kV line was undergrounded. Undergrounding would also have the added benefit of reducing effects on the SLA landscape which begins at Keyfield Groves and extends to just south of Lower Wood.

3.3.20 South of Lower Wood the landscape rises onto an elevated interfluvium to the west of Barking Tye. The characteristics of this landscape mean that it lacks the scenic qualities of the SLA and given its flatter topography and vegetation pattern is relatively less sensitive to pylon development. There is less justification for undergrounding the 400kV in this area. However, if the 400kV line ran overland it would be seen in close proximity to the 132kV line (contrary to Holford Rule 6). The proposed development would result in an intensification of this type of development for a length of c.2.1km.

3.3.21 At Willisham Tye the preferred swathe splits around Middle Wood. A 400kV line which extends to the east of Middle Wood would introduce new pylon development into a highly attractive valley which formed part of the former SLA and would affect properties in Willisham Tye, Willisham and Offton. It would also need to cross the existing 132kV line south of Offton. There is a strong case for undergrounding through this section given these sensitivities.

3.3.22 Alternatively, a 400kV route to the west of Middle Wood would also need to cross the existing 132kV line but would remain outside of the former SLA. Again, this is likely to give rise to cumulative effects with a smaller line and create visual clutter and confusion (contrary to Holford Rule 6). Nevertheless, a much smaller section of tributary valley would be affected by the proposed 400kV.

3.3.23 Beyond this the preferred swathe and the existing 132kV lines would diverge. The preferred swathe adopts a route across broad, gently undulating farmland which is currently relatively unaffected by pylon development. At Flowton the NG Assessment noted restricted width of the preferred swathe with the 400kV coming close to the village and Grade I church. East of this the landscape is extensively influenced by the convergence of pylons on the Bramford Substation. The preferred swathe would therefore give rise to a number of landscape and visual effects, including the intensification of pylon development around Bramford and notably extending this influence to the west of the substation. Although this is the case, there is little weight for undergrounding through this section.

3.3.24 In summary this analysis has demonstrated that there is a case to consider undergrounding of the proposed 400kV line within the preferred swathe in two separate locations namely:

- South of Stowmarket to south of Lower Wood (c.4.3km)
- Eastern route at Middle Wood from Willisham Tye to south of Offton (c.2.7km)

3.3.25 The possible location of sealing end compounds is illustrated on Figures 2 and 3.

Reconsideration of an alternative route between Stowmarket and Bramford.

- 3.3.26 Given the sensitivities and complexities noted above alternative options between Stowmarket and Bramford have also been considered. As noted in para 3.3.13 above the eastern 132kV route from Stowmarket is highly utilised and requires reinforcement. The analysis above highlights the opportunity to rationalise the 132kV route as part of the new 400kV OHL. It also sets out the case to underground a new 400kV route south of Stowmarket.
- 3.3.27 Currently the route of the eastern 132kV crosses the 400kV known as 4YM. Both lines continue in close parallel, over the plateau and across tributary valleys between Somersham and Little Blakenham on approach to Bramford.
- 3.3.28 NG Assessment did consider a close parallel route with the existing 400kV in the assessment of NB2. It noted in section C that east of Somersham the corridor is restricted, and that limited space would lead to some properties being positioned between the new and existing line.
- 3.3.29 Nevertheless, in this section there is scope to consider the following:
- The rationalisation of the eastern 132kV line increasing the capacity of this landscape to accommodate a new 400kV line
 - The undergrounding of the new 400kV line south of Stowmarket as far as Swingen's Wood (4.4km)
 - The close paralleling of the new 400kV line with the existing 4YM line. This may require some rationalisation of the 4YM route or a section of undergrounding where the routes converge and cross in the vicinity of Ditch Wood.
- 3.3.30 Arguably this option takes the new 400kV line through the middle of the SLA, affecting a much larger area of landscape which is considered to have a high value and therefore potential sensitivity. However, the proposed route is that of the existing 132kV route and it crosses the middle section of this landscape comprising Ancient Plateau Claylands, where mature woodland blocks help integrate the route on the plateau.
- 3.3.31 Where the proposed 400kV route would close parallel 4YM, between Somersham and Little Blakenham, the effects of pylons on this landscape would increase and would also impact on residences in Somersham, although there is likely to be some scope for mitigation. Aligning the new OHL with the existing 4YM route has the added advantage of a more visually cohesive appearance of pylons approaching Bramford, retaining the effects along existing OHL corridors, in contrast to the preferred swathe.
- 3.3.32 In conclusion there is a weight of evidence which supports undergrounding for two sections of the preferred route and even if this is pursued the preferred route would nevertheless give rise to landscape and visual effects in association with an existing 132kV line and would extend the influence of pylons west of Bramford. The above analysis highlights an alternative option along the corridor of an existing eastern 132kV line which could be rationalised when introducing a

400kV line. This route could close parallel the existing 400kV line (4YM) thereby offering greater compliance with Holford Rule 6, and which would require less undergrounding, and a more cohesive appearance on approaching Bramford Substation.

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4 Assessment of Bramford to Lawford

4.1 Overview of NB5

- 4.1.1 The preferred route between Bramford and the substation at Lawford is BE5 comprising a direct corridor passing through the Dedham Vale AONB, west of the A12. Other options which cross the AONB further east (BE1 or BE2) were discounted. The National Grid Consultation Document appendices explore different sections of route by dividing it up in the assessment tables as follows:
- Bramford and Great Wenham = Section A
 - Great Wenham to Lamb Corner across Dedham Vale AONB = AB
 - Lamb Corner to substation = Section F
- 4.1.2 The issues noted in the NG Consultation Documents associated with these sections are noted on Figures 4-6.
- 4.1.3 The conclusions reached in the NG Consultation Documents in relation to these sections are summarised below:
- Significant adverse effects on local landscape character due to existing OHL associated with Bramford substation and possibility the landscape has reached capacity
 - 400kV line would conflict with SLA which is associated with the tributary valleys between Burstall and Washbrook.
 - 400kV route would be undergrounded through the AONB (c.6km), avoiding honeypot sites with sealing end compounds located back from the edge of the AONB (c.1km)
 - Potential for cumulative effects with two 132kV lines on approaching Lawford substation.
 - Splitting of the route west of Lawford substation would give rise to significant effects on residential properties.

4.2 Bramford to Dedham Vale

- 4.2.1 The NG assessment concludes that in landscape and visual terms the preferred swathe requires:
- Careful mitigation around Bramford; and
 - Careful siting of Sealing End Compounds north and south of the AONB
- 4.2.2 In relation to section F, it notes that the route is challenging, with the potential for significant effects remaining after normal routing and siting practices are applied.

Baseline Landscape and Sensitivity

- 4.2.3 From the Bramford substation the preferred swathe crosses the Ancient Plateau Claylands landscape type and then descends into Rolling Valley Farmlands crossing the tributaries to the Belstead Brook. This valley landscape was previously designated SLA. Evaluation of the landscape as part of the Landscape Appraisal for

the Copdock and Washbrook Neighbourhood Plan¹⁰ confirmed its special qualities. These valley landscapes therefore have qualities which increase their sensitivity to OHL development.

- 4.2.4 To the west of Copdock and Washbrook the preferred swathe rises onto the Ancient Plateau Claylands and continues on the plateau until the northern fringes of the AONB around Holton St Mary. The plateau landscape has a simple and open character containing significant blocks of woodland and hedgerows with trees and is less settled than the valley landscapes. It is therefore less sensitive to the introduction of OHL which could be mitigated through careful siting and planting.
- 4.2.5 North of Little Wenham the land starts to dip slightly forming the upper reaches of the Samford Valley. This area is more settled with a significant cluster of listed buildings at Little Wenham and a higher concentration of settlement associated with Great Wenham and Holton St Mary. To the north is the former Raydon airfield. South and west of Holton St Mary is the Dedham Vale AONB, where the landscape dips into the valley and there are elevated views across the AONB to the unfettered skyline comprising a rim of woodlands on the southern side of the valley.
- 4.2.6 The valley sides of Dedham Vale are topographically complex, often cloaked in woodland, and the valley floor contains waterbodies and is settled. The preferred swathe passes between Higham and Stratford St Mary and between Langham and the A12. Close to the A12 there is a further tributary valley of the Black Brook which the preferred swathe crosses before reaching the edge of the AONB at Birchwood Road.

The case for undergrounding between Bramford and Lawford (BE5)

- 4.2.7 The NG assessment for the preferred swathe south of Bramford clearly recognised the issues of cumulative effects of OHLs on this landscape. The fact that the assessment raised concerns regarding the landscape being 'at capacity' adds significant weight to the need to consider an undergrounding option south of Bramford.
- 4.2.8 Furthermore, the landscape quickly drops into the tributary valleys of the Belstead Brook, an area which was previously designated as SLA and was identified as retaining valued characteristics in the Copdock and Washbrook Landscape Appraisal for the Neighbourhood Plan. West of Washbrook the tributaries of the Belstead Brook form two separate valleys which run parallel to one another, the confluence occurring to the east at Washbrook Street. This results in the valley slopes being steep and narrow, intimate, and small scale. In particular the Copdock and Washbrook Landscape Appraisal notes that Woods Hill forms a distinctive hillside and woodland, Church Lane is a sunken rural route and the isolated church of St Mary a local landmark which contributes to sense of place.
- 4.2.9 An additional complication to the routing of the proposed 400kV through these valley landscapes is the existing 132kV line which runs east west into Washbrook Street. The proposed 400kV line would need to cross this and this may require

¹⁰ Copdock and Washbrook Neighbourhood Plan Landscape Appraisal, Final Report, Alison Farmer Associates, September 2019, pages 24-26.

the 132kV to be undergrounded. These intimate valleys are generally more able to accommodate the smaller scale 132kV pylons than larger 400kV pylons. This, when taken together with the 'at capacity' judgment around Bramford and landscape sensitivities, strengthens the case to underground the proposed 400kV line between the Bramford Substation and Chattisham. The location of Sealing End Compounds would need to be kept back from the edge of the valleys and be located on the plateau landscape close to the substation and south of Coles Green Farm as indicated on Figure 4.

- 4.2.10 The flat and larger scale character of the plateau to the south could accommodate the proposed 400kV OHL, with careful siting of pylons and use of new and existing woodland to mitigate effects. There is no case for undergrounding the OHL in this section of the route.
- 4.2.11 Beyond the disused railway the land starts to slope into the upper reaches of the Samford Valley around Little Wenham. Here the cluster of outstanding historic assets including Little Wenham Hall, castle and church, set within intact pre18th century enclosure patterns, along with the dispersed form of settlement of Great Wenham and Holton St Mary, increase sensitivity. A further constraint is that of the active airfield to the north associated with Raydon, the preferred swathe keeping south of this area. As set out in the NG assessment and consultation documents the route through the Dedham Vale AONB is proposed for undergrounding. This means that a Sealing End Compound will need to be located on the northern side of the designation. Whilst a location south of Holton St Mary may seem suitable, the linear and dispersed form of settlement at Holton; historic environment sensitivities noted in the NG assessment; need to remain clear of the airfield at Raydon; and increasing sensitivity of the landscape around Little and Great Wenham; strengthens the case for starting the undergrounded section further north, as shown on Figure 5.
- 4.2.12 The NG Consultation Documents propose that the 400kV route is undergrounded where it crosses the Dedham Vale AONB. The selection of this route through the AONB was made on the basis of avoiding the central 'honeypot' sites around Flatford Mill and utilising the A12 as a means of separating the proposed routing from these sensitive locations. However, this preferred route still cuts through a central part of the designation, which is also valued, including a section of valley which is the setting to Stratford St Mary. Issues which are likely to arise with undergrounding through this section of the valley include the need to navigate the complex and wooded valley slopes which define the vale, the need to cross the river Stour west of Stratford St Mary and navigate various waterbodies on the valley floor, and also cross the Black Brook in a further parallel tributary valley to the south as well as the A12 near Langham. The Dedham Vale AONB report setting out the natural beauty and special qualities of the AONB along with perceived and anticipated risks¹¹ highlights that this landscape is particularly vulnerable to change which does not take account of effects on the immediate environment and also longer distant views across the valley. Taking the proposed swathe through the centre of the AONB is likely to disrupt longstanding and traditional landuse patterns and mature trees which would be difficult to fully repair or re-create, as noted in the historic environment appraisal which

¹¹ Dedham Vale AONB Natural Beauty and Special Qualities and Perceived and Anticipated Risks, Alison Farmer Associates, July 2016.

recommends the use of Horizontal Directional Drill (HDD) to minimise effects. The technical section indicates the need for three separate areas of HDD to overcome the River Stour, Black Brook and A12.

- 4.2.13 Furthermore, when reaching the southern side of the Dedham Vale AONB an OHL route is proposed which would head east towards the Lawford Substation crossing close to the settlement of Ardleigh Heath. A separate line would then leave Lawford substation and head west passing close to Ardleigh.
- 4.2.14 The preferred crossing of the AONB to the west of the A12, whilst attempting to avoid sensitive parts of the AONB, gives rise to challenges in the Ardleigh area (see below).

Reconsideration of an alternative route across Dedham Vale

- 4.2.15 Given the sensitivities noted above further, consideration was given to option BE2. This route comprises a relatively direct corridor passing through a more eastern part of the Dedham Vale AONB and through the westernmost part of the Suffolk Coast and Heaths AONB. In landscape terms the NG assessment concluded it was less favoured than option BE5 on the basis the latter was further from *'particularly highly valued parts of the Dedham Vale AONB'*. However, locating the 400kV route towards the eastern end of the AONB would mean that it was also away from the Flatford area. It has further advantages including being located close to other existing infrastructure associated with the A137 corridor.
- 4.2.16 It is acknowledged that BE2 affects the Cattawade Marshes SSSI and was not preferred from a Biodiversity and Ecology perspective, however it is also noted that the ecology and biodiversity assessment indicated an absence of data to establish a firm conclusion. The technical assessment considered that a c. 700-900m HDD would be required to cross the River Stour and Tidal area, and some increased technical complexity would arise, but concluded that the route would be low risk.
- 4.2.17 The adoption of a route which cuts across the eastern side of the Dedham Vale AONB also needs to be considered in the context of what happens to the north and also to the south of such a crossing. Figures 5-7 indicate an alternative route which departs from the preferred swathe north of Capel St Mary. From here it could assume the route of the existing 132kV line, which is highly utilised and or requiring reinforcement, and has the potential to rationalise this, incorporating it into the 400kV line.
- 4.2.18 South of Capel St Mary the route would need to cross the Suffolk Coast and Heaths AONB through the Samford Valley before heading east towards Brantham and the A137 corridor to cross Dedham Vale. Undergrounding would be required in both national designations and given the gap between them is a narrow interfluvium, there would be no point in a small section of OHL between the two. On this basis the proposed eastern route would require a relatively long stretch of undergrounding between Capel St Mary and Lawford Substation. Nevertheless, there would be several advantages to adopting an easterly route from a landscape perspective. These are set out below, and do not appear to have been given sufficient weight in the NG analysis.

4.2.19 Option BE2 would require undergrounding for a length of c.11.5km (very similar to BE5) and would require an HDD crossing of the two River Stour crossings at the location the river meets the associated estuary. It would:

- Cross the eastern end of the AONB and not affect the honey pot sites;
- Would be located close to existing infrastructure (road, railway and 132kV line);
- Would cross the AONB at a point where the valley sides are not as complex and shallower;
- Would be located further from settlement within the AONB;
- Would avoid cumulative effects with 132kV line approaching Lawford substation; and
- Would remove the need for two routes passing close to Ardleigh (see below).

4.2.20 On balance BE2 is considered to have several advantages over BE5 and therefore merits further consideration.

4.3 Lawford Substation and Ardleigh

4.3.1 The National Grid Consultation Documents refer to the preferred route around Ardleigh as Section F of BE5.

4.3.2 The issues identified in the NG Consultation Documents associated with this section are annotated on drawing 6 and would include two 400kV OHL in the vicinity of Ardleigh as indicated in paragraph 4.2.12 above.

4.3.3 The conclusions reached in the NG Consultation Documents in relation to this section are summarised below:

- Impact on residential properties where the line splits in two between Birchwood Road and Lawford substation and the other heading west from the substation. This would result in residences at Ardleigh Heath being surrounded on three sides and the village of Ardleigh experiencing a cumulative effect of OHL to the north, east and west.
- Cumulative effects of the proposed 400kV lines with existing 132kV lines converging on Lawford substation.

4.3.4 These issues arise in part due to the preferred swathe through the AONB to the west of the A12, and the need to connect into the Lawford Substation.

Baseline Landscape and Sensitivity

4.3.5 South of the DV AONB the landscape comprises Plateau Farmland Landscape Type and is relatively flat, containing small blocks of woodland and hedgerows with mature trees and many small lanes. This is a well settled landscape comprising both nucleated villages as well as a dispersed pattern of dwellings along roads. Some areas of the landscape show signs of field boundary loss resulting in a larger scale landscape with wider views. Around Ardleigh it becomes more open and larger scale and east of the railway line it is influenced by fruit growing and has a more empty and less settled character.

- 4.3.6 In the vicinity of the Lawford substation the convergence of existing 132kV lines has a cumulative effect, although this is very localised.
- 4.3.7 To the southwest of Ardleigh is Ardleigh reservoir which has scenic qualities and is highly valued at a local level.

The effects of the proposed route and case for undergrounding

- 4.3.8 The cumulative effect of two new 400KV lines on the communities of Ardleigh Heath and Ardleigh would be significant and adverse and would result in a characterising influence on the surrounding landscape. There is a strong weight of evidence to suggest that the 400kV line should remain undergrounded through this section as far as the Lawford substation, given that any sealing end compounds would need to be located away from the edge of the AONB, combined with the likely effects of an OHL on residences at Ardleigh Heath.
- 4.3.9 Similarly, the 400kV route from the substation heading west should remain undergrounded until west of the village of Ardleigh as illustrated on Figure 6 give the proximity of the route to local communities.

Reconsideration of an alternative route at Ardleigh

- 4.3.10 The re-consideration of BE2 would negate the need to have a 400kV line to the north and east of Ardleigh Heath. This would potentially reduce the length of undergrounding by some 5.9km. On this basis there is a strong argument to consider BE2 in detail and to make a more detailed comparison between this option with the preferred swathe.

5 Conclusions

5.1 Recommendations

5.1.1 The considerations of landscape and visual effects of new OHLs is complex, not least because the landscape through which the proposed route passes, is already affected by high voltage electricity infrastructure.

5.1.2 The purpose of this assessment was to consider if there is a case for undergrounding sections of the preferred swathe. This has required a review of the existing consultation documents and has revealed several issues with the approach and assessment undertaken to date including:

- Variations in reporting on sensitivity;
- Differing weight given to past SLA;
- Lack of consideration of other existing OHLs; and
- Identification of a preferred swathe which solves one problem but creates a further problem elsewhere.

5.1.3 There are some basic principles which are important to consider when making judgments on landscape and visual effects as follows:

- Given the high number of existing OHL within the receiving landscape Holford Rule 6 is particularly important. A coherent arrangement of OHLs is required. Close paralleling can help to achieve this while placing 400kV close to smaller 132kV lines, within complex valley topography can cause clutter and visual confusion
- The Suffolk landscape is subtle with gentle changes in topography and small-scale intimate river valleys. Those landscapes which are less sensitive to large scale pylons are the plateau landscapes where their scale and opportunities to mitigate enables OHL to be integrated more successfully. This is reflected in the current route of the 400kV between Diss and Bramford.
- If possible, it is best to limit the geographical extent over which effects are felt. This can be achieved through close paralleling routes but also through the rationalisation of the existing 132kV lines which require upgrading.
- T pylons are unlikely to reduce the effects of a new 400kV line simply because of the existence of so many OHL which comprise traditional lattice style pylons. Introducing a new vertical element is likely to result in further visual confusion.

5.1.4 This review has concluded that there are several locations where there is a weight of evidence to suggest undergrounding of the proposed route in addition to undergrounding across the Dedham Vale AONB. However, it has also revealed the need to review alternative options particularly where they allow for close paralleling thereby limiting the geographical extent over which effects are felt. These conclusions are reached having taken account of landscape character but also valued landscapes and considering the opportunities for rationalising the 132kV line as part of a 'tidy up' of current wire-scapes affecting the study area.

Appendix A:

Sensitivity Categories Utilised in the Bramford to Twinstead Assessments

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Appendix 5.1 Assessment Criteria

Table 1.1: Value and Sensitivity for Each Topic

Value/Sensitivity	Descriptor	
Landscape and Visual	Landscape Criteria	Visual Criteria
Very high	The key characteristics and qualities of the landscape are very highly susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is notably high. Key landscape characteristics are very highly vulnerable and unable to accommodate the project without significant consequences for character.	Locations which people might visit purely to experience a highly scenic view, and which typically offer a prolonged viewing opportunity, including: • panoramic viewpoints (often marked on OS plans and providing interpretation facilities); • mountain and hilltops; • tourist, visitor and other destinations where the view is of paramount importance and contributes to the experience; and • publicly accessible heritage destinations affording a specific, important and highly valued view (note: the visual assessment will consider people as receptors and not the heritage asset itself).
High	The key characteristics and qualities of the landscape are highly susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is medium-high to high. Key landscape characteristics are highly vulnerable and unable to accommodate the project without significant consequences for character.	Locations where people are likely to pause to appreciate a scenic view, including: • local communities within which people are living and moving around; • promoted scenic drives or tourist routes; • designed landscapes/parks and gardens with specific views/vistas/borrowed landscapes and visual experiences which are fundamental to the appreciation of the attraction; • tourist, visitor or heritage destinations where views of the surroundings are fundamental to the experience (note: the visual assessment will consider people as receptors and not the heritage asset itself. Impacts on heritage assets and their setting will be considered in Chapter 8: Historic Environment); • viewpoints marked on road atlases, or referred to in guidebooks, and which have brown road signage and/or interpretation boards; and • nationally/regionally promoted walks and cycle routes.

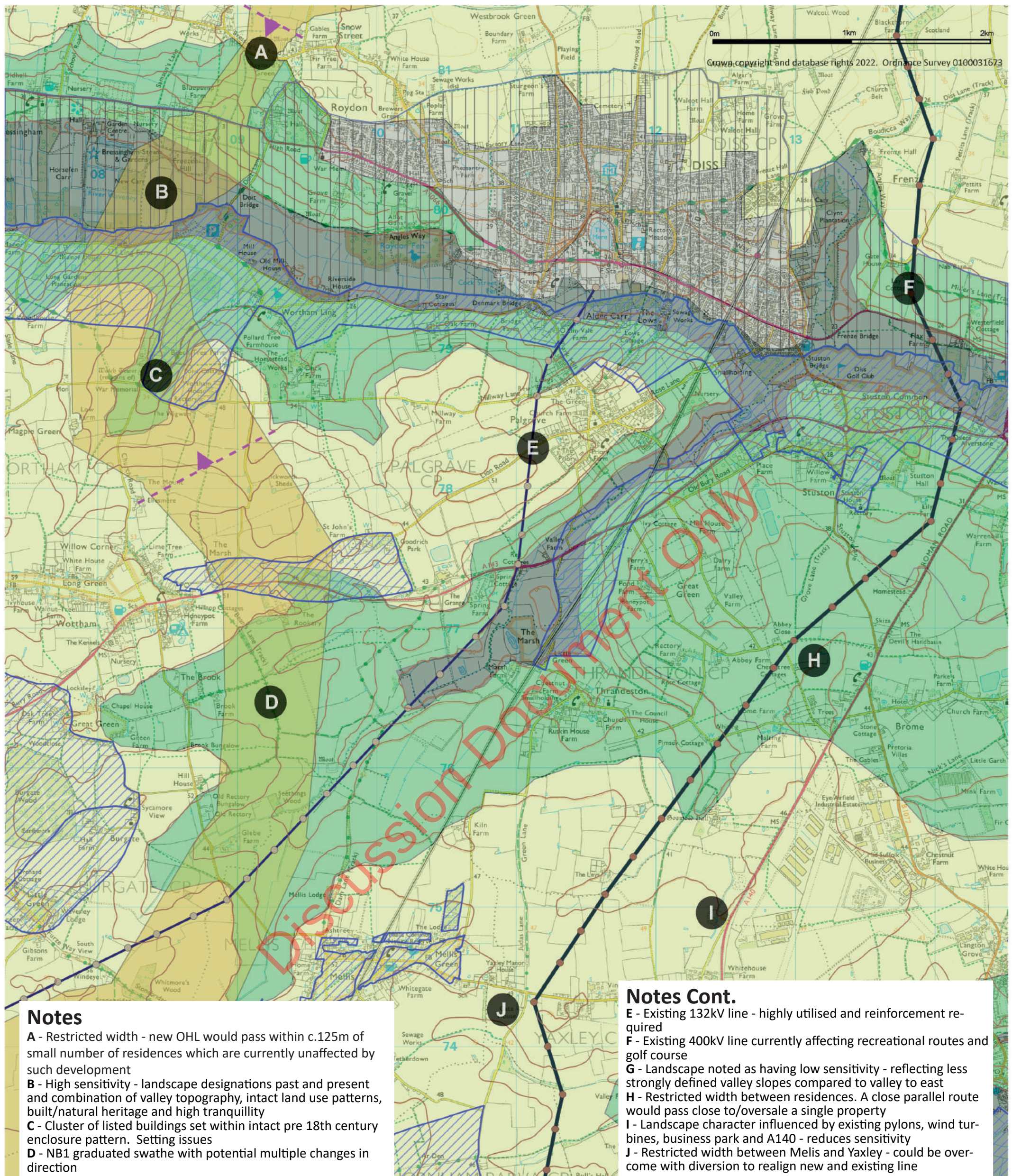
Value/Sensitivity	Descriptor	
Medium-High	The key characteristics and qualities of the landscape are very susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is medium to medium-high. Key landscape characteristics are vulnerable and unable to accommodate the project without some significant consequences for character. Parts of the landscape may be able to accommodate the project but only in limited situations without significant character change or adverse effects.	Not applicable for visual.
Medium	Some of the key characteristics and qualities of the landscape are susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is medium-low to medium. Although the landscape may be able to absorb some development if sensitively sited and designed, it may introduce new inappropriate characteristics or result in a change in character. Parts of the landscape may have potential to accommodate the project in some defined situations without significant character change or adverse effects.	People with a general interest in their surroundings or with transient viewing opportunities combined with a view of average scenic quality, including: • people using incidental footpaths and local Public Rights of Way (PRoW); • people travelling on residential distributor routes and the local road network; • people using general public open spaces, greenspace, recreation grounds and play areas; • people in rural offices and business parks; and • rural outdoor workers and those engaged in marine surface-based activities such as fishing.
Medium-Low	Few of the key characteristics and qualities of the landscape are susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is medium-low to medium-high.	Not applicable for visual.

Value/Sensitivity	Descriptor
Low	Key characteristics and qualities of the landscape are robust or degraded and are not susceptible to change; and/or the value of the landscape is low. The landscape is unlikely to be adversely affected by the type and scale of the project being assessed. People with limited opportunity to enjoy the view due either to the speed of travel or because their attention is elsewhere, combined with a view of limited scenic quality, including: • workers in industrial and commercial buildings; • people in schools; • people travelling on main roads (although susceptibility may be higher in scenic locations); • people in indoor facilities; • commuters; and • people engaged in outdoor sport or recreation which does not depend on an appreciation of views of their surroundings.
Biodiversity	
Very high (international importance)	Very high importance and rarity, international scale and very limited potential for substitution. European and international designated sites for example: • Special Protection Areas (SPAs) and potential SPAs; • Special Areas of Conservation (SACs) and candidate or possible SACs; and • Wetland of International Importance (Ramsar sites).
High (national importance)	High importance and rarity, national scale, and limited potential for substitution, for example: • statutory designated sites comprising Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs); • 'Irreplaceable natural habitat', e.g. ancient woodland, veteran trees, blanket bog, limestone pavement, sand dunes, saltmarsh and lowland fen; • species recorded as 'critically endangered' under the International Union for Conservation of Nature Red List of Threatened Species; resident or regularly occurring populations of species which may be considered at an international or national level where either of the following criteria is met: the loss of these populations would adversely affect the conservation status or distribution of the species at this geographic scale; or the population forms a critical part of a wider population at this scale; and • Nationally Rare or Scarce taxa: Nationally Rare taxa are those occurring in 15 or fewer 10x10km OS grid-squares in the UK; Nationally Scarce species are those occurring in 16-99 10x10km squares.

Appendix B:

Figures

Discussion Document Only



Notes

- A** - Restricted width - new OHL would pass within c.125m of small number of residences which are currently unaffected by such development
- B** - High sensitivity - landscape designations past and present and combination of valley topography, intact land use patterns, built/natural heritage and high tranquillity
- C** - Cluster of listed buildings set within intact pre 18th century enclosure pattern. Setting issues
- D** - NB1 graduated swathe with potential multiple changes in direction

Notes Cont.

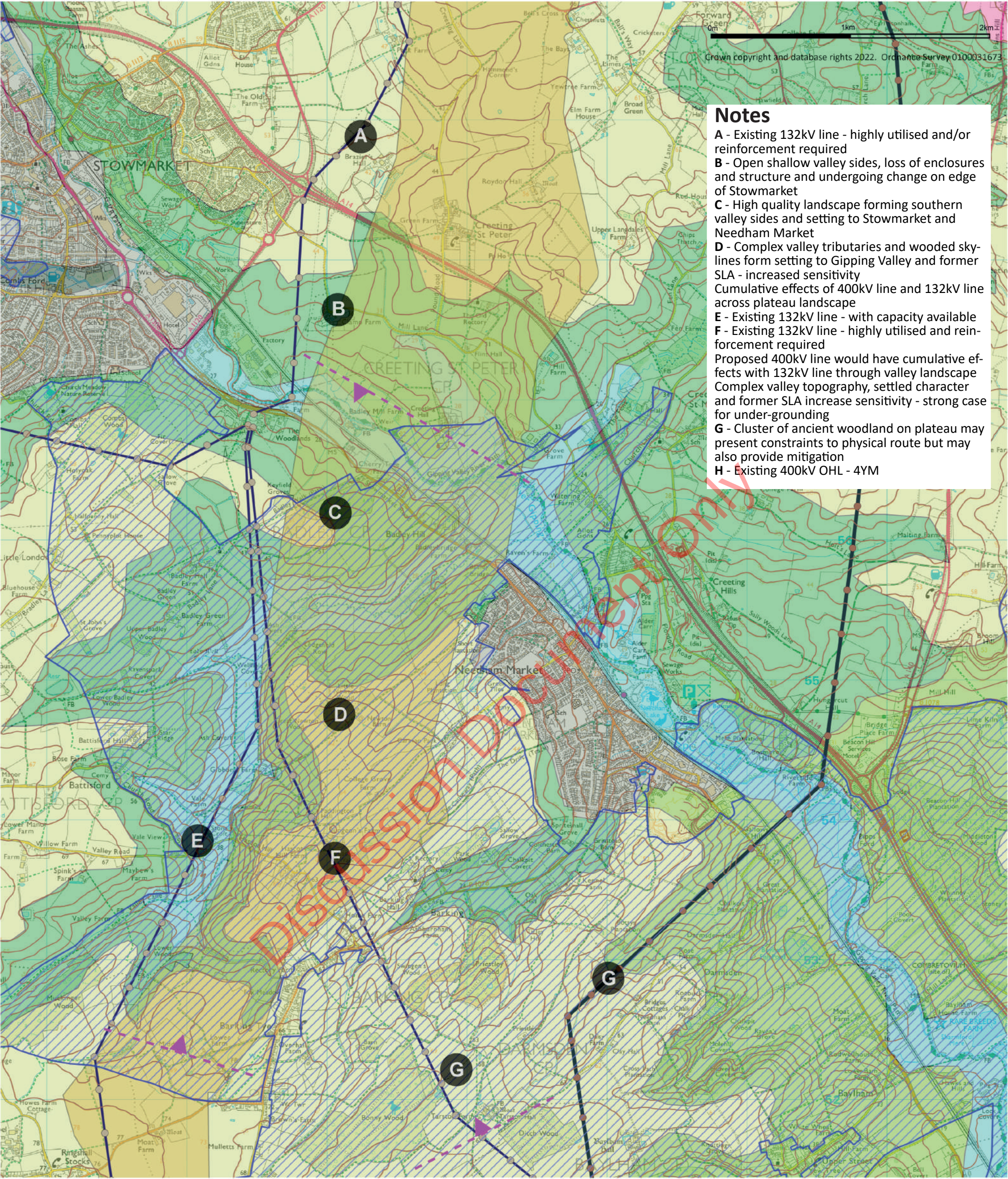
- E** - Existing 132kV line - highly utilised and reinforcement required
- F** - Existing 400kV line currently affecting recreational routes and golf course
- G** - Landscape noted as having low sensitivity - reflecting less strongly defined valley slopes compared to valley to east
- H** - Restricted width between residences. A close parallel route would pass close to/oversale a single property
- I** - Landscape character influenced by existing pylons, wind turbines, business park and A140 - reduces sensitivity
- J** - Restricted width between Melis and Yaxley - could be overcome with diversion to realign new and existing line

Key

	Graduated Swathe BE5		Existing 132kV OHL
	Wooded Plateau Claylands		Existing 400kV OHL
	Valley Settled Farmlands		Bramford Substation
	Wooded Fen		Potential location for Sealing End Compound
	Mid Suffolk Special Landscape Area		South Norfolk Landscape Designation

National Grid East Anglian Green

Figure 1: Waveney Valley



Notes

A - Existing 132kV line - highly utilised and/or reinforcement required

B - Open shallow valley sides, loss of enclosures and structure and undergoing change on edge of Stowmarket

C - High quality landscape forming southern valley sides and setting to Stowmarket and Needham Market

D - Complex valley tributaries and wooded sky-lines form setting to Gipping Valley and former SLA - increased sensitivity

Cumulative effects of 400kV line and 132kV line across plateau landscape

E - Existing 132kV line - with capacity available

F - Existing 132kV line - highly utilised and reinforcement required

Proposed 400kV line would have cumulative effects with 132kV line through valley landscape

Complex valley topography, settled character and former SLA increase sensitivity - strong case for under-grounding

G - Cluster of ancient woodland on plateau may present constraints to physical route but may also provide mitigation

H - Existing 400kV OHL - 4YM

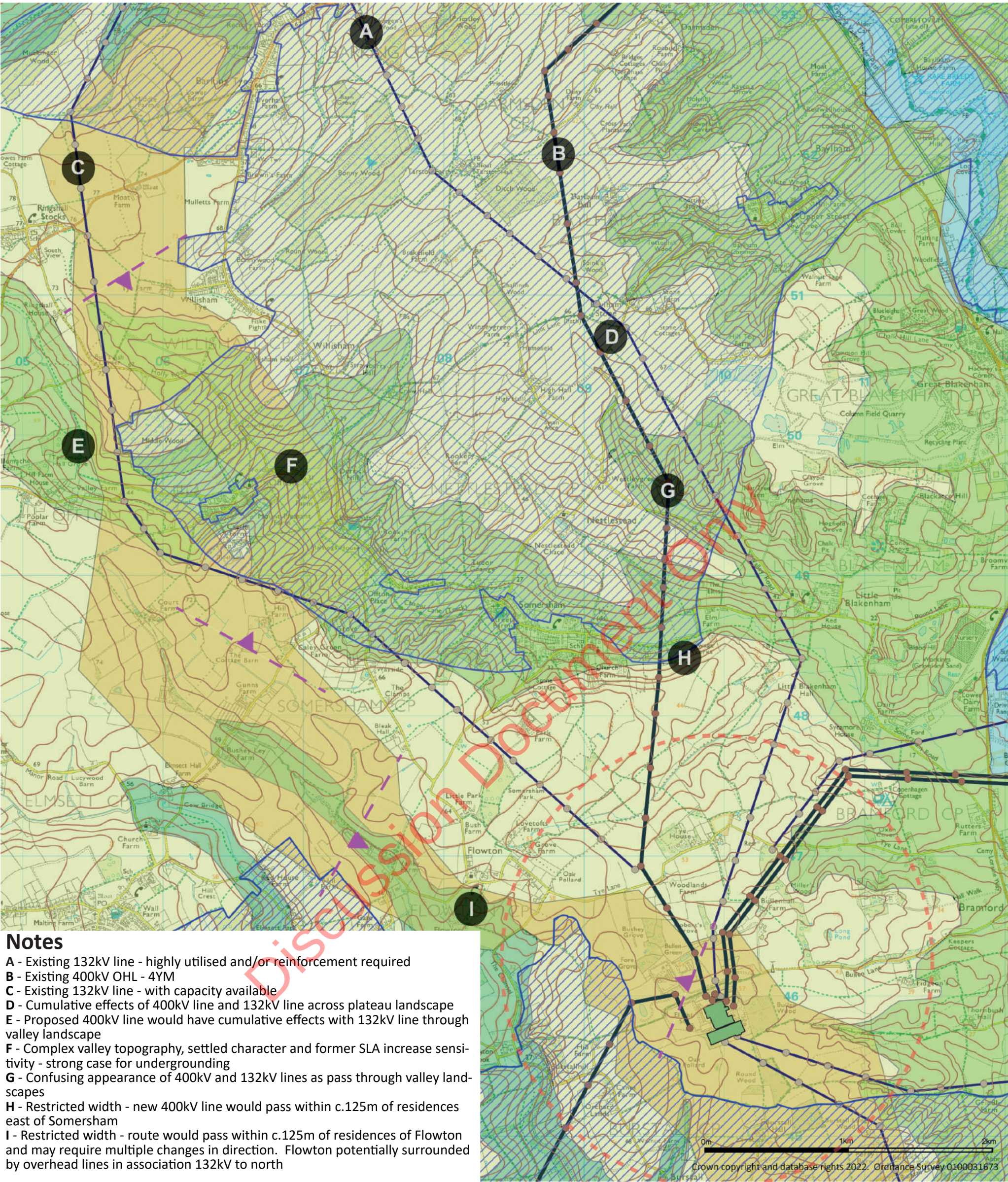
Key

	Graduated Swathe NB1		Special Landscape Area
	Ancient Plateau Claylands		Existing 132kV OHL
	Rolling Valley Farmlands		Existing 400kV OHL
	Valley Meadowlands		Bramford Substation
	Rolling Estate Farmlands		Potential location for Sealing End Compound

National Grid East Anglian Green

Figure 2: Gipping Valley

landscape architecture and environmental planning

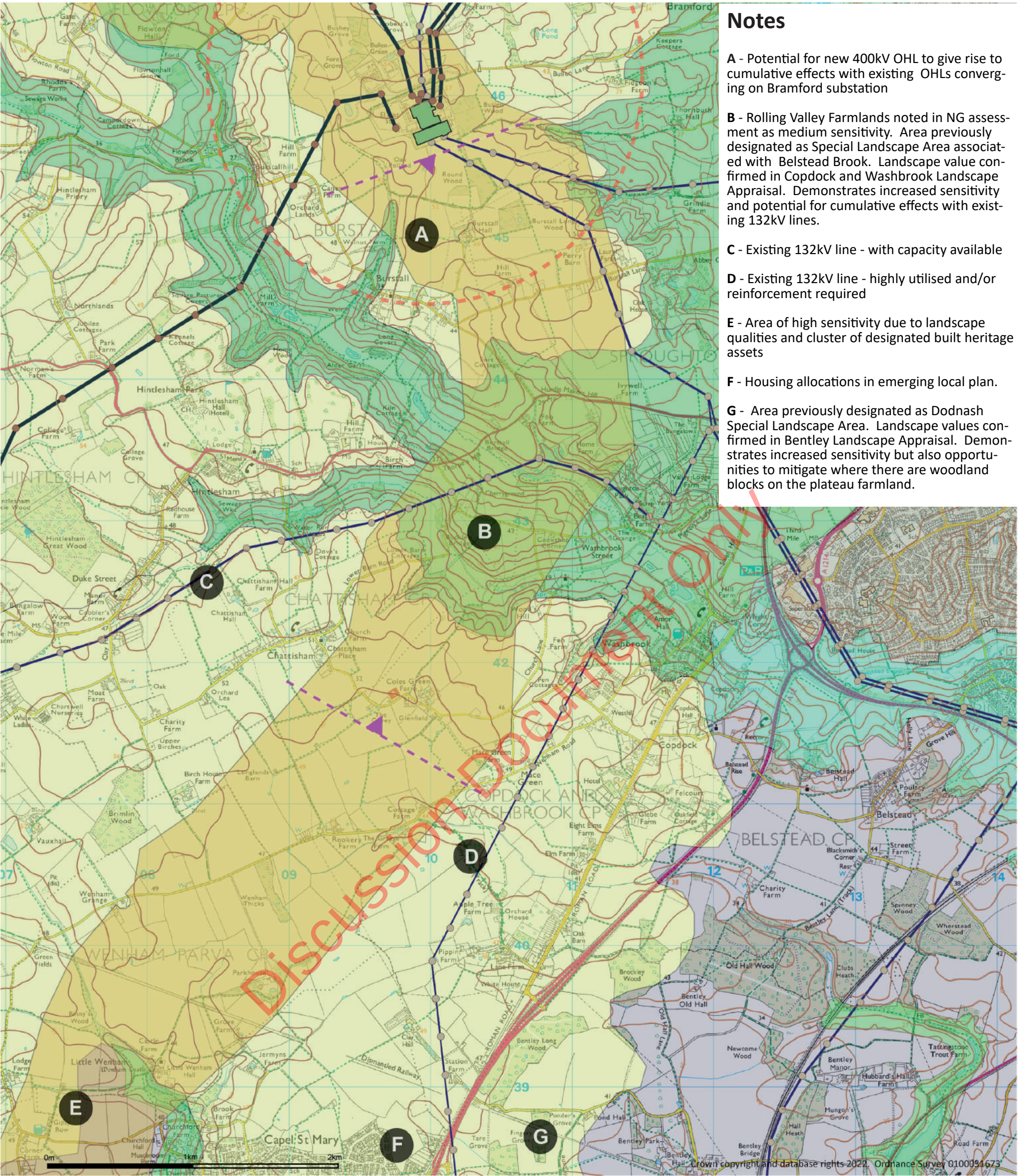


- Notes**
- A - Existing 132kV line - highly utilised and/or reinforcement required
 - B - Existing 400kV OHL - 4YM
 - C - Existing 132kV line - with capacity available
 - D - Cumulative effects of 400kV line and 132kV line across plateau landscape
 - E - Proposed 400kV line would have cumulative effects with 132kV line through valley landscape
 - F - Complex valley topography, settled character and former SLA increase sensitivity - strong case for undergrounding
 - G - Confusing appearance of 400kV and 132kV lines as pass through valley landscapes
 - H - Restricted width - new 400kV line would pass within c.125m of residences east of Somersham
 - I - Restricted width - route would pass within c.125m of residences of Flowton and may require multiple changes in direction. Flowton potentially surrounded by overhead lines in association 132kV to north

Key	
	Graduated Swathe NE1
	Wooded Plateau Claylands
	Estate Farmland
	Valley Settled Farmland
	Special Landscape Area
	Existing 132kV OHL
	Existing 400kV OHL
	Bramford Substation
	Potential location for Sealing End Compound
	Cummulative effects of converging lines

National Grid East Anglian Green

Figure 3: North Bramford



Notes

- A - Potential for new 400kV OHL to give rise to cumulative effects with existing OHLs converging on Bramford substation
- B - Rolling Valley Farmlands noted in NG assessment as medium sensitivity. Area previously designated as Special Landscape Area associated with Belstead Brook. Landscape value confirmed in Copdock and Washbrook Landscape Appraisal. Demonstrates increased sensitivity and potential for cumulative effects with existing 132kV lines.
- C - Existing 132kV line - with capacity available
- D - Existing 132kV line - highly utilised and/or reinforcement required
- E - Area of high sensitivity due to landscape qualities and cluster of designated built heritage assets
- F - Housing allocations in emerging local plan.
- G - Area previously designated as Dodnash Special Landscape Area. Landscape values confirmed in Bentley Landscape Appraisal. Demonstrates increased sensitivity but also opportunities to mitigate where there are woodland blocks on the plateau farmland.

Key

Graduated Swathe BE5

Wooded Plateau Claylands

Valley Settled Farmlands

Wooded Plateau Farmlands

Special Landscape Area

Existing 132kV OHL

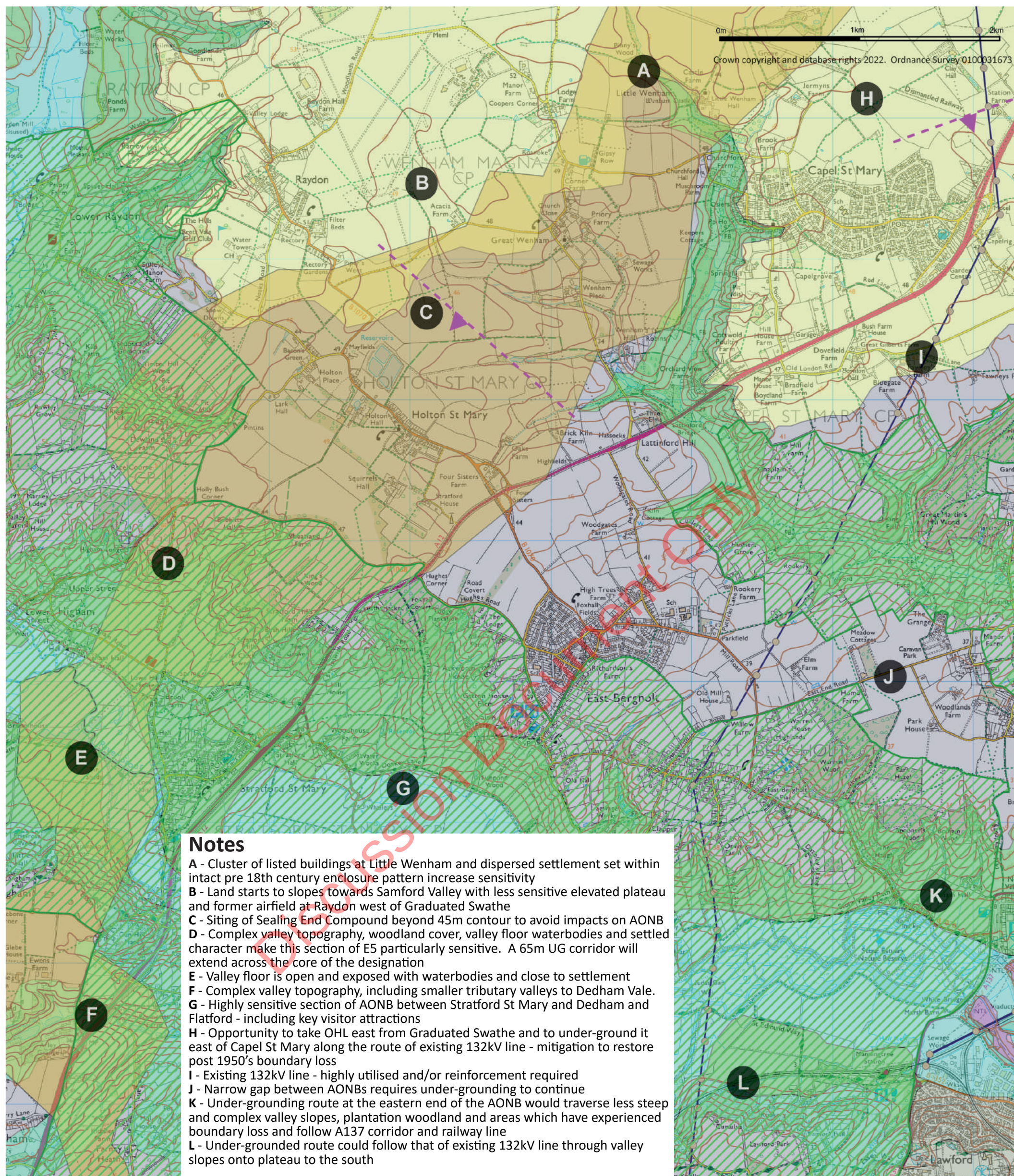
Existing 400kV OHL

Bramford Substation

Potential location for Sealing End Compound

Cummulative effects of converging lines

National Grid East Anglian Green
Figure 4: Bramford to Capel St Mary

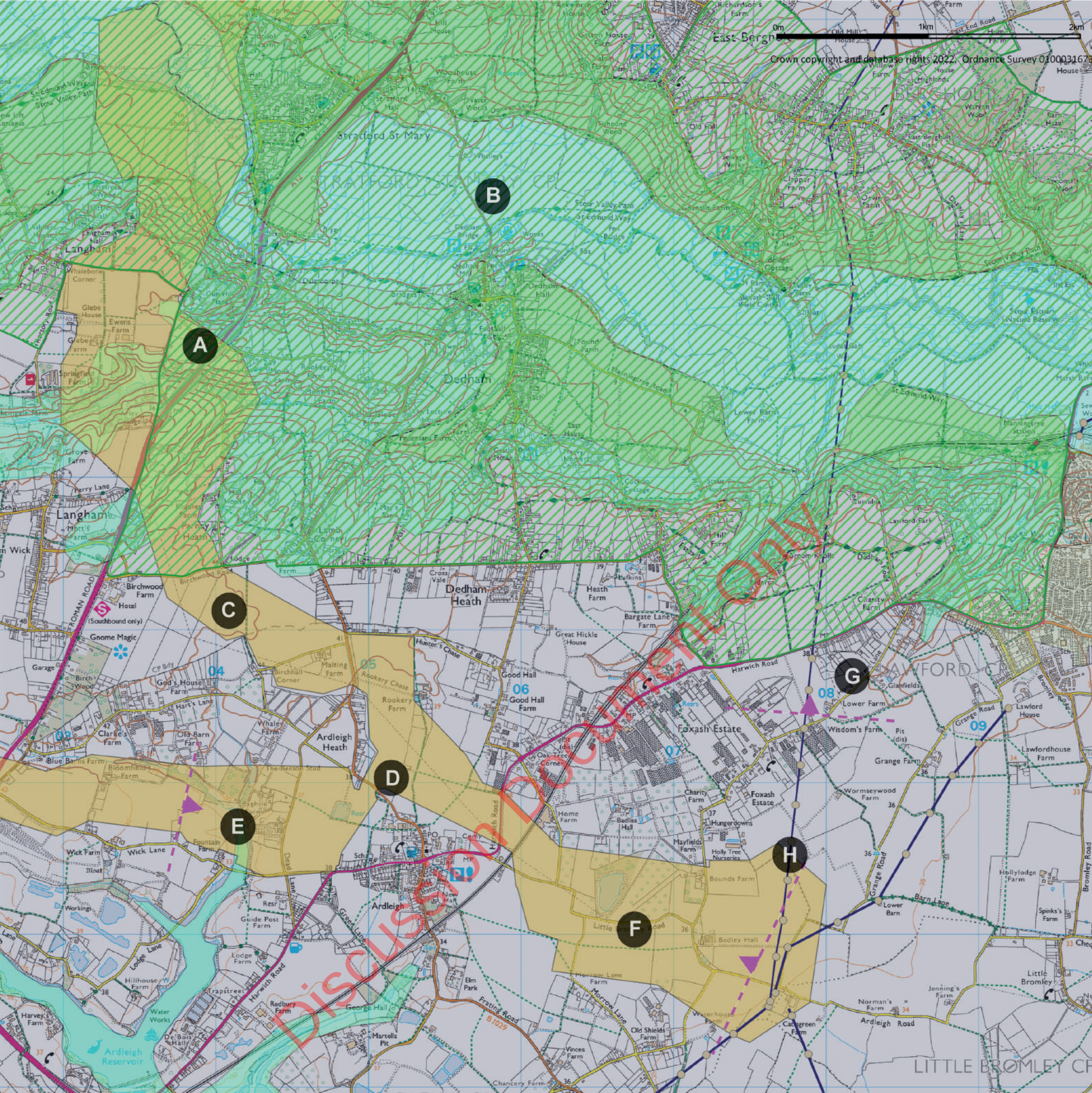


Key

	Graduated Swathe NB1		Area of Outstanding Natural Beauty
	Wooded Plateau Claylands		Existing 132kV OHL
	Wooded Plateau Farmlands		Existing 400kV OHL
	Valley Settled Farmlands		Bramford Substation
	Valley Meadowlands		Potential location for sealing end compound

National Grid East Anglian Green

Figure 5: Dedham Vale



Notes

- A - Complex, wooded, tributary valleys to Dedham Vale - increase sensitivity
- B - Highly sensitive section of AONB between Stratford St Mary and Dedham and Flatford - including key visitor attractions
- C - Limited space for siting of Sealing End Compound outside of AONB, set back from valley and within settled landscape
- D - 400kV OHLs to and from Lawford Substation impact on residences along Hart's Lane, Ardley Heath and Ardleigh. Restricted width between Ardleigh Heath & Ardleigh
- E - Attractive water landscape associated with Ardleigh Reservoir
- F - Less settled plateau landscape west of substation
- G - Site of Sealing End Compound south of Norwich Road set back from edge of AONB and valley slopes
- H - 400kV line to potentially replace existing 132kV line, reducing cumulative effects on approach to Lawford Substation and removing need for a 400kV line in and out of Lawford Substation in the vicinity of Ardleigh

Key

Graduated Swathe NB1

Wooded Plateau Farmlands

Valley Settled Farmlands

Valley Meadowlands

Wooded Farmlands

Area of Outstanding Natural Beauty

Existing 132kV OHL

Existing 400kV OHL

Potential location for sealing end compound

National Grid East Anglian Green
Figure 6: Lawford and Ardleigh Area

NORWICH TO TILBURY

EN020027

Joint Local Impact Report

Appendix 2 (National Grid's RIIO-T3 Business Plan, 2024)

Suffolk County Council FC74BF695

nationalgrid

RIIO-T3 Business Plan

National Grid Electricity
Transmission's Business Plan

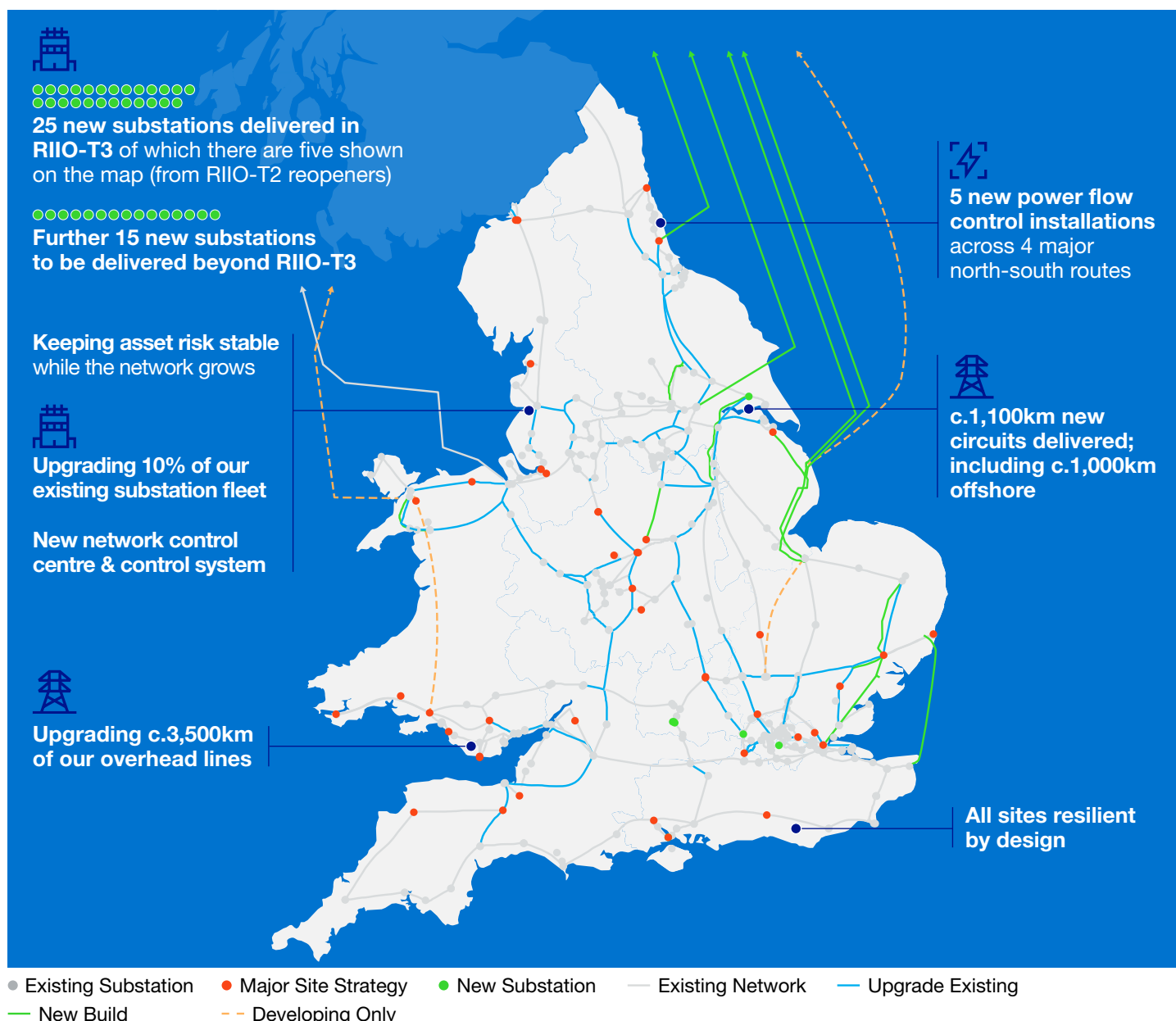


View the
digital plan

December 2024

Highlights of our RIIO-T3 plan

What we are delivering on the network



Map is illustrative. New build and some upgrades are at various stages of development and planning. The lines shown here should therefore not be regarded as defined or proposed routes but reflective of various required reinforcements published by NESO. Includes baseline and pipeline projects.

Major site strategy includes existing substations where we plan a rebuild or significant extension (> £20m). Does not include new tCSNP2 circuits onshore and offshore which are subject to the outcome of NESO's tCSNP2 refresh.

Outcomes for customers, consumers & communities

- ◆ **Nearly doubling** the power that can flow across the country
- ◆ **Avoiding c.£12bn** of constraint costs, equivalent to £40 per year for consumers
- ◆ **Connecting 35 GW** generation and **19 GVA** demand
- ◆ **Supporting growth of British businesses and decarbonisation** of our economy
- ◆ **Keeping the lights on,** with **99.9999% reliability**

How we are delivering responsibly

- ◆ **0.7% efficiency year-on-year**
- ◆ **50% reduction in our own emissions**
- ◆ **Leaving a legacy of community and regional benefits**
- ◆ **Grow workforce by c.50% and improve diversity to better reflect our communities**
- ◆ **Biodiversity net gain for equivalent of >8,000 acres of land, 7x impact vs. RIIO-T2**

Throughout this document we refer to power generation and storage in GW (one billion watts) and power supply in GVA (one billion volt-amperes)

4.3 Mitigating the visual impacts of our network

Baseline £0.33bn
Pipeline -

Our RIIO-T3 objective:
Play a leading role in accelerating a net zero, nature positive future, including by reducing our own emissions and environmental impact

Views from stakeholders and customers

- We have agreed the three Visual Impact Provision projects to complete during the RIIO-T3 period with the Stakeholder Advisory Group. The group strongly supports the continuation of funding for LEI projects.
- Our local community engagement continues to highlight opportunities for visual improvement, which is considered for each new build project to protect natural beauty as far as reasonably possible.

Our commitments:		Success measure / target
B4.12	Honour our commitment to visual improvement and invest in preserving natural beauty where new infrastructure is needed	• Deliver three ongoing VIP projects by 2031 (Eryri, the Cotswolds and North Wessex Downs) • Invest in preserving natural beauty where new infrastructure is needed

Visual Impact Provision (VIP)

Ofgem put in place a VIP provision across Great Britain to carry out work which will help to reduce the impact of existing electricity transmission lines in English and Welsh AONBs and National Parks.

We have completed major landscape transformation projects in Dorset and the Peak District removing a total of 29 pylons and undergrounding 10.3 km of overhead line to restore the natural beauty of these areas.

We have followed Ofgem's recommendation not to initiate any new VIP projects during RIIO-T3 as it would limit our work elsewhere. Instead, we expect to complete the three in-flight projects that have been agreed by the VIP Stakeholder Advisory Group since these initiatives deliver improved visual impact and upgraded capacity needed for the connection of renewable generation.

Landscape Enhancement Initiative (LEI)

The LEI makes a positive contribution to natural beauty, wildlife and biodiversity, cultural heritage, and public enjoyment by carrying out improvements that shift emphasis away from the impact of existing transmission infrastructure, such as tree planting, changes to public access (cycleways, footpaths, etc.) and enhance historic features.

We have invested around £9m for improvement projects, including a new accessible boardwalk at RSPB Minsters in the Suffolk Coast and Heaths National Landscape that won an Accessible & Inclusive Tourism Award and farmer-led initiatives in the Clwydian Range and Dee Valley AONB.

Our RIIO-T3 investments

Investments	Description	Baseline	Pipeline
Mitigating the visual impacts of our network		£0.33bn	-
Eryri	Remove 3 km of overhead line and 10 pylons		
North Wessex Downs	Replace 4.6 km of overhead and 13 pylons		
Cotswolds	Remove 7 km of OHL near the Cotswold Way National Trail		
LEI	Local improvements for positive contributions to natural beauty, biodiversity, cultural heritage, and public enjoyment		

National Grid plc

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NORWICH TO TILBURY

EN020027

Joint Local Impact Report

Appendix 3 (National Grid's Visual Impact Provision (D6), 2021)

Suffolk County Council FC74BF695

VISUAL IMPACT PROVISION

How we intend to reduce the visual impact of existing electricity transmission lines in Areas of Outstanding Natural Beauty and National Parks

Contents

01 Introduction

02 What can the Visual Impact Provision be used for?

03 How we will use the Visual Impact Provision

04 The Guiding Principles

05 Engagement with stakeholders

06 Working with other transmission and distribution owners

07 Review of this document

08 Contacts

01: Introduction

National Grid is funded by a price control mechanism which is agreed with and set by Ofgem, the electricity and gas markets regulator. Ofgem and National Grid have agreed a set of price controls and incentives for the period from April 2021 to March 2026¹.

The price controls and incentives include a provision of £465 million² for electricity transmission owners to mitigate the visual impact of existing electricity infrastructure in nationally protected landscapes in Great Britain. For National Grid, which is the electricity transmission owner in England and Wales, this means considering the visual amenity of our existing infrastructure in Areas of Outstanding Natural Beauty (AONBs) and National Parks. We call this the 'Visual Impact Provision'.

AONBs and National Parks are nationally important landscapes with statutory protection. At National Grid we are passionate about playing our part in conserving and enhancing the natural beauty, wildlife and cultural heritage of these landscapes. By making use of this fund, we are doing as much as we possibly can to conserve and enhance England and Wales' most valued landscapes.

We are seizing the opportunity the fund creates to work collaboratively with stakeholders to achieve this. We are of course working in accordance with our statutory duties and licence obligations³ and national planning policy⁴. In particular, we have duties to maintain our network in an economical and efficient way, to preserve amenity, and to conserve and enhance the natural beauty, wildlife and cultural heritage of the AONBs and National Parks.

This document has been prepared as our Visual Impact Provision policy on how we are using the fund and working with our stakeholders to identify opportunities for maximising benefits from it.

Our objective is to achieve the maximum enhancement to the landscape from the available funds whilst ensuring that no significant adverse impacts arise as a result.

This policy document sets out our approach to achieving our objectives, including the identification of a set of guiding principles, the creation of a Stakeholder Advisory Group consisting of stakeholders with national remits for England and Wales, and ways of engaging other stakeholders. We are committed to using the Visual Impact Provision in a collaborative and transparent way.

¹ RIIO T2

² £465m in 2018-19 prices.

³ Section 11A(2) of the National Parks and Access to the Countryside Act 1949; Section 85 of the Countryside and Rights of Way Act 2000. We have summarised our duties on our VIP website www.nationalgrid.com/uk/electricity-transmission/network-and-infrastructure/visual-impact-provision

⁴ Para. 176 and Para. 180 of the National Planning Policy Framework (July 2021); Paras. 6.3.10, 6.3.16 and 6.4.4 of Planning Policy Wales (Edition 11, February 2021); Paras. 5.9.9-5.9.13 of Overarching National Policy Statement for Energy (EN-1) (2011); Para. 2.2.6 of National Policy Statement for Electricity Networks Infrastructure (EN-5) (2011)

02: What can the Visual Impact Provision be used for?

National Grid's Visual Impact Provision applies to existing electricity infrastructure in designated AONBs and National Parks in England and Wales. This infrastructure mainly comprises our existing high voltage (400,000 and 275,000 Volt) overhead electricity transmission lines.

The Visual Impact Provision can, where justified in relation to the relevant special licence condition, also apply to lines adjacent to protected landscapes⁵, where an effect can be shown to their setting. Examples of how the fund could be used are:

- landscape enhancements
- screening substations or overhead lines from key public viewpoints
- use of alternative pylon designs, such as lower-height pylons
- re-routeing or rationalising existing lines
- whole or partial replacement of existing overhead lines with underground cables
- innovative ways of painting pylons to reduce their visual impact
- initiatives in National Park and AONB management plans, where these can be clearly shown to directly meet the purpose of using Visual Impact Provision to mitigate the visual impact of our electricity infrastructure
- measures that could help divert attention away from the overhead line
- other visual impact measures recommended by stakeholders

The research⁶ we have conducted to establish the 'willingness to pay' of consumers indicates that the majority of consumers favour 'undergrounding', followed by screening with trees, an alternative pylon design and re-routeing. We are therefore using a significant portion of the funds for placing existing lines, or parts of them, underground. Along with our stakeholders, we also consider it is advantageous to deliver cheaper and simpler but nonetheless highly effective enhancements such as localised screening, which can be delivered over a shorter period of time, as well as more major undergrounding projects. The final proposals put forward for funding are informed by our engagement with stakeholders.

The Visual Impact Provision does not apply to:

- the construction of new transmission lines and other new transmission infrastructure; the visual impact of these is addressed through the planning and consent process before the infrastructure is constructed
- other infrastructure operated by National Grid.
- other landscape, heritage and ecological designations – such as World Heritage Sites, Heritage Coasts, conservation areas, scheduled monuments, Sites of Special Scientific Interest, Special Areas for Conservation, Local Wildlife Sites – although these are likely to be factors for consideration where they are located within or adjacent to an AONB or National Park
- infrastructure owned and operated by other businesses (e.g. lower voltage lines, typically carried on smaller pylons or wooden poles, used for electricity distribution)

⁵ RII0-2 Final Determinations - NGET Annex (REVISED) pages 30 – 31

https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determination_nget_annex_revised.pdf

⁶ See Consumer Willingness to Pay research, National Grid Electricity Transmission (December 2019)
<https://www.nationalgrid.com/uk/electricity-transmission/document/132056/download>

- areas which are not yet designated as AONBs or National Parks. However, as and when new areas are designated, lines within them will be eligible for consideration under the Visual Impact Provision

Where replacement or maintenance activity is planned on a line, the allowance will not be used to pay for this. However, when estimating the costs for mitigation options, consideration will be given to possible cost savings resulting from coordination with planned works (e.g. other works in the vicinity of potential enhancement proposals, or planned maintenance to the candidate line which would otherwise be carried out).

“We are committed to using the Visual Impact Provision in a collaborative and transparent way.”

03: How we are using the Visual Impact Provision

We are using the Visual Impact Provision to mitigate the visual impact of our electricity transmission infrastructure in the most precious landscapes. Our objective in using the allowance is therefore to achieve the maximum enhancement to the landscape in England and Wales from the available funds whilst ensuring that no significant adverse impacts arise as a result.

National Grid has contributed technical appraisals to refine these priorities. We ensured that the opinions of local stakeholders were fed into the process. As detailed proposals emerged, technical, cost and environmental factors were assessed.

In this way, we have ensured that stakeholders have had a substantial input in determining how the Visual Impact Provision is used and how National Grid takes forward proposals. A substantial proportion of the engagement activities occurred near to the start of the process, to ensure that stakeholder views were taken into account at the earliest stage and we have the best chance of using the Visual Impact Provision effectively.

Landscape Assessment Methodology

Alongside this policy, we have published a Landscape and Visual Impact Assessment methodology⁷ which, in consultation with stakeholders, we have used as the basis for prioritising our response to impacts on the landscape.

Our Project

The process on the next page shows how we identified the projects to take forward as candidates for funding. Section 04 sets out the Guiding Principles and explains in further detail how we engage with our stakeholders to help us decide how to use the Visual Impact Provision. To deliver cheaper and simpler projects that do not involve engineering works on National Grid electricity infrastructure, such as localised screening, we have the Landscape Enhancement Initiative. We have published an annex to this policy that explains how this initiative will work⁸.

⁷ The Landscape and Visual Impact Assessment Methodology is based on the framework set out in Guidelines for Landscape and Visual Impact Assessment (GLVIA) (3rd Edition) (2013) published by Routledge on behalf of the Landscape Institute and the Institute of Environmental Management and Assessment. A copy of our methodology can be found on our VIP website <https://www.nationalgrid.com/uk/electricity-transmission/document/84136/download>

⁸ Annex to VIP Policy: Landscape Enhancement Initiative <http://lei.nationalgrid.com/media/1100/lei-policy-doc.pdf>

1) Identification of potential candidate areas

We have identified the full list of National Grid's electricity assets that run through AONBs and National Parks.

We have also identified other transmission lines that lie adjacent and in reasonable proximity to an AONB or National Park that impact the landscape and visual setting of the designated area.

Stakeholder Advisory Group – Considered relevant information and set priorities for the use of the Visual Impact Provision, in accordance with the Guiding Principles in Section 04.

National Grid – Provided technical inputs and resources to ensure that our statutory duties are met and to make the final decisions on which projects are submitted for funding.

2) Assessment of landscape and visual impacts in priority areas

All potential candidate areas were assessed to identify the importance of the landscape and the visual effects of the existing line. These assessments were conducted by qualified landscape architects and the results discussed by the Stakeholder Advisory Group.

The results were converted into a simple scoring system that was used to give each assessment section an overall score.

Further detail on this is set out in our Landscape and Visual Assessment methodology which is published alongside this policy document.

Other Stakeholders – Brought forward technical information, local knowledge and views (see Section 05) and identified local priorities for using Visual Impact Provision funds.

3) Identification of mitigation options

Only the sections of line identified as having the highest visual impact were assessed for potential re-routeing, alternative pylon design or undergrounding. This reduced number of sites will then undergo further detailed site surveys looking at ecology, biodiversity, historic environment, socio-economic factors etc. to determine which potential enhancements would provide the greatest landscape benefit.

Areas not taken forward for this further study will be assessed to see if any of the less intrusive options would be beneficial.

Ofgem – Observe the prioritisation process to ensure its transparency and robustness and to ensure the fund is spent efficiently.

4) Refining options – technical and economy / efficiency filter

All potential landscape enhancements will be assessed to ensure they are deliverable, in terms of:

- technical complexity
- construction / project delivery issues
- suitability of technology
- land availability
- network capacity
- network efficiencies / benefits
- consent requirements

and that they offer value for money to the consumer, ensuring that the greatest benefit can be realised from the expenditure made. Estimates of both capital and lifetime costs should be considered.

5) Final selection and approval from Ofgem for individual expenditure

Once National Grid has determined, with the help of the Stakeholder Advisory Group and other stakeholders, the projects that we believe are consistent with our statutory duties and the most beneficial, based on the Guiding Principles, we will seek additional funding from Ofgem. This request will include:

- A description of the proposed project and the visual benefits that we intend to deliver
- Supporting evidence that the project has been identified and prioritised in accordance with the above approach
- Cost forecasts for delivering the project
- Analysis of any relevant issues that might reduce feasibility or increase costs
- Proposed timescales for delivery
- Any other relevant analysis or information

Ofgem will then assess the efficient costs of delivering the projects that have been prioritised through the Visual Impact Provision process and determine an adjustment to our allowed expenditure under the price control.

6) Detailed project development by National Grid

When expenditure is allowed, we will carry out further detailed technical appraisal, feasibility studies, cost assessments and consultation on a project-by-project basis, prior to seeking the necessary consents and permissions for construction. We will do this in line with the principles laid out in our published Approach to the Design and Routeing of New Electricity Transmission Lines.

04: The Guiding Principles

We have worked and will continue to work with stakeholders to decide how to treat existing National Grid electricity infrastructure to bring the most benefit from the Visual Impact Provision. Candidate schemes were selected (and will be selected in future) with reference to the Guiding Principles below.

Guiding Principles

Working with stakeholders, we have prioritised and will continue to prioritise proposals which will:

- result in greatest landscape enhancement benefits
- result in greatest opportunities to conserve and enhance natural beauty, wildlife and cultural heritage whilst avoiding unacceptable impacts on the natural and historic environment which cannot be mitigated
- result in greatest opportunities to encourage public understanding and enjoyment of the protected landscapes, including positive socio-economic impacts
- are technically feasible in context of the wider transmission system
- are economical and efficient

As these principles have sometimes conflicted with one another and each scheme has performed differently against them, we have carefully balanced the choices we have made, with the help of stakeholders, against the Guiding Principles. This will continue for future projects.

“Potential enhancements should not result in any other significant adverse impacts on other landscape or environmental features.”

05: Engagement with stakeholders

We believe that the views of our stakeholders and consumers are vital in making decisions on how we use the Visual Impact Provision to maximise enhancement to the landscape from the available funds.

Our engagement is consistent with our wider stakeholder engagement principles⁹. We have and will continue to carry out all engagement activities on the Visual Impact Provision in accordance with the following principles:

- engaging widely, effectively and at a formative stage in establishing priorities
- being open with information and transparent about the judgements we make
- developing proposals that deliver what society needs from us

We are keen that stakeholders play a key role in helping us to identify those areas and lines which would benefit most from expenditure under the Visual Impact Provision. There are two main ways we are doing this: we have formed a Stakeholder Advisory Group; and we are seeking the views of other stakeholders.

Stakeholder Advisory Group

We invited a group of stakeholders, with national remits and a focus on landscape across England and Wales, to join us as a Stakeholder Advisory Group, under an independent chair, to help us to:

- identify initial priorities for the use of the Visual Impact Provision, based on the guiding principles set out above
- consider the technical inputs and evidence provided by National Grid including the Landscape and Visual Impact Technical Report prepared on behalf of National Grid in October 2014¹⁰
- consider the input of wider stakeholders who are not directly represented on the Stakeholder Advisory Group (e.g. specific comments on where use of Visual Impact Provision funds might be beneficial, or where there is evidence of public support)
- identify the specific infrastructure and locations which would most benefit
- define the projects which should be taken to development phase by National Grid
- re-consider or re-assess priorities and use of the fund, as development of projects progresses

⁹ <https://www.nationalgrid.com/uk/electricity-transmission/document/81026/download>

¹⁰ The Landscape and Visual Impact Technical Report (October 2014) assesses the landscape and visual impact of existing electricity transmission infrastructure in nationally protected landscapes in England and Wales. The report was written by Professor Carys Swanwick acting as Independent Adviser to National Grid on the VIP project. <https://www.nationalgrid.com/uk/electricity-transmission/document/84141/download>

The organisations that are members of this group are:

National Association for Areas of Outstanding Natural Beauty National Parks England National Parks Wales	Representing the 7 National Parks and 19 AONBs in which we have overhead electricity transmission lines
Cadw Historic England Natural England Natural Resources Wales	Statutory bodies with relevant responsibilities and technical expertise
Campaign for National Parks CPRE The Countryside Charity Campaign for the Protection of Rural Wales The Landscape Institute National Trust The Ramblers Visit England Visit Wales	Organisations with an interest in protected landscapes and rural areas and their use
National Grid	To provide technical input, ensure our statutory duties are met, and decide which schemes should be submitted for funding
Ofgem, the energy regulator	To observe the process and make the final decisions on expenditure

Seeking the views of other stakeholders

We sought and will continue to seek the views of other stakeholders, such as local groups who use AONBs and National Parks and those who care passionately about them, to establish their priorities for using Visual Impact Provision funding. The Stakeholder Advisory Group helped shape and inform how this wider consultation works.

We engage with:

- landowner groups and landowners affected
- National Park authorities and local planning authorities
- AONB partnership boards and management units/partnerships
- amenity societies such as the Friends of individual AONBs and National Parks
- organisations with an interest in the environment (e.g. the Wildlife Trusts, RSPB)
- bodies such as Citizens Advice and the Major Energy Users' Council, which represent electricity consumers
- other electricity transmission and distribution owners
- groups established by the distribution network operators (DNOs) to advise on where DNO lines should be placed underground

The final decision on how to undertake wider consultation is made in collaboration with the Stakeholder Advisory Group. We proactively reach out to stakeholders, through our website and individual websites for major projects and the LEI; through one-to-one meetings with representatives of the organisations that represent the interests of groups of stakeholders; and through written consultations.

As proposed projects are refined, we will engage further with these groups (for example, in the case of new underground cables, establishing acceptable route corridors and alignments) in line with the principles laid out in our published Approach to Consenting. At this point we will carry out project-specific consultation before seeking to secure the necessary planning permissions and consents. Project information, updates and documentation are shared through our dedicated website and the dedicated website of each individual project.

06: Working with other transmission and distribution owners

The Scottish transmission system

National Grid Electricity Transmission owns the high voltage electricity transmission network in England and Wales. The £465m allowance for RIIO-T2 applies to the whole of Great Britain, and can therefore also be used for the Scottish transmission network. We are engaging with Scottish Hydro Electric Transmission Limited and Scottish Power Transmission Limited, which between them own the Scottish transmission network, to try to ensure that between us we can maximise the benefits of the allowance to consumers across England, Wales and Scotland. In particular, we are engaging with the Scottish transmission owners to share best practice and knowledge with each other in relation to the implementation of the Visual Impact Provision and to share with them relevant information, technical assessments and outputs from our process of identifying and taking forward priorities.

Local distribution network operators

The Visual Impact Provision does not apply to electricity distribution infrastructure operated by local distribution network operator (DNO) companies, as these organisations have separate allowances available for placing existing lines underground.

There may be cases where a collaborative approach to using both funds can result in greater benefits – for example, where a ‘wirescape’ of both our lines and those of DNOs exist. In such situations, we will work with the DNOs to ensure maximum benefit from the use of both funds. In particular, where they exist, we will engage with the groups established by the DNOs to advise on where DNO lines should be placed underground.

“It is important that any expenditure we make under the Visual Impact Provision is made in accordance with our statutory duties.”

07: Review of this document

The policy set out in this document was originally developed at the start of the previous price control period¹¹ in which the provision was initiated. We reviewed and updated the document in 2021 to reflect the changes to the provision introduced by the current price control period¹² and the progress made in the previous period.

We will review the policy in 2023, half-way through the price control period. We will consult stakeholders and revise the policy as necessary to ensure it remains fit for purpose. If required by the emergence of new best practice or any other relevant development, we may make interim amendments. In particular, we may review our Policy in the light of:

- changes to our responsibilities, legislation, government policy or guidance
- changes in best practice guidance in environmental, social or economic appraisal
- relevant technology advances
- new information about the application or costs of different technologies
- feedback from the Stakeholder Advisory Group

We will seek to record learning and best practice from the process to apply to similar or related stakeholder engagement initiatives in the future.

¹¹ RIIO T1 April 2013 – March 2021

¹² RIIO T2 April 2021 – March 2026

08: Contacts

Visual Impact Provision hotline: 0330 134 0051

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Send an email to: visualimpact@nationalgrid.com

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NORWICH TO TILBURY

EN020027

Joint Local Impact Report

Annex C (Babergh and Mid Suffolk District Councils, Landscape and Visual Detailed Comments)

Babergh District Council FD2A958D5

Mid Suffolk District Council FF822847B

Deadline 1

26 February 2026

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Glossary of Acronyms

<i>DCO</i>	<i>Development Consent Order</i>
<i>ES</i>	<i>Environmental Statement</i>
<i>NSIP</i>	<i>Nationally Significant Infrastructure Project</i>
<i>PPA</i>	<i>Planning Performance Agreement</i>

“The Council” / “SCC” refers to Suffolk County Council.

Purpose of this Submission

The document has been prepared by Babergh and Mid Suffolk District Councils to provide additions to the main content of the Local Impact Report (“**LIR**”). Examination Library references are used throughout to assist readers.

1 Landscape and Visual Detailed Comments

(construction and operational stage effects)

- 1.1 The landscape of the study area is described within a county level character assessment identifying 12 No. Landscape Character Types (LCTs). The Landscape and Visual impact Assessment contains an assessment of effects on these County level LCTs both at Construction and Operation stages. The Councils consider that the geographical landscape character areas the project passes through should have been described and assessed in relation to their landscape character type.

Landscape Character Types

- 1.2 Rolling Valley Farmlands and Furze LCT – BMSDC would query that the operational effect would only be moderate significant adverse within 1Km, as the presence of the 50m high pylons and overhead lines would likely have an impact on the sense of rurality and tranquillity of most of Wortham Ling and its setting. BMSDC query the Distinctiveness judgement of Low-Medium and the overall judgement of the value assessment as Medium. Functional value does not appear to value the provisioning role of farmland.
- 1.3 Wooded Valley Meadowlands and Fens LCT – BMSDC do not agree that significant adverse landscape effects, particularly indirect ones, would be limited to 0.5Km as the valley bottom is quite open, for instance close to The Doit, over which the Project line crosses. BMSDC query the Distinctiveness judgement of Low-Medium when the key part of the character type is the distinctive flat valley bottom and peat deposits. BMSDC query the Perceptual judgement of Low-Medium when this is substantially a rural landscape in good condition. Functional value does not appear to value the provisioning role of farmland itself.
- 1.4 Ancient Plateau Claylands – such as experienced at Mellis Green and its setting, Stowupland, Creting St Peter, Burstall, Barking Tye, Elmsett, Great Bricett. BMSDC query whether the operational effects would be significant adverse only at 1Km or less. These areas are characterised by flat or gently rolling arable clay landscapes where the presence of the 50m high pylons and overhead lines would have an extended impact on the sense of rurality and tranquillity of the countryside, and the experience of its amenity and aesthetic value. BMSDC query the identification of the Cultural Heritage value, Distinctiveness and Perceptual character of the landscape as low-medium. Mellis has strong associations with Roger Deakin author of Waterlog so should be judged at least Medium. BMSDC would judge the recreational value as Medium- High due to the Open Access land.

Functional value does not appear to value the provisioning role of farmland itself, and BMSDC would ask these judgements are reevaluated to encompass a full range of ecosystem services.

- 1.5 Plateau Claylands – a landscape of heavy clay soils very gently undulating or flat dissected by small streams, such as is found at Gislingham, Dandy Corner, Cotton and Mendlesham. Due to topography and lack of substantial woodland BMSDC do not agree that adverse effects would only be judged as moderate significant close to the project line but would judge these effects as major significant up to 1Km. Indirect effects on the landscape would extend beyond 1.5Km affecting its sense of place and history. Much of the setting is deeply rural with single track lanes with few existing detractors.
- 1.6 Valley Meadowlands LCT This is a narrow, linear LCT occurring in two discrete areas. The northernmost area follows the course of the River Gipping and its tributaries, north and west of Needham Market and west of Ipswich. The southernmost area follows the course of the River Brett to the west of Raydon. The LCT would be directly affected by construction works undergrounding of an existing 132 kV overhead line where it crosses the Project near Badley Hill, including a CSE compound. BMSDC do not agree that likely significant effects would be limited to moderate and to 0.5Km from the Project line, especially once operational, due to the height and linear extent of the Project. Due to their intimate character valley landscapes contribute considerably to a sense of place and history which would be affected by strongly industrial infrastructure at a local level. BMSDC do not agree with the judgement of Distinctiveness value as Low-Medium when the river valley floor forms such a distinct characteristic of this landscape type.
- 1.7 Rolling Valley Farmland This occurs at six discrete areas, following the valleys of tributaries of the River Gipping, Belstead, Brook, River Brett and River Stour. The LCT would be directly affected by construction activity southwest of Willisham Tye, west of Offton, near Washbrook Street, and along the proposed cable route north-west of Stratford St Mary, within Dedham Vale National Landscape. BMSDC do not agree that the likely significant negative effects on this LCT would be limited to 0.5Km from the Project line. Due to their intimate character valley landscapes contribute considerably to a sense of place and history which would be affected strongly at a local level by such industrial infrastructure. BMSDC query the Distinctiveness value being judged as low-medium when the LCT description notes the 'gentle valley sides with some complex and steep

slopes'. There are some towns and villages with 'distinctive' medieval cores and late medieval churches.

- 1.8 The Plateau Farmlands LCT This occupies two discrete areas. The smaller, northern most area lies to the west of Ipswich. The larger, southern most area encompasses Holton St Mary and East Bergholt, and the southern edge of the LCT is within Dedham Vale National Landscape. These would be directly affected by construction activity, west of Ipswich and west of Holton St Mary. BMSDC agree that the likely significant negative effects on this LCT would be limited to 1.0Km from the Project line. BMSDC do not agree that the likely significant negative effects on this LCT would be limited to 0.5Km from the Project line due to the gently rolling and open plateaux landform providing extensive intervisibility of the landscape notably west of Sproughton affecting the sense of isolation and tranquillity.
- 1.9 The Ancient Estate Farmlands LCT The Ancient Estate Farmlands LCT occurs to the south-west of Ipswich and includes the settlement of Washbrook. Due to the Ancient Estate Farmlands LCT being only indirectly affected by a relatively small amount of construction activity, BMSDC agree that the effect on the LCT would likely be negative but likely not significant at the construction stage and there would likely be no effect once the Project was operational. BMSDC query the judgement of Cultural Heritage value being seemingly assessed purely in terms of listed buildings. A consideration of the farmed landscape which offers a dimension of time depth needs to be added. BMSDC query the Perceptual Scenic value being judged as Low when the open, flat landscape is part of the key character of the landscape.
- 1.10 The Wooded Valley Meadowlands LCT These occur along the River Stour within the Dedham Vale National Landscape (an Area of Outstanding Natural Beauty (AONB), to the east of Stratford St Mary. BMSDC agree the indirect effect on the LCA at construction would likely be negative but not likely to be significant and there would likely be no effect once the Project was operational. BMSDC query the Medium judgment for Natural Heritage value when part of an SSSI and a Ramsar site are in the LCT. BMSDC query the Distinctiveness value being judged as Low when the character type is mainly formed by the distinctive valley floor.

Visual Receptor Areas

- 1.11 B1 Wortham: This Visual Receptor Area is located to the west of the Project, broadly between Roydon to the north and Gislingham to the south. Representative viewpoints are identified as:
- i. Viewpoint 2.01 Wortham Ling

- ii. Viewpoint 2.04 Burgate Road, Burgate
 - iii. Viewpoint 2.22 Lion Road near St John's House / Goodrich Park
 - iv. Viewpoint 2.32 PRow north of Wortham (Wortham 39)
 - v. Viewpoint 2.49 Burgate Road, south of Little Green
- 1.12 BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.13 Operation: At operation, it is identified that within approximately 0.5 km of the Project, there would be close views of the overhead line from the local road and PRow network. Pylons and the overhead line would also dominate views from VP 2.01 Wortham Ling, where the viewpoint is only 400m from the Project at its closest point. Wortham Ling is important as it is open access land, thus allowing views from many different angles. BMSDC query whether the impact is major significant up to more than 0.5Km i.e. 1.0Km. BMSDC cannot judge whether beyond 1.5 km the scale of change would be small, and the magnitude of effect would be low. Or that the effect would be minor and not significant (adverse) as a visualisation or wireline from beyond 1.5Km is not provided.
- 1.14 It is also identified that the Project would be visible in close views from the east of the Visual Receptor Area and in some longer-range views, where the tops of pylons would be seen above existing vegetation. The views from VP 2.22 Lion Road near St John's House / Goodrich Park are taken from 400m away. Wireframes are needed from these viewpoints to demonstrate that there is no likely significance beyond 1.5Km.
- 1.15 It is also likely that close views would include views from the Waveney Valley, notably from The Doit (also Angles Way PRow) north to the proposed pylons on the northern side of the Waveney, and BMSDC judge a wireline visualisation is needed at this location.
- 1.16 The assessment states that between approximately 0.5 km and 1 km the overhead line would most often be seen on the skyline above intervening layers of vegetation from the local road and PRow network citing the visualisation for Viewpoint 2.04 Burgate as an example that demonstrates this. However, this shows that a major part of the pylons and wires would be visible in the middle-distance, not on the horizon, as the term 'skyline' implies.

Visual assessment

- 1.17 BMSDC agree that generally operational effects on visual receptors would likely be significant (negative) within approximately 1.5 km of the Project. However, additional wireframe images are needed from medium-long distance viewpoints to demonstrate that there is no likely significance beyond 1.5Km as well as a wireframe from The Doit to demonstrate the extent of the negative effect of the Project on the Waveney Valley itself from the Suffolk side.
- 1.18 B2 Palgrave: This Visual Receptor Area is identified as east of the Project, broadly between Diss to the north and Thrandeston in the south. The area comprises part of the Waveney Valley and one of its tributaries. The Representative Viewpoints are identified as:
- i. Viewpoint 2.03 PRoW Palgrave (Palgrave 5/6)
 - ii. Viewpoint 2.31 New Road / PRoW north-east of Thrandeston
- 1.19 BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.20 Operation: BMSDC do not accept that the effects on visual receptors would likely be major significant (adverse) only within 0.5 km of the draft Order Limits. VP 2.03 ProW at Palgrave is taken 0.78Km from the project line and BMSDC suggest demonstrates that at this distance there is still a major significant adverse effect due to the sheer extent, density and height of the Project. The landscape at this point consists of large-scale arable fields, providing open views with intermittent boundary vegetation. BMSDC agree that up to 1.5 km, effects would likely remain significant but moderate. BMSDC welcome Viewpoint 2.31 New Road / PRoW north-east of Thrandeston as an additional viewpoint from 1.89Km in order to demonstrate no significant effects from beyond 1.5Km, however, this is partly dependent on there being topography or vegetation screening the horizon line.
- 1.21 B3 Mellis: This Visual Receptor Area is located to the east of the Project, broadly between Thrandeston to the north and Thornham Park in the south. Welcome that two additional viewpoints have been included in this VRA.
- i. Viewpoint 2.05 Mellis Road, Mellis Green
 - ii. Viewpoint 2.33 Mellis Road, south of Thrandeston
 - iii. Viewpoint 2.39 Thornham Road, Thornham Park

- 1.22 Operation: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.23 BMSDC agree that less than 0.5 km and between approximately 0.5 km and 1 km, there would be close and open views from the local road and PRow networks, properties and parts of Mellis and Mellis Common. The latter is demonstrated in photomontage in Viewpoint 2.05 Mellis Road, Mellis Green which is 0.96 Kms from the Project line.
- 1.24 It is stated that 'The Project would be seen on the skyline and layers of field boundary vegetation would filter views.' However, that is truer to the west of Mellis Green rather than to the north-west where views are far more open and the impacts far more substantial.
- 1.25 BMSDC acknowledge there is some mitigation from the under grounding of the existing overhead line, however the increased height of the Project pylons introduces far more intrusive and dominant infrastructure.
- 1.26 BMSDC welcome the addition of VP 2.33 and VP 2.39 assessments and visualisations within this VRA.
- 1.27 Generally, BMSDC agree that effects on visual receptors would likely be significant (adverse) within approximately 1.5 km of the Project. Beyond 1.5 km, effects would not likely be significant due to a reduction in perception of the overhead line which increases with distance.
- 1.28 B4 Finningham and Gislingham: This Visual Receptor Area is located to the west of the Project, broadly between Gislingham in the north and Gipping to the south. The identified Representative Viewpoints are:
- i. Viewpoint 2.06 Mill Street, west of Gislingham
 - ii. Viewpoint 2.07 PRow south of Gislingham
 - iii. Viewpoint 2.09 PRow Dandy Corner (Cotton 18)
 - iv. Viewpoint 2.11 Middy Railway Footpath neat Stonham Road
 - v. Viewpoint 2.34 Mendlesham Road / Potters Lane, Cotton
 - vi. Viewpoint 2.42 PRow south of Finningham (Finningham 16)
- 1.29 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.30 BMSDC generally agree that effects on visual receptors would likely be significant (negative) within approximately 1.5km of the Project at

operational stage, and that between approximately 2 km and 3 km distance and layers of vegetation would reduce visibility of operational effects.

Viewpoint 2.07 PRoW south of Gislingham demonstrates the major significant adverse effects that would result. BMSDC do not agree that all effects from Gislingham reduce to moderate significant.

- 1.31 VP2.09 Dandy Corner which is 0.66Km from the Project line demonstrates the major negative effects that will occur from this distance where there is an open and wide view. This visualisation should have been presented as a photomontage. It would dramatically affect the experience of the landscape including the perception of its tranquillity and rurality in a place where there is a strong sense of isolation. This image contradicts the claim that the Project would be filtered and screened by intervening woodland and mature boundary vegetation or be seen on the 'skyline'. At best the project appears prominently in the middle distance.
- 1.32 Similarly, as VP 2.11 Middy Railway Footpath is 0.32km distance from the Project line and shows it creates major significant adverse effects where there is an open view and therefore a significant negative impact as a result. Whilst not impacting directly on views from the centre of Mendlesham, the overhead line and pylons will have a profound effect on the setting of the village and the perception of its rurality. BMSDC judge it is likely the significant major adverse effects could be visible to 1 Km.
- 1.33 Viewpoint 2.34 Mendlesham Road / Potters Lane, Cotton is only 0.19Km from the project line and demonstrates the significant major adverse effects at that point. However, the wireline Visualisation from Viewpoint 2.06 Mill Street, west of Gislingham which is taken from 2.1Km specifically demonstrates that visual effects will still be present in places on completion beyond 2Km due to the often large-scale, open landscape with extended intervisibility. Dozens of pylons are visible to the north-east of Gislingham, albeit at a distance, in a currently tranquil, rural landscape with few detractors.
- 1.34 B5 Wickham Skeith and Mendlesham: This Visual Receptor Area is located to the east of the Project, broadly between Thornham Magna in the north and Middlewood Green in the south. There are 8 Representative Viewpoints:
- i. Viewpoint 2.08 Wickham Street
 - ii. Viewpoint 2.10 Whiteup's Lane, north of Mendlesham Green
 - iii. Viewpoint 2.23 Road south of Elm Pollard, west of Wickham Skeith
 - iv. Viewpoint 2.24 PRoW near Mendlesham Hall, west of Mendlesham (Mendlesham 55)

- v. Viewpoint 2.41 Mid Suffolk Footpath near Mendlesham Green
 - vi. Viewpoint 2.43 PRow, Middlewood Green (Earl Stonham 8)
 - vii. Viewpoint 2.50 Wickham Road, south of Wickham Skeith
 - viii. Viewpoint 2.53 Mid Suffolk Footpath near Mendlesham
- 1.35 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.36 Close to impacts would occur from parts of the Mid Suffolk Footpath and Middy Railway Footpath, Quiet Lanes, parts of local villages and hamlets, at both construction and operational stages. VP 2.23 Road south of Elm Pollard, west of Wickham Skeith is unfortunately located effectively under the power lines adjoining a hedgerow so the wider effects at close range are not demonstrated. VP 2.24 near Mendlesham at 0.29Kms and Viewpoint 2.41 Mid Suffolk Footpath near Mendlesham Green at 0.29Km and Viewpoint 2.43 PRow, Middlewood Green (Earl Stonham 8) demonstrate the major significance of the effect in an open landscape, that is generally flat with gappy hedgerows and trees. It is a tranquil landscape with quiet single-track lanes and sparse traffic. Although there is an existing 132Kv line in the middle distance in some views there are few other detractors.
- 1.37 VP 2.08 Wickham Street is south-east of Gislegham and the railway, 0.7Kms from the Project line. This visualisation demonstrates how significant effects are at 0.7Kms. This is often a large -scale open, gently undulating landscape with good intervisibility, but with scattered copses and the poplar plantation providing some screening, so the pylons and line are generally visible over a wide area.
- 1.38 Viewpoint 2.53 Mid Suffolk Footpath near Mendlesham: the visualisations do not appear to be included in the figures.
- 1.39 B6 Stowupland: This Visual Receptor Area is located to the west of the Project, broadly between Gipping in the north and Creting St Peter in the south. There are three Representative Viewpoints:
- i. Viewpoint 2.12 Mid Suffolk Footpath
 - ii. Viewpoint 2.13 Stowupland
 - iii. Viewpoint 2.14 Creting Lane, Creting St Peter
- 1.40 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to

this sort of infrastructure is low. BMSDC consider the use of the term ‘skyline’ in near view descriptions is mis-leading as it implies a certain distance between the viewer and the view. BMSDC suggest the term middle distance is more appropriate.

- 1.41 There are no close viewpoints in this VRA so BMSDC cannot judge whether major significant impacts are limited to 0.5Kms. Judging from other VRAs BMSDC would suggest major impacts extend up to 1 Kms. It is identified that close and medium distance views at operation stage will be had from local lanes, the PRow network including the Mid Suffolk Footpath, scattered properties, Saxham Street and the eastern fringes of Creting St Peter. VP 2.12 Mid Suffolk footpath is 1.24Km from the Project line, looking east/southeast gently sloping towards the viewpoint giving wide open views of a large-scale arable landscape with few or no detractors. The lanes are single track, quiet and rural. The overhead line is clearly visible across a wide area creating significant effects even from this distance. BMSDC agree effects are significant up to 1.5Kms. There are no viewpoint assessments and visualisations greater than 1.5 kms in this area therefore some need to be identified beyond this to demonstrate that effects are not significant beyond 1,5Kms. There is more topography towards the River Gipping and Gipping Great wood where there is an undulating/sloping valley landscape.
- 1.42 VP 2.13 Stowupland The viewpoint here is at 1.5km and is still clearly visible across a wide area creating significant effects. This viewpoint demonstrates that effects are significant up to 1.5kms. The viewpoint looks east with Stowupland to the west. Existing 132Kv overhead line can be seen in the middle-distance. However, the proposals would intensify and extend these effects making dozens of pylons visible.
- 1.43 VP2.14 Creting St Peter taken from 0.9Km away demonstrates the effects of the pylons as they’re viewed on the neighbouring ridge, thereby filling the whole view looking east just north of Creting St Peter on the edge of a PRow. BMSDC agree the impact is major and significant (adverse) at Creting St Peter. Again, from this viewpoint, it is an open undulating unspoiled agricultural landscape sitting to the north of the Gipping valley. Stowmarket and the A14 lie just to the west and south but this northern approach to the village is unspoiled.
- 1.44 B7 Forward Green and Creting St Mary: This Visual Receptor Area is located to the east of the Project, broadly between Middlewood Green to the north and Creting St Mary in the south. There are two representative viewpoints within this Visual Receptor Area.
- i. Viewpoint 2.40 A1120, Forward Green

- ii. Viewpoint 2.44 Fen Lane, near Woolney Hall, north of Creting St Mary
- 1.45 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low. BMSDC agree that the effects of the Project would be major and significant (adverse) within 0.5 km; moderate and significant (adverse) between 0.5 km and 1.5 km, and minor and not significant (adverse) beyond 1.5 km.
- 1.46 B8 Stowmarket: This Visual Receptor Area is located to the west of the Project, encompassing part of the Gipping Valley including the eastern side of Stowmarket and adjacent farmed valley sides. There is one representative viewpoint within this Visual Receptor Area.
 - i. Viewpoint 2.28 Gipping Valley Path near Creting Hall
- 1.47 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.48 Although this is a small Visual Receptor Area it contains a lengthy stretch of the undeveloped Gipping Valley, along which the Gipping Valley River Path runs. The Project is proposed to over sail both. Viewpoint 2.28 Gipping Valley Path near Creting Hall demonstrates the major significant adverse impacts that would affect the valley and river path. This is a distinctive valley landscape which warrants conservation and enhancement. BMSDC agree that Major and significant (adverse) impacts would occur particularly along the River Gipping and around Creting Hall.
- 1.49 B9 Needham Market: This Visual Receptor Area is located to the east of the Project, encompassing part of the Gipping Valley including the settlement of Needham Market. There are two Representative Viewpoints:
 - i. Viewpoint 2.15 PRoW, north-west of Needham Market
 - ii. Viewpoint 2.27 All Saints Road, Creting Hills
- 1.50 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.51 BMSDC query the quality of the images from Viewpoint 2.27 All Saints Road, Creting Hills and also that only a wireline has been provided when this is an elevated viewpoint with wide views.

- 1.52 BMSDC agree that the effects of the Project would be major and significant (adverse) within 0.5 km particularly from the Gipping River Path east of Creting Hall, generally moderate and significant (adverse) between 0.5 km and 1.5 km, and minor and not significant (adverse) beyond 1.5 km, dependent on the openness of the view and the presence of intervening vegetation.
- 1.53 B10 Great Bricett: This Visual Receptor Area is located to the west of the Project, broadly between Stowmarket to the north and Great Bricett in the south. There are four Representative Viewpoints:
- i. Viewpoint 2.16 PRoW near Badley Hall Farm (Badley 21)
 - ii. Viewpoint 2.18 B1078, Great Bricett
 - iii. Viewpoint 2.38 B1078, Ringshall Stocks
 - iv. Viewpoint 2.45 Church Road, Battisford
- 1.54 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.55 It is identified that there would be close views from the local road and PRoW network, scattered properties and the eastern edge of Ringshall Stocks. Close to medium views are represented by VP 2.16 PRoW near Badley Hall Farm which is 0.9km from the Project line. Although there are existing overhead lines and pylons from this viewpoint the visualisation shows how that wirescape is extended and densified, despite some of the existing 132Kv line being undergrounded.
- 1.56 VP 2.18 Great Bricett 1.65Km This is an open gently undulating quite large-scale arable landscape. The B1078 traffic is quite fast but intermittent. There are few other visible detractors. Wattisham Flying Station is close by but there is no sense of it at this point. There are distant pylons to the east of the view. BMSDC judge the impacts remain moderate significant even at 1.65KM. BMSDC would therefore query that effects on visual receptors at operation would likely be significant (negative) only within approximately 1.5 km.
- 1.57 The close view visualisation shown from VP 2.38 B1078, Ringshall Stocks shows near view effects when there are existing overhead wires how that is intensified with the proposals which are highly prominent.
- 1.58 Generally, BMSDC agree the effects of the Project would remain major and significant (adverse) within 0.5 km and at Badley; moderate and significant

- (adverse) between 0.5 km and 1.5 km. However BMSDC dispute that impacts at Ringshall are minor and not significant (adverse)
- 1.59 B11 Barking and Willisham: This Visual Receptor Area is located to the east of the Project, broadly between Needham Market to the north and Willisham in the south.
- 1.60 There are three Representative Viewpoints:
- i. Viewpoint 2.17 B1078 Barking Road, Barking Tye
 - ii. Viewpoint 2.37 PRoW near The Causeway, west of Needham Market (Barking 14)
 - iii. Viewpoint 2.51 PRoW east of Winneygreen Farm
- 1.61 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low. BMSDC consider the use of the term ‘skyline’ in near view descriptions is mis-leading as it implies a certain distance between the viewer and the view. BMSDC suggest the term middle distance is more appropriate.
- 1.62 It is identified that close and close to medium distance views of the completed Project would be had from the local road and PRoW network, parts of the B1078, scattered properties including Hascot Hill Farm and parts of Barking, the Open Access Area at Barking Tye and the settlement at Willisham. Further south, part of the existing overhead lines are to be undergrounded to accommodate the Project.
- 1.63 Barking Tye green is a large traditional open green, substantially retained as meadow with mown margins. It provides extensive essentially open views beyond the hedgerows on the boundary towards rising arable farmland beyond. VP 2.17 Barking Tye is situated 0.79Km from the Project line and illustrates how the pylons would be visible over 80% of the view either wholly or in part. They would form a new negative backdrop to the green. The description of other viewpoints in the assessment do not tally with the list of viewpoints given.
- 1.64 BMSDC agree generally that the effects of the Project are major and significant (adverse) within 0.5 km and major and significant (adverse) at Willisham; moderate and significant (adverse) between 0.5 km and 1.5 km, and minor and not significant (adverse) beyond 1.5 km.
- 1.65 B12 Elmsett: This Visual Receptor Area is located to the west of the Project, broadly between Greenstreet Green to the north-west and Flowton to the south-east. The sole Representative Viewpoint is:

- i. Viewpoint 2.21 Offton Road, north of Elmsett
 - ii. Viewpoint 2.46 Tye Lane, Flowton
 - iii. Viewpoint 2.48 PRow south of Flowton (Burstall 7)
 - iv. Viewpoint 2.52 Minor Road near Hintlesham Priory
- 1.66 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.67 The assessment identifies that there would be close and close to medium views from the local road and PRow network, scattered properties and the fringes of Flowton. There would be close to medium distance views from the local road and PRow network and parts of Flowton. There would be views from some elevated areas, such as illustrated from VP 2.21 Offton Road, north of Elmsett. There is a very intimate landscape around Elmsett with steep valley slopes rising up from Offton Road to the flatter or gently undulating more open ridge tops. The lanes are single track, and it is intensely tranquil. These areas would all be visually affected once the Project is complete. VP 2.21 Elmsett is taken from 1.3Km so is quite distant as opposed to a close to medium view.
- 1.68 Generally, BMSDC accept that the effects of the Project would remain as in Operation Year 1: major and significant (adverse) within 0.5 km; moderate and significant (adverse) between 0.5 km and 1.5 km; and minor and not significant (adverse) beyond 1.5 km.
- 1.69 B13 Somersham: This Visual Receptor Area is located to the east of the Project, broadly between Offton to the north-west and Bramford Substation to the south-east.
- 1.70 The area comprises an undulating plateau, dissected by small valleys of tributaries of the River Gipping There are five Representative Viewpoints:
 - i. Viewpoint 2.19 PRow near Castle Farm, Offton (Offton 27)
 - ii. Viewpoint 2.25 Nettlestead Road, Nettlestead
 - iii. Viewpoint 2.26 Ipswich Road, Somersham 7.12)
 - iv. Viewpoint 2.20 Tye Lane, east of Flowton
 - v. Viewpoint 2.47 Bullen Lane, Bramford
- 1.71 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.

- 1.72 The assessment identifies close views from the local road (including a Quiet Lane) and PRow networks, scattered properties and parts of Somersham and Offton. Viewpoint 2.19 PRow near Castle Farm, Offton. The visualization demonstrates the major impact and significant adverse effects of the overhead line in an undulating landscape. This is rolling countryside with intimate heavily vegetated stream side valleys, with quiet single-track lanes and scattered settlement, rising to more open large-scale plateaus. Although existing overhead lines exist in the distance, the proposed Project will significantly add to the negative effects within this Receptor Area when seen close to.
- 1.73 It is identified in the assessment, that at completion, there would be some medium to long distance views of the Project from elevated areas between approximately 1 km and 2 km. However, VP 2.25 Nettlestead Road, Nettlestead is taken from 1.97Km from the Project line on elevated land to the northeast of Nettlestead. It shows the existing pylons dominating about 25% of the existing view, but the proposed ones extend both the extent and intensity of the existing infrastructure to the point where the whole view is dominated by infrastructure. It seems unlikely that even at 2 Kms in elevated and open landscape that this extent and density of 'wirescape' will not appear significant. In the south of the Visual Receptor Area the completed Project line would be seen in the context of existing electricity infrastructure.
- 1.74 BMSDC agree generally the effects of the Project would be major and significant (adverse) within 0.5 km, however BMSDC do not agree it is moderate and significant (adverse) at Offton; moderate and significant (adverse) between 0.5 km and 1.5 km but also at Nettlestead and minor and not significant (adverse) beyond 1.5 km.
- 1.75 C1 Burstall: This Visual Receptor Area is located to the west of the Project, in the area surrounding Burstall and Hintlesham. There are four Representative Viewpoints:
- i. Viewpoint 3.01 Church Hill, near Burstall Hill
 - ii. Viewpoint 3.02 Burstall Lane, Burstall
 - iii. Viewpoint 3.06 PRow, Hintlesham
 - iv. Viewpoint 3.07 Pigeon's Lane, Washbrook Street
- 1.76 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.

- 1.77 The assessment identifies there would be close views from the local road and PRow network, including a short section of the A1071, as well as scattered properties and clusters of properties including those along Church Hill to the north of Burstall. VP 3.01 Church Hill near Burstallhill is taken from 0.71Km from the Project line not 0.5Km or less so represents a close to medium view. It demonstrates how, even though the existing view is dominated by overhead lines in about 50% of the view, this is greatly amplified and extended by the proposals to impact over a far wider view and appearing much closer to the viewer, in part because of the greater pylon height.
- 1.78 Between 0.5-1Km there are identified medium distance views of construction and the finished Project from the local road and ProW network, including the A1071 and also scattered and clustered properties including those along Washbrook Street and those to the north-east of Burstall
- 1.79 VP3.02 Burstall Burstall Lane, Burstall is also 0.7Km from the Project line and shows again how, despite the existing overhead line, the proposed line would be closer (on Burstall Lane by c 300m) and taller and the alignment runs along a ridge at this point making them far more dominant. There are also long views from Hintlesham Priory over 2Km from Burstall to the southwest that have existing prominent views of the substation and existing pylons so likely to have an intensified impact from the proposals.
- 1.80 Between approximately 1 km and 2 km construction activity and the operational pylons are described as ‘would likely be perceptible in some medium to long distance views’, and ‘form a component ‘ in some medium to long distance views, yet the visualisation from Viewpoint 3.06 PRow Hintlesham at 1.6Kms distance shows that the effects are more than perceptible. This landscape is likely to be affected by the proposed Bramford to Twinstead Reinforcement and forms part of the historic park of Hintlesham Hall so the cumulative effects on this landscape could be major.
- 1.81 Generally, BMSDC agree the effects of the Project would remain major and significant (adverse) within 0.5 km; moderate and significant (adverse) between 0.5 km and 1.5 km, reducing to negligible and not significant within wooded tributary valleys.
- 1.82 C2 Washbrook: This Visual Receptor Area is located to the east of the Project and south-east of the existing Bramford Substation. There is one representative viewpoint within this Visual Receptor Area.
- i. Viewpoint 3.22 PRow near Sproughton (Sproughton 20)

- 1.83 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.84 This Receptor Area contains an intimate landscape of streams and valleys, Belstead Brook and Spring Brook, criss-crossed by PRow and lanes. The assessment identifies there would be close views from the properties along Burstall Lane and those associated with the valley systems to the south of the A1071 such as at Washbrook Street. The Grindle is designated as a Quiet Lane, located to the north of Sproughton.
- 1.85 Generally, BMSDC agree that the effects of the Project would remain major and significant (adverse) within 0.5 km; moderate and significant (adverse) between 0.5 km and 1.5 km, reducing to negligible and not significant from Abbey Oaks; and no effect (not significant) beyond 1.5 km.
- 1.86 C3 Ipswich West, Bramford and Sproughton: This Visual Receptor Area is located to the east of the Project, on the edge of Ipswich. There is one representative viewpoint within this Visual Receptor Area.
- i. Viewpoint 3.29 Hadleigh Road, near Chantry Park
- 1.87 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low. The assessment identifies that from some limited areas, for example some parts of the A1071 and from Hadleigh Road on the edge of Chantry Park Conservation Area there would be views towards the overhead line above distant wooded skylines to the west.
- 1.88 The applicant has only provided a baseline photograph for Viewpoint 3.29, however, which is not acceptable even though the viewpoint distance is 2.37Km. BMSDC cannot agree the significance of effects without a visualisation from Viewpoint 3.29.
- 1.89 C4 Chattisham: This Visual Receptor Area is located to the north of the Project in the area broadly between Chattisham and Duke Street in the east and Upper Layham in the west. There are four Representative Viewpoints:
- i. Viewpoint 3.05 The Street / NCR 1, Chattisham
 - ii. Viewpoint 3.08 NCR 1, Woodlands Road
 - iii. Viewpoint 3.25 PRow near Woodlands Hall
- 1.90 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to

this sort of infrastructure is low. The assessment identifies close views of construction activity and the operational line, including views towards the CSE compound and construction activity associated with the underground cable, from the local road and PRow network, including from NCN 1 on Chattisham Road, as well as the linear settlement of Chattisham, and a relatively small number of scattered properties.

- 1.91 Viewpoint 3.05 Chattisham, NCR Route 1 is taken from 0.6Km so just outside the 'Close view' definition. However, the pylon line is still a dominant feature in about 75% of the visualisation and BMSDC judge a major significant impact. Viewpoint 3.25 PRow near Woodlands Hall is taken from 0.6Km and illustrates the dominant impact of the CSE compound from this distance which BMSDC judge is also major significant without mitigation. Viewpoint 3.08 NCR 1, Woodlands Road taken from 1Km distance illustrates how the overhead line is still of moderate i.e., of significant impact at this distance. BMSDC agree that significant effects remain up to 1.5Kms
- 1.92 C5 Capel St Mary: This Visual Receptor Area is located to the south of the Project in the area broadly between Copdock in the east and Capel St Mary in the west. There are two Representative Viewpoints
- i. Viewpoint 3.04 Church Lane, Washbrook
 - ii. Viewpoint 3.09 PRow, Little Wenham
 - iii. Viewpoint 3.28 PRow near Capel St Mary (Copdock 19)
- 1.93 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low. The assessment identifies close views towards the CSE compound, from the local road and PRow network, NCN Route 1, as well as scattered properties and close to medium distance views from the local road and PRow network (as represented by Viewpoint 3.04 Church Lane Washbrook). Other receptors would include NCN Route 1, as well as a relatively small number of scattered and clustered properties such as those along Wenham Road. Viewpoint 3.04 Church Lane Washbrook is taken from 0.8Km away from the Project line. The visualisation demonstrates the widespread and significant impact of the line at this point with dozens of pylons dominating the fore and middle ground. This is a landscape with some infrastructure visible on the horizon but this is c4Kms away and so currently barely perceptible in the wider landscape. It is disingenuous to state the overhead line would most often be seen on the skyline, above intervening vegetation and hedgerows when

the visualisation clearly shows the proposed overhead line in the foreground of view. Likewise, to state that between approximately 1 km and 2 km the overhead line would only be ‘perceptible’ in some medium to long distance views is not borne out. In Viewpoint 3.09 Little Wenham completely understates the visibility of the line in this visualisation from 1.4Km distance, when the overhead wires and pylons are clearly visible in the mid-ground.

- 1.94 BMSDC agree generally that the effects of the Project would remain as in Operation Year 1: major and significant (adverse) within 0.5 km; moderate and significant (adverse) between 0.5 km and 1.5 km, increasing to major and significant (adverse) west of Washbrook and reducing to minor and not significant (adverse) at Little Wenham; and minor and not significant (adverse) beyond 1.5 km,
- 1.95 C6 Raydon: This Visual Receptor Area is located to the west of the Project in the area around Raydon. Part of the area falls within Dedham Vale National Landscape (an AONB). There is one Representative Viewpoints outside this area to the south-west, although VP 3.10 appears also to be in this area:
 - i. Viewpoint 3.24 Higham Hill south of Lower Raydon
- 1.96 Operational: BMSDC do not agree with the approach to value of the view which ignores the general role of views/vista/intervisibility in the Landscape Character Assessment. BMSDC do not accept that the visual sensitivity to this sort of infrastructure is low.
- 1.97 The Project would be undergrounded within this Visual Receptor Area. The assessment identifies close views of construction activity associated with the underground cables from the local road and PRow network, including the B1070, NCN Route 48, as well as scattered properties and the eastern and southern edges of Raydon. People using Noaks Road and Sulleys Hill Road, which are designated as Quiet Lanes would also have close views towards this activity. Viewpoint 3.24 Higham Hill which is located outside this area to the south-west within Dedham Vale National Landscape identifies that the finished infrastructure is likely barely perceptible if at all. However, between approximately 1 km and 2 km the overhead line would be perceptible in some limited medium to long distance views from a small part of the north-east of this area. A VP 3.10 had been identified on Figure 13.7 but there is no viewpoint photograph and visualisation. These would be useful to demonstrate that views from the north-east are only ‘perceptible’. Generally, BMSDC agree with the assessment judgements.

- 1.98 C7 Holton St Mary and East Bergholt: This Visual Receptor Area is located to the east of the Project in the area around Great Wenham and Holton St Mary. The Representative Viewpoints identified are:
- i. Viewpoint 3.17 Great Wenham
 - ii. Viewpoint 3.30 PRoW south of Greenfields
- 1.99 The assessment identifies that close views can be had of construction activity, including views towards the CSE compound and construction activity associated with the underground cable, from the local road network including the B1070, from the local PRoW network from NCN Route 48 as well as from Bacon's Green and scattered properties.
- 1.100 BMSDC accept that visual effects on visual receptors would generally be significant (negative) within approximately 1 km of the draft Order Limits. However, it is important that a close view of the CSE is provided to demonstrate the extent of the effects of that piece of permanent infrastructure and the beneficial effects or not of any proposed mitigation.
- i. C8 (Undergrounding section – 1 km buffer) Higham
 - ii. C9 (Undergrounding section – 1 km buffer) Stratford St Mary
- 1.101 BMSDC accept that effects on visual receptors would likely be significant (negative) within approximately 0.5 km of draft Order Limits only at construction in these two Visual Receptor areas.