



SCOPING OPINION:

Proposed Bramford to Twinstead Overhead Line Project

Case Reference: EN020002

Adopted by the Planning Inspectorate (on behalf of the Secretary of State) pursuant to Regulation 10 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

June 2021

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1. INTRODUCTION

1.1 Background

- 1.1.1 On 10 May 2021, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from National Grid Electricity Transmission plc (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed Bramford to Twinstead Overhead Line Project (the Proposed Development).
- 1.1.2 In accordance with Regulation 10 of the EIA Regulations, an Applicant may ask the SoS to state in writing its opinion *'as to the scope, and level of detail, of the information to be provided in the environmental statement'*.
- 1.1.3 This document is the Scoping Opinion (the Opinion) provided by the Inspectorate on behalf of the SoS in respect of the Proposed Development. It is made on the basis of the information provided in the Applicant's report entitled Bramford to Twinstead Scoping Report (the Scoping Report). This Opinion can only reflect the proposals as currently described by the Applicant. The Scoping Opinion should be read in conjunction with the Applicant's Scoping Report.
- 1.1.4 The Applicant has notified the SoS under Regulation 8(1)(b) of the EIA Regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development is EIA development.
- 1.1.5 Regulation 10(9) of the EIA Regulations requires that before adopting a scoping opinion the Inspectorate must take into account:
- (a) *any information provided about the proposed development;*
 - (b) *the specific characteristics of the development;*
 - (c) *the likely significant effects of the development on the environment; and*
 - (d) *in the case of a subsequent application, the environmental statement submitted with the original application.*
- 1.1.6 This Opinion has taken into account the requirements of the EIA Regulations as well as current best practice towards preparation of an ES.
- 1.1.7 The Inspectorate has consulted on the Applicant's Scoping Report and the responses received from the consultation bodies have been taken into account in adopting this Opinion (see Appendix 2).
- 1.1.8 The points addressed by the Applicant in the Scoping Report have been carefully considered and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the Inspectorate will take account of relevant legislation and guidelines. The Inspectorate will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with the application for a Development Consent Order (DCO).

- 1.1.9 This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (eg on submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or Associated Development or development that does not require development consent.
- 1.1.10 Regulation 10(3) of the EIA Regulations states that a request for a scoping opinion must include:
- (a) *a plan sufficient to identify the land;*
 - (b) *a description of the proposed development, including its location and technical capacity;*
 - (c) *an explanation of the likely significant effects of the development on the environment; and*
 - (d) *such other information or representations as the person making the request may wish to provide or make.*
- 1.1.11 The Inspectorate considers that this has been provided in the Applicant's Scoping Report. The Inspectorate is satisfied that the Scoping Report encompasses the relevant aspects identified in the EIA Regulations.
- 1.1.12 In accordance with Regulation 14(3)(a), where a scoping opinion has been issued in accordance with Regulation 10 an ES accompanying an application for an order granting development consent should be based on *'the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)'*.
- 1.1.13 The Inspectorate notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2017 ('the Habitats Regulations'), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. This assessment must be co-ordinated with the EIA in accordance with Regulation 26 of the EIA Regulations.
- 1.1.14 The Inspectorate notes that the Proposed Development forms part of a project that initially commenced in 2009 and has previously been the subject of a Scoping Opinion adopted by the SoS in March 2013 under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009, following which the project was placed on pause. Section 1.2 of the Scoping Report (Volume 1) describes the background to the Proposed Development and the reasons for the pause. Section 1.4 states that, given the time lapse, the Applicant is seeking a new scoping opinion, which once adopted will replace the March 2013 Scoping Opinion.

1.2 The Planning Inspectorate's Consultation

- 1.2.1 In accordance with Regulation 10(6) of the EIA Regulations the Inspectorate has consulted the consultation bodies before adopting a scoping opinion. A list of the consultation bodies formally consulted by the Inspectorate is provided at Appendix 1. The consultation bodies have been notified under Regulation 11(1)(a) of the duty imposed on them by Regulation 11(3) of the EIA Regulations to make information available to the Applicant relevant to the preparation of the ES. The Applicant should note that whilst the list can inform their consultation, it should not be relied upon for that purpose.
- 1.2.2 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided, along with copies of their comments, at Appendix 2, to which the Applicant should refer in preparing their ES.
- 1.2.3 The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.
- 1.2.4 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the Applicant and will be made available on the Inspectorate's website. The Applicant should also give due consideration to those comments in preparing their ES.

2. THE PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 The following is a summary of the information on the Proposed Development and its site and surroundings prepared by the Applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the Proposed Development and the potential receptors/ resources.

2.2 Description of the Proposed Development

2.2.1 The Applicant's description of the Proposed Development, its location and technical capacity is provided in Chapter 4 of the Scoping Report (Volume 1). Section 4.5 describes the project components and construction methods. Section 4.6 describes the operational and maintenance requirements of the Proposed Development. Section 4.7 describes the decommissioning activity.

2.2.2 The Proposed Development involves construction and operation of a 400 kilovolt (kV) electricity transmission reinforcement between Bramford substation in Suffolk and Twinstead Tee in Essex following removal of existing 400kV and 132kV infrastructure, as illustrated on a series of plans presented at Figure 4.1 (Volume 3) (AAA_B2B_04_Proposed Development).

2.2.3 The Proposed Development comprises:

- Installation of approximately 19km of overhead line (OHL);
- Installation of circa 56 new steel lattice pylons (circa 50m in height);
- Installation of approximately 8km of underground cables;
- Realignment of existing 400kV OHL to the north and west of Hintlesham Woods to facilitate the use of the existing swathe through the woods for the new 400kV OHL;
- Installation of four cable sealing end compounds (CSEC), including permanent access roads;
- Removal of existing OHL and supporting pylons:
 - Approximately 25km of 132kV OHL and supporting pylons between Burstall Bridge and Twinstead Tee; and
 - Approximately 1.5km of 400kV OHL and supporting pylons between Twinstead Tee and the proposed CSE at Stour Valley West;
- A new 400kV/ 132kV Grid Supply Point (GSP) substation (including permanent access road) at Butler's Wood, and associated works to link to the existing 400kV and 132kV electricity transmission network;
- Temporary OHL diversion to allow the construction of the proposed CSEC at Stour Valley West;
- Temporary use of land to facilitate construction, including compounds, haul routes and laydown areas;

- Temporary amendments to the highway network to facilitate construction access; and,
 - Environmental mitigation and enhancement, including tree planting.
- 2.2.4 The Proposed Development is located in a predominantly rural location in the east of England, crossing 3 local authority areas: Mid Suffolk District (north west part of the site), Babergh (central part of the site) and Braintree (south west part of the site). The scoping boundary runs in a linear route, with two branches at the eastern end, from the existing Bramford substation in the north east to Twinstead in the south west. There is a further separate site for the proposed GSP substation at Wickham St Paul, to the west of Twinstead. Ipswich lies 5km to the east of Bramford substation; the town of Hadleigh is 1km to the north of the scoping boundary at the eastern end, and the town of Sudbury is 4km to the north of the scoping boundary at the western end.
- 2.2.5 The central part of the Proposed Development crosses the northern most section of the Dedham Vale Area of Outstanding Natural Beauty (AONB), which is designated as an exceptional example of a lowland river valley. Likely significant effects to the AONB are considered in Chapter 6 of the Scoping Report. Three rivers (Brett, Box and Stour) dissect the scoping boundary running in a north to south direction in the east, central and west sections of the site respectively (Figure 7.3, Volume 3) (drawing reference AAA_B2B_07_Biodiversity).
- 2.2.6 The road network is described at paragraph 12.4.2 of the Scoping Report (Volume 1). The A120, A12 and A14 are part of the strategic road network (SRN) in the wider area. The A120 and A12 are located to the south, running from south west to north east; the A14 is located to the east, running from south to north. The A1071 is the primary east to west route running parallel to the north of the scoping boundary. It connects with the A134, which travels south to north to the east of Assington, and in turn connects with the A131, which also runs south to north, to the west of Twinstead. The scoping boundary includes some locally designated protected and quiet lanes; these are shown on Figure 8.1 (Volume 3) (drawing reference AAA_B2B_08_Historic Environment) and are considered in Chapters 8 and 12 of the Scoping Report (Volume 1).
- 2.2.7 A location plan is provided at Figure 1.1 (Volume 3) (drawing reference AAA_B2B_01_Introduction). The Applicant has stated that the boundary for the purposes of EIA Scoping has been drawn with a 250m buffer to incorporate flexibility for potential refinement of the indicative alignment of the OHL forming part of the Proposed Development. It is stated at paragraph 1.1.5 of the Scoping Report (Volume 1) that the order limits will be further defined and will replace the scoping boundary as the basis for assessment in the ES.
- 2.2.8 The scoping boundary is divided into six sections based on landscape character areas, which the Applicant states have informed the options' appraisal for the Proposed Development. The sections are shown on Figure 1.1 (Volume 3) and are as follows:
- Section AB Bramford Substation and Hintlesham (sections A and B were combined following options' appraisal work in 2012 as the landscape characteristics were considered similar);

- Section C Brett Valley;
- Section D Polstead;
- Section E Dedham Vale up to the AONB boundary;
- Section F Leavenheath and Assington; and,
- Section G Stour Valley.

2.2.9 The land use is primarily arable, with areas of woodland and grassland across the scoping boundary. Hintlesham Wood (ancient woodland and Site of Special Scientific Interest (SSSI)) is located to the north west section of the scoping boundary (see Figure 7.2, Volume 3) (drawing reference AAA_B2B_07_Biodiversity). Parts of the site are already in operational use by the Applicant or others as part of the electricity network, eg the existing OHL and the Bramford substation. There are existing residential areas, comprising villages, hamlets and individual properties/ farmsteads located along the length of the scoping boundary to the north, south and west, including Assington, Boxford, Bures, Burstall Hill, Chattisham, Hintlesham, Lamarsh, Leavenheath, Stoke by Nayland, Twinstead and Upper Layham.

2.3 The Planning Inspectorate's Comments

Description of the Proposed Development

- 2.3.1 Paragraphs 4.5.1 to 4.5.9 describe the general methods proposed to be used in the construction of the Proposed Development. The ES should describe the extent of land temporarily required for construction, and clarify the location, number and duration of temporary facilities, including compounds, access roads and bridging of watercourses, as well as any likely significant effects associated with this activity.
- 2.3.2 Section 4.5 describes the expected temporary and permanent vehicle access requirements to the proposed GSP substation, and states that there may be a requirement for widened access and/ or localised modification of highway. The Inspectorate considers that the Applicant should make effort to define these routes within the ES; however, where they are unable to do so, the Applicant should ensure that the ES appropriately assesses the likely significant effects associated with the potential access routes.
- 2.3.3 Paragraph 4.5.7 states that percussive piling may be required at some pylon locations and other areas requiring deep foundations, which will be confirmed following ground investigation. The ES should be based on the foundation design to be used, or where this is still to be determined, the worst case scenario should be assessed to identify any likely significant effects.
- 2.3.4 The Inspectorate notes that the final alignment of the proposed OHL is still to be confirmed and that there are options under consideration for routeing of the proposed underground cable at Dollops Wood and the siting of the CSEC at Dedham Vale East. The Applicant should make effort to fix the siting of each component and reduce uncertainty; where this is not possible, the Applicant

should ensure that the ES assesses a worst-case scenario adopting a parameters based approach.

- 2.3.5 The Applicant should ensure that the description of the Proposed Development that is being applied for is as accurate and firm as possible, as this will form the basis of the EIA. In the event that a DCO application is submitted, the Applicant should clearly define what elements of the Proposed Development are integral to the NSIP, and whether any elements are 'Associated Development' under the Planning Act 2008 (as amended) (PA2008) or ancillary matters. The Inspectorate notes that paragraph 1.1.4 of the Scoping Report (Volume 1) refers to some aspects of the project comprising associated development, but no further description is provided within the Scoping Report. Associated Development is defined in the PA2008 as development that is associated with the principal development. Guidance on Associated Development can be found in the Ministry of Housing, Communities and Local Government (MHCLG) publication 'Planning Act 2008: Guidance on associated development applications for major infrastructure projects'. Any proposed works and/ or infrastructure required as Associated Development or an ancillary matter (whether on or off-site) should be assessed as part of an integrated approach to environmental assessment.
- 2.3.6 The Inspectorate notes that it is proposed to undertake works to the existing Bramford substation under permitted development rights; these works would not form part of any DCO application. It is stated at paragraph 4.3.2 of the Scoping Report (Volume 1) that these works would form part of the assessment of cumulative effects in the ES. The Inspectorate considers that where there is potential for likely significant cumulative effects, these works should be included on the long list and taken forward to Stage 2 assessment, noting that they do not currently appear to be included at Appendix 18.1 (Volume 2).
- 2.3.7 The Scoping Report (Volume 1) identifies at paragraph 4.7.1 that the expected life span of the Proposed Development is at least 40 years, but likely to extend further with regular maintenance. Whilst general commentary regarding the approach to decommissioning and its potential effects is provided, it is stated at paragraph 5.3.7 that this element of the project is proposed to be scoped out of the ES given the potential for change in the regulatory framework and baseline conditions over the lifetime of the Proposed Development. The Inspectorate acknowledges that the further into the future any assessment is made, the less reliance may be placed on the outcome. However, the purpose of such a long-term assessment is to enable the decommissioning of the works to be taken into account in the design and use of materials such that structures can be taken down with the minimum of disruption. The Inspectorate considers that a high-level environmental assessment of the decommissioning of the Proposed Development should be provided in the ES. The assessment should provide information about the predicted future baseline which has been applied to the assessment of decommissioning effects. The estimated timescales for the life span of the Proposed Development should also be set out, along with an indication of the certainty in this regard. The sensitivity of the findings in the assessment to any departure or deviation from the estimated timescales should be explained. The process and methods of decommissioning should be considered and options presented in the ES.

Alternatives

- 2.3.8 The EIA Regulations require that the Applicant provide 'A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects'.
- 2.3.9 The Inspectorate acknowledges the Applicant's intention to consider alternatives within the ES, and notes the consideration and assessment of strategic options, route corridor and alignment options that has already been undertaken to date (as described in Chapter 3: Main Alternatives Considered of the Scoping Report (Volume 1)). The Inspectorate would expect to see a discrete section in the ES that provides details of the reasonable alternatives studied and the reasoning for the selection of the chosen option(s), including a comparison of the environmental effects. This should include consideration of how much of the cable is OHL and how much is undergrounded across the Proposed Development.
- 2.3.10 The ES should describe the selection process used and decisions made that result in the determination of the final location for the CSEC at Dedham Vale East and routing of underground cables at Dollops Wood.

Flexibility

- 2.3.11 The Applicant's attention is drawn to the Inspectorate's Advice Note Nine 'Using the 'Rochdale Envelope'¹, which provides details on the recommended approach to follow when incorporating flexibility into a draft DCO (dDCO).
- 2.3.12 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons, eg the number of new and replacement pylons and their locations, and the Limits of Deviation (LoD) for the installation of the new overhead line and underground cable. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters should be clearly defined in the dDCO and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.
- 2.3.13 It should be noted that if the Proposed Development materially changes prior to submission of the DCO application, the Applicant may wish to consider requesting a new scoping opinion.

¹ Advice Note nine: Using the Rochdale Envelope. Available at:
<https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

3. ES APPROACH

3.1 Introduction

- 3.1.1 This section contains the Inspectorate's specific comments on the scope and level of detail of information to be provided in the Applicant's ES. General advice on the presentation of an ES is provided in the Inspectorate's Advice Note Seven 'Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements'² and associated appendices.
- 3.1.2 Aspects/ matters (as defined in Advice Note Seven) are not scoped out unless specifically addressed and justified by the Applicant, and confirmed as being scoped out by the Inspectorate. The ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant's Scoping Report.
- 3.1.3 The Inspectorate has set out in this Opinion where it has/ has not agreed to scope out certain aspects/ matters on the basis of the information available at this time. The Inspectorate is content that the receipt of a Scoping Opinion should not prevent the Applicant from subsequently agreeing with the relevant consultation bodies to scope such aspects / matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects/ matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.
- 3.1.4 The Inspectorate has made effort to ensure that this Scoping Opinion is informed through effective consultation with the relevant consultation bodies. Unfortunately, at this time the Inspectorate is unable to receive hard copy consultation responses, and this may affect a consultation body's ability to engage with the scoping process. The Inspectorate also appreciates that strict compliance with COVID-19 advice may affect a consultation body's ability to provide their consultation response. The Inspectorate considers that Applicants should make effort to ensure that they engage effectively with consultation bodies and where necessary further develop the scope of the ES to address their concerns and advice. The ES should include information to demonstrate how such further engagement has been undertaken and how it has influenced the scope of the assessments reported in the ES.
- 3.1.5 Where relevant, the ES should provide reference to how the delivery of measures proposed to prevent/ minimise adverse effects is secured through dDCO requirements (or other suitably robust methods) and whether relevant consultation bodies agree on the adequacy of the measures proposed.

² Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements and annex. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

3.2 Relevant National Policy Statements (NPSs)

- 3.2.1 Sector-specific NPSs are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority (ExA) will make their recommendation to the SoS and include the Government's objectives for the development of NSIPs. The NPSs may include environmental requirements for NSIPs, which Applicants should address within their ES.
- 3.2.2 The designated NPSs relevant to the Proposed Development are the:
- Overarching NPS For Energy (NPS EN-1); and,
 - NPS for Electricity Networks Infrastructure (NPS EN-5).

3.3 Scope of Assessment

General

- 3.3.1 The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:
- to demonstrate how the assessment has taken account of this Opinion;
 - to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;
 - to set out the proposed mitigation and/ or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);
 - to describe any remedial measures that are identified as being necessary following monitoring; and
 - to identify where details are contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of National Site Network sites and their locations, together with any mitigation or compensation measures, that inform the findings of the ES.
- 3.3.2 The ES should clearly describe any changes that have been made to the DCO boundary from the scoping boundary, including reduction or increase in extent, or variation of extent, and the reasons for such change, eg following further survey work, consultation or refinement of the indicative alignment. Where changes are made, each aspect chapter of the ES should explain the effect of such changes on the approach to assessment, including where this results in additional matters needing to be scoped into the ES.
- 3.3.3 The Applicant is reminded that the ES should be clear and accessible to readers.

Baseline Scenario

- 3.3.4 The ES should include a description of the baseline scenario with and without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

- 3.3.5 In light of the number of ongoing developments within the vicinity of the Proposed Development application site, the Applicant should clearly state which developments will be assumed to be under construction or operational as part of the future baseline.

Forecasting Methods or Evidence

- 3.3.6 The ES should contain the timescales upon which the surveys which underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter.
- 3.3.7 The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters.
- 3.3.8 The ES should include details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

Residues and Emissions

- 3.3.9 The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant. This information should be provided in a clear and consistent fashion and may be integrated into the relevant aspect assessments.
- 3.3.10 The Scoping Report contains minimal information about the likely types of waste that would be produced during the construction, operational and decommissioning phases of the Proposed Development (paragraphs 4.4.7 and 4.4.8, Volume 1). The ES should include an estimate of the quantities of waste that are likely to be produced and should assess the impact of waste where this likely to give rise to significant effects.

Mitigation and Monitoring

- 3.3.11 Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should also address how any mitigation proposed is secured, with reference to specific dDCO requirements or other legally binding agreements.
- 3.3.12 The ES should identify and describe any proposed monitoring of significant adverse effects and how the results of such monitoring would be utilised to inform any necessary remedial actions.

Risks of Major Accidents and/or Disasters

- 3.3.13 Section 17 of the Scoping Report (Volume 1) and Appendix 17.1 (Volume 2) provide a description of the likely significant effects resulting from accidents and disasters applicable to the Proposed Development including risks to human health, cultural heritage and the environment. Measures to prevent and control significant effects are described. The Applicant should also make use of appropriate guidance (e.g. that referenced in the Health and Safety Executives (HSE) Annex to the Inspectorate's Advice Note 11) to better understand the likelihood of an occurrence and the Proposed Development's susceptibility to potential major accidents and hazards.
- 3.3.14 Please note that further comments are made on risks of major accidents and/or disasters in section 4.12 of this report.

Climate and Climate Change

- 3.3.15 The ES should include a description and assessment (where relevant) of the likely significant effects the Proposed Development may have on climate (for example having regard to the nature and magnitude of greenhouse gas (GHG) emissions) and the vulnerability of the project to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development. This may include, for example, alternative measures such as changes in the use of materials or construction and design techniques that will be more resilient to risks from climate change.
- 3.3.16 Please note that further comments are made on climate and climate change in section 4.15 of this report.

Transboundary Effects

- 3.3.17 Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES.
- 3.3.18 The Scoping Report concludes that the Proposed Development is not likely to have significant effects on a European Economic Area (EEA) State and proposes that transboundary effects do not need to be considered within the ES. This conclusion is drawn following completion of a Transboundary Screening Matrix, which is presented at Appendix 1.1 (Volume 2).
- 3.3.19 Having considered the nature and location of the Proposed Development, the Inspectorate is not aware that there are potential pathways of effect to any EEA states but recommends that, for the avoidance of doubt, the ES details any such consideration and assessment including through an up-to-date Transboundary Screening Matrix.
- 3.3.20 Please note that further comments are made on transboundary effects in section 4.13 of this report.

A Reference List

- 3.3.21 A reference list detailing the sources used for the descriptions and assessments must be included in the ES.

3.4 Coronavirus (COVID-19) Environmental Information and Data Collection

- 3.4.1 The Inspectorate understands government enforced measures in response to COVID-19 may have consequences for an Applicant's ability to obtain relevant environmental information for the purposes of their ES. The Inspectorate understands that conducting specific surveys and obtaining representative data may be difficult in the current circumstance.
- 3.4.2 The Inspectorate has a duty to ensure that the environmental assessments necessary to inform a robust DCO application are supported by relevant and up to date information. Working closely with consultation bodies, the Inspectorate will seek to adopt a flexible approach, balancing the requirement for suitable rigour and scientific certainty in assessments with pragmatism in order to support the preparation and determination of applications in a timely fashion.
- 3.4.3 Applicants should make effort to agree their approach to the collection and presentation of information with relevant consultation bodies. In turn the Inspectorate expects that consultation bodies will work with Applicants to find suitable approaches and points of reference to allow preparation of applications at this time. The Inspectorate is required to take into account the advice it receives from the consultation bodies and will continue to do so in this regard.

3.5 Confidential and Sensitive Information

- 3.5.1 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to personal information specifying the names and qualifications of those undertaking the assessments and / or the presence and locations of rare or sensitive species such as badgers, rare birds and plants where disturbance, damage, persecution or commercial exploitation may result from publication of the information.
- 3.5.2 Where documents are intended to remain confidential the Applicant should provide these as separate documents with their confidential nature clearly indicated in the title and watermarked as such on each page. The information should not be incorporated within other documents that are intended for publication or which the Inspectorate would be required to disclose under the Environmental Information Regulations 2004.
- 3.5.3 The Inspectorate adheres to the data protection protocols set down by the Information Commissioners Office³ . Please refer to the Inspectorate's National

³ <https://ico.org.uk>

Infrastructure privacy notice⁴ for further information on how personal data is managed during the Planning Act 2008 process.

⁴ <https://www.gov.uk/government/publications/planning-inspectorate-privacy-notice>

4. ASPECT BASED SCOPING TABLES

4.1 Landscape and Visual Impact

(Scoping Report Section 6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.1	6.6.6	Special Landscape Areas (SLAs) that would not be physically impacted (construction and operation)	The Applicant proposes to scope out impacts to locally designated SLAs that will not be physically impacted by the Proposed Development, including the River Box/ Box Valley SLA. Given the stage of the project, the Inspectorate does not consider that sufficient information is yet available on the design and location of the Proposed Development to conclude that there would not be significant effects to the setting of these SLAs from addition of new infrastructure elements; where significant effects in this respect are likely, these should be considered in the ES.
4.1.2	6.6.8 6.6.14 6.6.15 Table 6.5	Night-time effects to designated landscapes, landscape character areas and visual receptors (construction and operation)	<p>On the basis that lighting used during construction would be managed in line with the good practice measures as set out in the Code of Construction Practice (CoCP) and would be used for a temporary period of time, the Inspectorate agrees that night-time effects are not likely to be significant and this matter can be scoped out of the ES.</p> <p>It is noted that operational lighting would only be required at the proposed GSP substation and possibly the CSECs, and only switched on when needed. The ES should clarify whether lighting is required at the CSECs (it is noted that the Habitats Regulation Assessment (HRA) Screening Report only references lighting at the GSP substation). Limited information is presented in the Scoping Report as to the type and brightness of lighting to be used, and it is noted that two of the CSECs are located within or on the border of the Dedham Vale AONB.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>On the basis that the proposed GSP substation is not located within a designated landscape and that the site is well screened by existing woodland and vegetation, the Inspectorate agrees that night-time effects arising from temporary lighting can be scoped out of the ES.</p> <p>The Inspectorate does not consider that sufficient information has been presented in the Scoping Report to conclude that there would not be significant effects from the installation and use of lighting at night time at the proposed CSECs, however. If lighting is required for these elements, then the ES should include further information about the location, type and hours of use of lighting in order to scope this matter out, demonstrating that they achieve lighting levels consistent with their existing rural setting (e.g. drawing on the Institute of Lighting Professionals Guidance Note 1 for the reduction of obtrusive light 2021). Where significant effects are likely, these should be considered in the ES.</p>
4.1.3	6.6.13	Landscape character areas that are not physically impacted by construction and operation	<p>The Applicant proposes to scope out landscape character areas including Plateau Farmlands, Urban and Rolling Estate Farmlands within the Babergh and Mid Suffolk District Council Landscape Guidance where these would not be physically impacted by the Proposed Development. Given the stage of the project, the Inspectorate does not consider that sufficient information has been presented on the design and location of the Proposed Development to conclude that there would not be significant effects to the setting of these landscape character areas from the addition of new infrastructure elements; where significant effects in this respect are likely, these should be considered in the ES. For clarity, the ES should confirm those landscape character areas within the study area that would not be physically affected.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.4	Table 6.5	Landscape elements (construction and operation) as individual receptors	<p>The Applicant states that individual landscape elements such as tree cover, field boundaries, landform and watercourses will not be assessed as separate landscape receptors, but their contribution to the baseline landscape character and value, and the impacts of changes to features, would be considered as part of the assessment of impact to district-scale landscape character areas. On that basis, the Inspectorate agrees that landscape elements can be scoped out as individual receptors.</p> <p>However, please also refer to the Inspectorate's comments on historic landscape character in ID 4.3.7.</p>
4.1.5	Table 6.5	National character areas (NCAs) and county scale landscape character areas (construction and operation)	<p>The Applicant states that NCAs and county scale landscape character areas will not be assessed as separate receptors, to avoid duplication in the assessment – instead, the assessment of impact to landscape character would consider district scale landscape character areas.</p> <p>The Inspectorate considers that given the linear route, length and geographical coverage of the Proposed Development, and therefore expected impacts to landscape character over a large geographical area, that a landscape character assessment at a wider level than district level is required as part of the ES in order to understand the potential likely significant effects to landscape character.</p> <p>On that basis, the Inspectorate agrees that NCAs can be scoped out of the ES, but county scale landscape character areas should be scoped into the ES for construction and operation.</p>
4.1.6	6.6.16 Table 6.5	Effects on views outside of the Zone of Theoretical Visibility (ZTV)	<p>The Applicant proposes to scope out effects on visual receptors that are wholly outside of the ZTV during construction and operation as the Scoping Report states there would be no likelihood of visual effects on receptors. The Inspectorate agrees that these matters can be scoped out of the assessment on that basis.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.7	6.6.17 Table 6.5	Effects on private views	<p>The Applicant proposes to scope out visual effects on individual private views and the 'right to a view'.</p> <p>On the basis that the indicative alignment of the Proposed Development has been designed to avoid residential properties and that effects to visual receptors in terms of local residents would be considered as part of the assessment of community level views, the Inspectorate agrees that this matter can be scoped out of the assessment.</p>
4.1.8	6.6.20 Table 6.5	Effects on views: road receptors (people travelling by car)	<p>The Applicant proposes to scope out visual effects on road users (people travelling by car) in their own right. The Scoping Report explains that road receptors will be considered as part of the community level views assessment. On the basis that this will include assessment of impacts to promoted scenic drives or tourist routes, quiet lanes and other road users, eg cyclists, walkers, horse riders and local communities, the Inspectorate agrees with this approach and that this matter can therefore be scoped out of the assessment.</p>
4.1.9	6.6.21 Table 6.5	Effects on views: people travelling on the Sudbury branch line (construction and operation)	<p>The Applicant proposes to scope out effects on the views of travellers by train on the Sudbury branch line. The Scoping Report explains that this is because of the speed of travel and that the cables in this location will be underground; in addition there would be control measures in place to manage construction lighting to avoid impacts to drivers and rail users. The Inspectorate agrees that this matter can be scoped out of the assessment on that basis.</p>

ID	Ref	Other points	Inspectorate's comments
4.1.10	6.2.2 Appendix 2.1	Technical guidance	<p>The Inspectorate considers that the ES should also refer to the Landscape Institute Technical Guidance Note: Landscape Character Assessment (Technical Information Note 08/15).</p> <p>The Inspectorate also draws the Applicant's attention to the release of further technical guidance by the Landscape Institute, TGN 02-21 Assessing landscape value outside national designations, in May 2021. This includes incorporation of cultural associations into consideration of landscape value, which should be considered as part of the assessment in the ES.</p>
4.1.11	6.3.6 Figure 6.3	ZTV	<p>The Scoping Report states that the draft ZTV presented in Figure 6.3 (Volume 3) excludes the area around the proposed GSP substation and CSECs. The Inspectorate considers that it is unlikely given the scale of these components relative to the OHL and pylon that the ZTV would increase in extent if they were included in the modelling; however, this should be considered and confirmed in the ES and the final ZTV should ensure it encompasses all of the Proposed Development.</p>
4.1.12	6.49	Baseline conditions	<p>The Inspectorate notes that the baseline conditions for the parts of the scoping boundary within Braintree District Council area are described by reference to the Landscape Character of Braintree District (2006). The landscape has evolved since the preparation of this document and the Inspectorate considers that the description of the baseline for Section G Stour Valley and Butler's Wood GSP substation within the ES should be supplemented with further information from the Applicant's own study and the findings of the Essex Landscape Character Assessment and the Stour Valley Project Area Valued Landscape Assessment to ensure that it is up-to-date. The Suffolk Landscape Character Assessment should also inform the description of the baseline conditions.</p>

ID	Ref	Other points	Inspectorate's comments
4.1.13	6.8.21	Dedham Vale AONB extension	<p>The Applicant proposes to scope in an assessment of effects on the Stour Valley SLA. The part of this SLA affected by the Proposed Development is within an area under consideration as part of the Dedham Vale AONB boundary review by Natural England; the proposal for boundary variation was registered in March 2021 and as yet there is no confirmed timetable for consideration and decision. It is noted that the Parliamentary Under Secretary with responsibility for AONBs stated in May 2021 that an extension has not been ruled out and Natural England would communicate with the local proposers in due course.</p> <p>The Applicant proposes that as this area is not currently designated as part of the AONB, it will be assessed under landscape character in the ES.</p> <p>However, the Inspectorate considers that the extension area has already been identified as having a particular value and an important role in the setting of the Dedham Vale AONB that is distinct from its SLA status. As such, the ES should include sensitivity testing assuming a worst case where the AONB has been extended.</p> <p>Depending on the status of the extension application at the time of any DCO application, the plans at Figure 6.1 (Volume 3) may need to be updated for the ES to illustrate any extension to the Dedham Vale AONB.</p>
4.1.14	6.6.6	River Box SLA	<p>The Applicant's Scoping Report (Volume 1) refers to a non-statutory designation - the River Box SLA. This site is not shown on the corresponding Figure 6.1 (Volume 3) of the Scoping Report, but the figure does show a site called 'Box Valley SLA'. The ES should use consistent terms for sites and ensure that this consistency is also applied to both figures and the text.</p>

ID	Ref	Other points	Inspectorate's comments
4.1.15	6.6.18 6.6.19	Study area for visual receptors	The Inspectorate notes that the assessment of effects to visual receptors will be focused on a 3km study area around the Proposed Development, and further rationale for the selection of this study area is presented in section 6.3 of the Scoping Report (Volume 1). The draft ZTV at Figure 6.3 (Volume 3) indicates that the Proposed Development would be visible beyond this study area and the ES should assess impacts to visual receptors beyond the 3km study area where these are likely to give rise to significant effects, rather than applying an arbitrary cut off.
4.1.16	6.7.15	Viewpoint selection	The Scoping Report describes the selection of viewpoints to inform the visual assessment. The scope and methodology used to determine the baseline, including the selection of viewpoints, should be discussed and agreed with relevant consultation bodies, including the local planning authorities. In addition to representative viewpoints and receptor groups, the viewpoints selected should include relevant vistas/ vantage points. The scope of any baseline data collection should also cross refer to any requirements for the cultural heritage assessment (Chapter 8: Historic Environment of the Scoping Report).
4.1.17	6.7.19	Community level assessment	The Applicant proposes to assess visual effects on communities by dividing the study area into community areas. The Inspectorate notes that the visual assessment will also be supported by selection and assessment of representative viewpoints and is therefore satisfied with this approach. The ES should however ensure that any areas defined for the assessment are clearly described and reasons given for their selection. Receptors within the community areas should be identified and agreed with relevant consultation bodies.

4.2 Biodiversity

(Scoping Report Section 7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.2.1	7.7.9	Collision of nocturnal species with construction machinery	The Applicant proposes to scope out the potential effects of collisions between construction machinery and nocturnal species, as the Scoping Report states that construction will not be carried out at night. The Inspectorate notes that there might be potential for some activity to occur throughout the night, eg trenchless crossings and cable jointing. Although this would be limited and appropriate mitigation measures would be in place, the Inspectorate considers that there is insufficient information about the location and nature of night-time working to conclude that significant effects will not occur. Therefore, potential effects of collision of nocturnal species with construction machinery should be scoped into the assessment.
4.2.2	7.7.11 7.7.12	Bat and bird collisions with pylons during operation	The Applicant proposes to scope out the potential effects of bat and bird collisions with pylons during operation, as the Scoping Report states that the Proposed Development will result in the same number of OHL being present in the landscape as there are currently. Given the potential for further changes to the design and that the new pylons and OHL will be of different heights and will affect new locations from the existing configuration, the Inspectorate does not agree that this matter can be scoped out of the assessment at this stage. Therefore, this matter should be scoped into the assessment where significant effects are likely to occur.
4.2.3	4.3.3 7.7.12	Bat and bird collisions within Hintlesham Woods Site of Special Scientific Interest (SSSI) during operation	The Applicant proposes to scope out the potential effects of bat and bird collisions with OHL during operation within Hintlesham Woods SSSI. The Scoping Report states that this is because the Proposed Development will result in the diversion of the existing 400kV OHL to the north and west of Hintlesham Woods SSSI and the installation of

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>the proposed 400kV route using the current alignment of the existing OHL within the woods itself. The Scoping Report explains that new pylons will be 50m in height and above the height of the woods. The Scoping Report does not yet provide details on the final design or siting of the OHL in this location and is based on an indicative alignment (paragraph 1.1.5).</p> <p>Given the stage of route design and the lack of detailed information about the final height and design of the OHL, and as further bat surveys are yet to be completed, the Inspectorate does not agree that this matter can be scoped out of the assessment at this stage. The Inspectorate considers that this matter should be scoped into the assessment where significant effects are likely to occur.</p>
4.2.4	7.7.15 Appendix 4.1	Fragmentation to habitat during construction	<p>The Applicant proposes to scope out the effects of habitat fragmentation as a result of vegetation removal during construction around the OHL. This is due to commitment LV01 in the outline CoCP, which is provided as Appendix 4.1 (Volume 2) of the Scoping Report.</p> <p>However, LV01 does not require the contractor to reduce vegetation removal to a minimum, only to retain vegetation 'where practicable'. The Inspectorate does not agree therefore that effects on habitat fragmentation can be scoped out of the ES for the OHL sections at this stage.</p>
4.2.5	7.7.16	Habitat loss during operation	<p>The Scoping Report explains that there will be no habitat loss during operation; however, it is unclear whether there would be any permanent habitat loss arising from maintenance and decommissioning activity for the Proposed Development, including activity that could affect Hintlesham Woods SSSI and other sites of high biodiversity value with impact pathways to the Proposed Development. This should be clarified within the ES and where</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			significant effects are likely to occur these should be assessed within the ES.
4.2.6	7.7.18	Artificial lighting during construction	The Applicant proposes to scope out effects from lighting of 24-hour workings, for example at trenchless crossings and for security purposes. The Scoping Report states that this is because lighting at construction compounds would be controlled through a commitment in the CoCP (Appendix 4.1, Volume 2). The Inspectorate considers that although artificial lighting will be limited, there is insufficient information about the location, duration and nature of night time working to conclude that significant effects will not occur. The Inspectorate considers that this matter should therefore be scoped into the assessment where significant effects are likely to occur.
4.2.7	Table 7.6 7.7.19	Operational lighting to ecological receptors	The Applicant proposes to scope out effects from artificial lighting on ecological receptors during operation of the Proposed Development. The Scoping Report states that this is because lighting will be limited and used only during occasional maintenance visits at the GSP substation. The Inspectorate notes that operational lighting may also be required at the CSECs. Given the limited scale of these works, the Inspectorate agrees that it is unlikely that significant effects would occur; however, there is insufficient information regarding the type, location and hours of lighting at this stage to confirm this conclusion. Where significant effects are likely to occur, these should be assessed in the ES.
4.2.8	Table 7.6 7.7.19	Operational noise and vibration to ecological receptors	The Applicant proposes to scope out noise and vibration effects on ecological receptors during operation. The Scoping Report states that this is because no change is anticipated to occur to existing noise and vibration as a result of the Proposed Development. However, given the stage of the project and as no evidence is provided in the Scoping Report to explain whether the operation of the new GSP substation at

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>Butler's Wood or the CSECs could give rise to significant noise or vibration effects, the Inspectorate does not agree that this matter can be scoped out of the assessment at this stage. Operational noise and vibration effects on ecological receptors from the new GSP substation and CSECs should be scoped into the assessment where significant effects are likely to occur. The ES should confirm which ecological receptors are being considered as part of the assessment.</p>
4.2.9	7.7.21	Construction dust	<p>The Applicant proposes to scope out the effects of dust on ecological receptors on the basis that the embedded commitments GG03 and GG05 in the outline CoCP, provided in Appendix 4.1 (Volume 2) to the Scoping Report and any further mitigation identified through preparation of a dust risk assessment would control construction dust so that it would not give rise to likely significant effects. The Scoping Report confirms that a dust risk assessment will also be appended to the ES.</p> <p>On that basis, the Inspectorate considers that this matter can be scoped out of the ES.</p> <p>The Inspectorate considers that the Applicant should make effort to agree the detail of mitigation with relevant consultation bodies, including Natural England.</p> <p>In the event that any matters relating to impacts of construction dust to ecological receptors arise at selected points on the proposed route once construction logistics are more fully defined, and there is potential for these to result in likely significant effects, these should be identified and assessed within the ES.</p>
4.2.10	7.7.22	Air quality changes arising from construction traffic to ecological receptors	<p>It is noted that air quality changes to ecological receptors arising from construction traffic is currently scoped into the ES, but could</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			potentially be scoped out following confirmation of traffic numbers and routes. Please refer to the Inspectorate's comments at ID 4.8.3.
4.2.11	7.7.23	Operational air quality to ecological receptors	The Applicant proposes to scope out the effects of air quality on ecological receptors. The Scoping Report explains that this is due to the very low vehicle numbers expected to be required during operation. The Inspectorate agrees that this matter can be scoped out of the assessment.
4.2.12	7.7.25	Emissions to surface and groundwater – construction and operation	<p>The Applicant proposes to scope out the effects of surface water changes on terrestrial and aquatic ecological receptors during construction on the basis that the outline CoCP (Appendix 4.1, Volume 2), contains commitments to control and prevent significant effects. However, given the stage of the project and as the exact location and design for watercourse crossings is yet to be determined, the Inspectorate does not agree that these matters can be scoped out of the assessment at this stage. The Inspectorate has additional comments on the scope of the water environment and geology and hydrogeology assessment in sections 4.4 and 4.5 of this Scoping Opinion.</p> <p>The Inspectorate notes that it is not expected that there would be emissions to surface or groundwater during operation and the Applicant therefore proposes to scope out these effects.</p> <p>The Inspectorate agrees that given the nature of the works and confirmation that there will be no discharges, operational effects for the OHL and CSECs can be scoped out of the ES as there is limited potential for water flow and water dependent habitats to be affected and therefore it is unlikely that there would be significant effects.</p> <p>The Inspectorate notes some inconsistency in Chapter 4: Project Description and Chapter 10: Geology and Hydrogeology, which indicates that discharges may be required to ground from the GSP</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>substation (please refer to ID 4.5.2). This should be clarified in the ES and, where there are discharges, if these have potential to affect water flow and water dependent habitats to the extent that significant effects are likely, this impact should be assessed in the ES.</p>
4.2.13	7.7.29	Invasive and Non-native species (INNS)	<p>The Applicant proposes to scope out the effects of spreading INNS during construction because of the best practice controls to prevent spread of INNS set out in the outline CoCP (Appendix 4.1, Volume 2). The Applicant considers there is a negligible risk of spreading INNS during operation.</p> <p>The Inspectorate considers that the Applicant should ensure that sufficient baseline information is available to establish the location and extent of INNS alongside the measures proposed in the outline CoCP. This should include consideration of Australian Swamp Stonecrop within ponds and waterbodies along the indicative alignment of the OHL.</p> <p>Appendix 7.2 (Volume 2) states that no further field survey will be undertaken in this respect (following completion of an extended Phase 1 Habitat survey in 2011 and 2012) and a risk assessment will be completed based on desk study and incidental records. Given that the spread of INNS can be rapid and the age of the baseline data referenced in the Scoping Report, the Inspectorate considers that the validation surveys programmed for 2021 and 2022 should also account for INNS (please also refer to ID 4.2.27).</p> <p>Whilst the Inspectorate agrees that the effects of INNS are unlikely to be significant with the proposed control measures in place, this cannot be confirmed until an up-to-date baseline position is known. This matter should therefore be scoped into the ES where significant effects are considered likely to occur following confirmation of the baseline position.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.2.14	7.7.30	Priority habitats	<p>The Inspectorate welcomes that the Applicant proposes to scope in an assessment of priority habitats to the assessment. However, it is not clear which priority habitats the assessment will consider. For example, the Priority Habitats shown on Figure 7.3 (Volume 3), do not include all of the Priority Habitats described in the text of the Scoping Report (Volume 1). Figure 7.4 (Volume 3) demonstrates that other priority habitats for Essex and Suffolk, such as ponds, exist within the Scoping Boundary, but are not mentioned in the text of the Scoping Report. For clarity, the ES should list and assess all priority habitats occurring within the study area that are likely to be affected by the Proposed Development. Where priority habitats are identified, they should be assessed separately where significant effects are likely to occur.</p>
4.2.15	7.7.33	Vascular and lower plants (aside from arable plant assemblages)	<p>The Scoping Report explains that assemblages of vascular and lower plants are valued as negligible. The Inspectorate agrees that these matters can be scoped out of the assessment, with the exception of arable plant assemblages. The baseline data collection that the Applicant describes in Appendix 7.2 (Volume 2) will also still need to be completed in 2021 and 2022. The Inspectorate notes that arable plant assemblages are scoped into the assessment in paragraph 7.7.30 (Volume 1).</p>
4.2.16	7.7.34 to 7.7.40	Great Crested Newt (construction and operation)	<p>The Applicant proposes to scope out effects on great crested newt on the basis of the project being subject to a district level licence (DLL). The Scoping Report states that this approach has been discussed with Natural England. Section 3.7 of Appendix 7.2 (Volume 2) summarises the results of previous surveys for this species in 2012 and 2013.</p> <p>The Inspectorate considers that the Scoping Report does not provide evidence of any agreement with Natural England regarding the use of a DLL. In the absence of this evidence, at this stage of the project the</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			Inspectorate cannot agree that this matter can be scoped out of the assessment.
4.2.17	7.7.35	Badger (construction and operation)	<p>The Applicant proposes to scope out effects on badger as the Scoping Report has valued this species as negligible. The Inspectorate notes that a separate Biodiversity Legislation Compliance Report including issues relating to badger protection will be appended to the ES. The Inspectorate agrees that this matter can be scoped out of the assessment.</p> <p>Please also refer to the Inspectorate's comments at 4.2.27.</p>
4.2.18	7.7.37	Reptiles (construction and operation)	<p>The Applicant proposes to scope out effects on reptiles on the basis of the measures detailed in the CoCP (Appendix 4.1, Volume 2). The Inspectorate notes that a separate Biodiversity Legislation Compliance Report including issues relating to protection of reptiles will also be appended to the ES. Whilst the Inspectorate agrees that effects on reptiles are unlikely to be significant with the proposed control measures in place, this cannot be confirmed until an up-to-date baseline position is confirmed through the updated Phase 1 habitat survey. This matter should therefore be scoped into the ES where significant effects are considered likely to occur following confirmation of the baseline position.</p> <p>Please also refer to the Inspectorate's comments at 4.2.27.</p>
4.2.19	7.7.39	Terrestrial invertebrates (construction and operation)	<p>The Applicant proposes to scope out effects on terrestrial invertebrates on the basis that priority habitats on which they would depend are already scoped into the assessment.</p> <p>The Inspectorate notes that whilst Hintlesham Woods and Arger Fen SSSIs (within and adjacent to the scoping boundary) are not designated for their invertebrate assemblages, they are nonetheless valuable habitats for insects. In addition, designated county wildlife</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>sites within the study area specify invertebrates in the citations (as described at paragraph 3.11.3 of Appendix 7.2 (Volume 2)) and the River Stour supports Scarce Chaser dragonfly.</p> <p>Whilst the Inspectorate agrees that the short term duration of the construction activity/ absence of activity during operation that would affect terrestrial invertebrates means an adverse effect to conservation status from mortality is not likely, it is not possible to conclude that there would be no likely significant effects to this receptor group (beyond habitat loss) until an up-to-date baseline position is confirmed through the updated Phase 1 habitat survey. Impacts to this specific receptor group should therefore be scoped into the ES where significant effects are considered likely to occur following confirmation of the baseline position.</p> <p>Please also refer to the Inspectorate's comments at 4.2.27.</p>
4.2.20	7.7.40	Other notable species (construction and operation)	<p>The Applicant proposes to scope out effects on other notable species such as brown hare, common toad, hedgehog and several species of invertebrate and birds because effects on these species will be considered through the assessment of habitat loss during construction.</p> <p>The Inspectorate notes that Table 7.4 of the Scoping Report (Volume 1) identifies an impact pathway to notable species during construction for mortality and injury, and species disturbance, suggesting a potential for likely significant effects to occur beyond habitat loss during construction. In addition, the Inspectorate notes that an updated Phase 1 habitat survey will be completed during 2021 and 2022 given the age of the current baseline data (2009-2013).</p> <p>On that basis, the Inspectorate does not have sufficient information to conclude that there would not be likely significant effects to</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>notable species; this matter should therefore be scoped into the ES, pending updates to the baseline information.</p> <p>Please also refer to the Inspectorate's comments at ID 4.2.27.</p>
4.2.21	Table 7.6	Statutory and non-statutory wildlife sites during operation (excluding groundwater dependent terrestrial ecosystems)	<p>The Applicant proposes to scope out effects on statutory and non-statutory wildlife sites (excluding groundwater dependent terrestrial ecosystems (GWDTE) during operation.</p> <p>The Inspectorate notes that paragraph 7.7.30 of the Scoping Report scopes in effects on statutory and non-statutory sites, however, without making a distinction between construction and operational effects.</p> <p>Please refer to the Inspectorate's comments at ID 4.2.5; it is considered that where there is permanent habitat loss arising from maintenance and decommissioning activity for the Proposed Development, including activity that could affect Hintlesham Woods SSSI and other sites of high biodiversity value with impact pathways to the Proposed Development, the ES should include an assessment where significant effects are likely to occur.</p>
4.2.22	Table 7.6	Ancient woodland and veteran trees during operation	<p>Please refer to the Inspectorate's comments at ID 4.2.5; it is considered that where there is permanent habitat loss arising from maintenance and decommissioning activity for the Proposed Development, including activity that could affect Hintlesham Woods and areas of ancient woodland as identified on Figure 7.3 (Volume 3), the ES should include an assessment where significant effects are likely to occur.</p>

ID	Ref	Other points	Inspectorate's comments
4.2.23	7.4.1 Appendix 7.2, 1.2.3	Study area	The Scoping Report explains the study areas that have been chosen around the Scoping Boundary to inform the biodiversity assessment. Appendix 7.2 (Volume 2) also describes how the study areas for the assessment will be reviewed or extended as the surveys develop. Given the stage of the project, the ES should fully describe the final study areas used in the assessment along with an explanation of the reasons for the choice of these study areas. This should include consideration of potential impact pathways to identify where likely significant effects might occur to a receptor, regardless of geographical distance from the DCO boundary. This should be supported by figures where possible.
4.2.24	Appendix 7.2, 2.12	Use of aerial photography	The Scoping Report states that current aerial photography will be used in part to establish any changes to land use that may have occurred since the previous ecological surveys were completed. The ES should provide details of the source and dates of the aerial photographs used for this approach, to ensure that there is sufficient evidence to show that the baseline has been updated.
4.2.25	Table 7.4	Effects on statutory designated sites	The Scoping Report notes that the River Stour and Orwell Estuaries Special Protection Area (SPA) and Ramsar site is situated approximately 5km from the Scoping Boundary and that the SPA/ Ramsar is hydrologically linked to Rivers Stour, Box, Brett and the Belstead Brook. The Inspectorate considers that there is insufficient evidence at this stage to determine whether there will be significant effects on the River Stour and Orwell Estuaries SPA and Ramsar site during construction. The ES should therefore assess this matter where significant effects are likely to occur.
4.2.26	Table 7.4	Air quality changes – receptors	With regard to air quality changes resulting in habitat loss/ modification during construction, it is noted that statutory and non-statutory sites are identified as receptors that are potentially sensitive to impact pathways. The Inspectorate understands that this matter is

ID	Ref	Other points	Inspectorate's comments
			<p>scoped into the ES for construction, with Table 7.4 of the Scoping Report referencing potential for habitat loss, fragmentation or modification arising from air quality change for statutory and non-statutory sites. The assessment should include ancient woodland and veteran trees, and priority habitats (excluding GWDTEs) as receptors where significant effects are likely.</p>
4.2.27	Appendix 7.2	Spatial and temporal extent of surveys	<p>The Scoping Report notes that previous ecological surveys from between 2009 to 2013 will be used as the basis for the EIA. Further 'validation surveys' will be completed in 2021 and 2022 to confirm or update these surveys. The Scoping Report appendices note that the 2021 scoping boundary is 'broadly similar' to the boundary presented in the previous Scoping Report in 2013.</p> <p>The Inspectorate considers that Natural England, local authorities and local groups, for example the Essex and Suffolk Dormouse Group should be consulted regarding the approach taken to surveys.</p> <p>The ES should ensure that the baseline presented is sufficient to assess the likely significant effects of the Proposed Development. It should therefore describe the geographical coverage of the surveys with reference to the redline boundary for the DCO application. Where there is reliance on 2009-2013 survey data, it should be clear what surveys remain valid and why, with reference to relevant technical guidance on survey validity. Where newer, validation surveys have been carried out, it should explain the methodologies employed with reference to appropriate recognised technical guidance.</p> <p>The updated survey of hedgerows should include bat activity surveys to identify any passes of Barbastelle bats, which would trigger Important Hedgerow status under the Hedgerows Regulations 1997 (as amended).</p>

ID	Ref	Other points	Inspectorate's comments
4.2.28	N/A	Environment Bill	The Inspectorate considers that the Applicant should consider the implications of the Environment Bill for the Proposed Development and ensure that the ES adequately addresses them.

4.3 Historic Environment

(Scoping Report Section 8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.3.1	8.6.6 Table 8.4	Physical effects on archaeological remains (designated or non-designated) during operation	The Applicant proposes to scope out physical effects on buried archaeological remains during operation. The Scoping Report explains that this is because there will only be 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 Proposed Development. The Inspectorate agrees that this matter can be scoped out of the assessment.
4.3.2	8.6.9 Table 8.4	Physical effects (direct damage and/ or destruction) to historic buildings during construction and operation	The Applicant proposes to scope out direct physical effects on historic buildings during construction and operation. The Scoping Report states that this is because there will be no direct impacts on historic buildings. The Inspectorate agrees that this matter can be scoped out of the assessment on that basis. It is noted that indirect physical effects to historic buildings during construction, including from vibration and changes to groundwater levels are scoped in to the ES.
4.3.3	8.6.14 Table 8.4	Physical effects (direct damage and/ or destruction) to designated historic landscape elements, ie Registered Parks and Gardens during construction and operation	<p>The Applicant proposes to scope out direct physical effects on designated historic landscape elements during construction and operation. On the basis that there are no designated historic landscape elements within 2km of the scoping boundary, the Inspectorate agrees that it is unlikely that direct physical effects will occur on Registered Parks and Gardens, this matter can therefore be scoped out of the assessment.</p> <p>The Inspectorate notes that Table 8.4 of the Scoping Report scopes out effects of damage to or destruction of designated historic landscape elements and that these effects are relating to Historic Parks and Gardens.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.3.4	8.6.15 Table 8.4	Physical effects (direct damage and/ or destruction) to non-designated historic landscapes during operation	The Applicant proposes to scope out direct physical effects on non-designated historic landscapes from the operation of the Proposed Development. On the basis that the physical effects of installation of the Proposed Development are scoped into the ES as part of the assessment of construction impact, and setting impacts are also scoped in, the Inspectorate agrees that this matter can be scoped out of the assessment, aside from where there is permanent loss of vegetation or other features that contribute to the historic landscape character arising from maintenance and decommissioning activity for the Proposed Development. This matter should be scoped in to the assessment where significant effects are likely to occur.
4.3.5	Table 8.4	Physical effects (direct damage and/ or destruction) to designated archaeological remains	The Applicant proposes to scope out effects on designated archaeological remains during construction and operation. The Inspectorate considers that although the precise alignment and location for the Proposed Development is not yet defined, that as there are no designated archaeological sites within the Scoping Boundary (shown on Figure 8.1, Volume 3) that significant effects from damage or destruction are unlikely to occur. The Inspectorate therefore agrees that this matter can be scoped out of the assessment.

ID	Ref	Other points	Inspectorate's comments
4.3.6	8.4.1 8.7.4	Desk study	The Applicant's Scoping Report lists the data sources that have been used to inform a desk study. The Scoping Report explains that the desk study for the ES will use information from the Applicant's previous scoping report (2013), and then describes the sources that will be used to obtain further data and information. The Applicant should ensure that the ES demonstrates the sources of data that informed the assessment and where the desk study has been updated

ID	Ref	Other points	Inspectorate's comments
			<p>to ensure that an accurate baseline position is presented. The ES should also describe any limitations on the use of those data and any gaps in coverage. In addition, the Inspectorate considers that where previous data are relied upon, that it is clear whether there are gaps or differences between the study areas used for previous scoping studies and, where there are gaps, any limitations of this approach.</p> <p>It is noted that aerial photographic report is dated, and should be updated with use of new aerial coverage; consideration should be given to the use of Lidar.</p> <p>A description of the Grade II listed buildings and any non-designated features of historic, architectural, archaeological or artistic interest within the final study area should also be presented in the ES.</p>
4.3.7	8.4.16	Historic Landscape Types	<p>The Applicant's Scoping Report confirms that the historic landscape sub topic is divided into Historic Landscape Types (HLTs). These HLTs are not themselves designated but can include designated heritage assets such as Registered Parks and Gardens. The ES should include a figure showing the location and extent of the HLTs and confirm any individual receptors located within the HLTs that will be subject to assessment, for example protected lanes, archaeological sites, historic buildings and cultural associations, for example those associated with painters such as Constable, Gainsborough, Nash and the East Anglian School of Painting and Drawing. This should include consideration of direct physical impacts to receptors where these would give rise to likely significant effects, for example any realignment of protected lanes to accommodation construction traffic.</p>
4.3.8	8.5.1 Appendix 4.1	Outline CoCP	<p>The Applicant's Scoping Report notes that a CoCP will contain good practice measures such as informing the local planning authority in the event of unexpected archaeological discoveries. The Inspectorate considers that the CoCP should also set out the processes that will be followed by the contractor in the event of unexpected archaeological</p>

ID	Ref	Other points	Inspectorate's comments
			discoveries, such as a commitment to halting work. The Inspectorate suggests that this should also specify the requirement for contact with local planning authority archaeologists and Historic England, where relevant.
4.3.9	8.6.4	Likely significant effects – archaeological remains during construction	As part of the assessment of archaeological remains, the ES should include consideration of the potential effects of excavation on palaeoenvironmental and geoarchaeological deposits along the length of the route, including a review of borehole logs to determine the depth of deposits.
4.3.10	8.7.4 8.7.5	Assessment methodology	<p>The Scoping Report notes that the assessment methodology will make use of the ZTV prepared for the landscape and visual impact assessment to inform assessment of effects on setting and historic landscape. The Inspectorate considers that the ZTV should be used to inform the extent of the study area to ensure that all heritage assets with potential for likely significant effects to setting are scoped into the assessment, including unknown non-designated heritage assets.</p> <p>The Inspectorate considers that there will be a requirement for visualisations to demonstrate the impact to the setting of historic buildings and landscape types; the approach to selection of viewpoints should be discussed and agreed with relevant consultation bodies. In particular, the setting of the Grade I Listed Hintlesham Hall and associated Grade II* buildings are identified as being potentially affected given their proximity to the scoping boundary. The assessment should be informed by visualisations from the viewpoints identified in consultation with relevant consultation bodies.</p>
4.3.11	8.7.9	Assessment methodology	The Applicant's scoping report indicates that deeper excavations have potential to affect paleoenvironmental and geoarchaeological deposits. The ES should clearly set out the methodology that will be used to assess potentially significant effects on all areas where there

ID	Ref	Other points	Inspectorate's comments
			is potential to encounter paleoenvironmental and geoarchaeological deposits, with reference to appropriate policy and technical guidance.
4.3.12	8.7.10	Intrusive archaeological survey	The Scoping Report indicates that where desk based or non-intrusive surveys are insufficient to determine the archaeological potential of a particular location, that intrusive pre-construction surveys will be carried out. The Inspectorate considers that there may also be a need to carry out intrusive surveys, including trial trenching particularly for sections of proposed undergrounding (inclusive of a 100m construction corridor), in order to inform the assessment of effects in the ES. Consideration of the need for such surveys should therefore be included in the development of the baseline and through consultation with the relevant consultation bodies.
4.3.13	N/A	Receptors	The Inspectorate notes that the designated Polstead Conservation Area is located adjacent to one of the potential locations for a CSEC, at the edge of Dollops Wood. Dollops Wood and the surrounding farmland contribute towards the significance of the Polstead Conservation Area. The ES should include an assessment of the effects to the setting of the Polstead Conservation Area in addition to designated buildings.

4.4 Water Environment

(Scoping Report Section 9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.4.1	Table 9.3 9.6.2	Water quality effects during construction	<p>The Applicant proposes to scope out the effects on water quality from watercourse crossings during construction due to the established good practice measures within the outline CoCP (Appendix 4.1, Volume 2) and compliance with any conditions established through relevant environmental permits. The Inspectorate notes that details of the working methods for the watercourse crossings and their exact locations have yet to be determined and that there is potential for there to be temporary crossings using box culverts. While the Inspectorate acknowledges that the watercourse crossings would be temporary and transient, there is insufficient information in the Scoping Report to determine where crossings would be and the length of time that they would be in place. Equally, the Scoping Report states that the River Stour would be crossed using a trenchless method but presents limited details on where the crossing would be and the preferred method of construction.</p> <p>The Inspectorate also notes in Table 9.1 of the Scoping Report that the watercourses considered as potential receptors are already in most cases classed at best as in moderate condition and all are failing in terms of their chemical status.</p> <p>The Inspectorate does not consider that there is sufficient information available at this stage to scope out effects of watercourse crossings during construction on water quality. The ES should therefore consider effects on water quality during construction. This should include potential for adverse effects from break out of drilling mud onto the bed of the watercourse. Where temporary culverting is required, the ES should also set out the reasons for selection of the</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>culverting method, and the alternatives to culverting considering the potential environmental effects.</p> <p>ID 4.2.25 of this Scoping Opinion includes the Inspectorate's comments in relation to the assessment of potential environmental effects on the River Stour and Orwell Estuaries SPA and Ramsar site. The ES should consider potential effects on those Rivers that are hydrologically linked to the SPA – the River Stour, River Box, River Brett and the Belstead Brook.</p> <p>Section 4.5 of this Scoping Opinion contains the Inspectorate's comments on effects of the Proposed Development on groundwater.</p>
4.4.2	Table 9.3 9.6.2	Effects of water abstraction during construction	<p>The Applicant proposes to scope out the effects from abstraction during construction as it is assumed that any water required for trenchless crossings will be brought in via tankers. On this basis, the Inspectorate agrees that this matter can be scoped out of the ES. However, in the event that water abstraction is required during construction, the potential for impacts should be reviewed and the ES should consider effects of abstraction from trenchless methods of watercourse crossing where significant effects are likely to occur.</p>
4.4.3	Table 9.3 9.6.4	Water quality effects during operation	<p>The Applicant proposes to scope out effects on water quality during operation due to the lack of pathways to surface water receptors once the Proposed Development is in place. The Inspectorate agrees that this matter can be scoped out of the assessment on the basis of the information presented in the Scoping Report.</p> <p>The Inspectorate notes that Chapter 10: Geology and Hydrogeology, references potential for operational discharges to watercourses. This should be confirmed in the ES. If operational discharges are required, the ES should include an assessment of this matter where significant</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			effects are likely to occur, or otherwise provide a robust justification for scoping the matter out of the assessment.
4.4.4	Table 9.3 9.6.5	Effects on abstractions and discharges during operation	The Applicant proposes to scope out effects on existing water abstractions and discharges during operation due to there being no permanent effects on watercourse flow regimes, no new consumptive water uses and thus no detriment to water quality. The Inspectorate agrees that this matter can be scoped out of the assessment on that basis.
4.4.5	9.6.7	Effects on hydro morphology during operation	The Applicant proposes to scope out effects on hydro morphology of watercourses during operation as the Scoping Report notes that once construction is complete and working areas reinstated, there will be no further operational works affecting watercourses. The Inspectorate agrees that this matter can be scoped out of the assessment.
4.4.6	9.6.8	Flood risk and drainage during construction	<p>The Applicant proposes to scope out effects from increased flood risk during construction due to the use of the measures in the outline CoCP (Appendix 4.1, Volume 2). It is noted that Table 9.3 of the Scoping Report states that flood risk from rivers and surface water within the floodplains of the Rivers Stour and Brett would be scoped in, and that temporary changes to land drainage and surface water flood risk would also be scoped in.</p> <p>Whilst the Inspectorate agrees that measures in the CoCP can be used to potentially address significant effects, there is insufficient information to be able to determine the scale or nature of effects at this stage of the project. Sections of the OHL route would cross areas that lie within Flood Zones 2 and 3 and are considered to be of medium to high flood risk. The Inspectorate notes that further baseline flood risk data has not yet been received by the Applicant. In addition, the design and alignment of watercourse crossings for the route of the new OHL is yet to be confirmed and the Applicant has</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>identified potential significant effects within Table 9.3 of the Scoping Report.</p> <p>The Inspectorate does not therefore agree to the Applicant's proposal to scope out effects on flood risk and drainage during construction at this stage. The ES should assess potential changes to existing flood storage and flood flow routes, as well as rainfall infiltration and runoff patterns, as a result of the Proposed Development, where significant effects are likely to occur. This should include consideration of impacts to agricultural operations within the study area, as referenced at paragraph 11.6.6 of the Scoping Report.</p>
4.4.7	Table 9.3 9.6.9	Flood risk and drainage during operation	<p>The Applicant proposes to scope out effects from increased flood risk and changes to drainage from the existence of the GSP substation, CSECs and permanent access tracks. The Scoping Report states that these components are located outside of Flood Zones 2 and 3, and designs will include permeable surfaces where practicable and incorporate measures set out in the outline CoCP.</p> <p>On the basis of the baseline data presented, the fact that the GSP substation, CSECs and permanent access tracks are located in Flood Zone 1, and incorporation of the design measures, the Inspectorate agrees that operational matters in respect of flood risk for these components are not likely to give rise to significant effects. However, limited information is presented about the potential for flood risk as a result of groundwater and overland fluvial flow. In addition, the position and design of the OHL and supporting pylons is yet to be finally determined.</p> <p>On this basis, the Inspectorate considers that there is insufficient information to conclude that significant effects relating to flood risk and drainage during operation are not likely at this stage and it should be scoped into the ES.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.4.8	9.6.12 Table 9.3	Flooding from sewers, the sea, reservoirs and groundwater	<p>The Applicant proposes to scope out effects of flooding from sewers, the sea, reservoirs and groundwater from the flood risk assessment that will be prepared in support of the DCO application.</p> <p>The Inspectorate agrees that, given the distance of the Proposed Development from the sea, the limited risk of flooding from these sources, and the evidence from the Environment Agency reservoirs flood risk map, that these matters can be scoped out of the assessment.</p> <p>The Inspectorate notes that it is stated that the rural nature of the development area means it is unlikely that many sewerage systems will be crossed by the Proposed Development, or any new connections into the network will be required. However, the Scoping Report does not present any further information in this respect. The ES should include information about the existing sewage network and any proposed connections into it. Where significant effects are likely, these should be assessed in the ES.</p> <p>Section 4.5 of this Scoping Opinion contains the Inspectorate's comments on potential effects of the Proposed Development on groundwater.</p>
4.4.9	9.7.10	Baseline water quality sampling and analysis	<p>On the basis that there is sufficient up to date relevant data available regarding the baseline water quality conditions of watercourses within the study area, the Inspectorate agrees that these surveys can be scoped out of the assessment.</p>

ID	Ref	Other points	Inspectorate's comments
4.4.10	N/A	Potential effects on groundwater	The Inspectorate appreciates that the Applicant has chosen to consider effects on groundwater in a separate chapter, Chapter 10:

ID	Ref	Other points	Inspectorate's comments
			<p>Geology and Hydrogeology. There are links between these two aspect assessments, particularly in relation to effects of the watercourse crossings, and there is some inconsistency in the conclusions of which effects are scoped into the assessment. It is the Applicant's decision as to how to present the structure of the ES, but nevertheless, there should be sufficient crossovers and linkages between those chapters that have interrelationships in this way. The Inspectorate's comments on the scope of the geology and hydrogeology assessment are provided in section 4.5 of this Scoping Opinion.</p>
4.4.11	9.4.1 9.4.2	Data sources	<p>Paragraph 9.8.2 of the Scoping Report describes the consultation that has informed the scope of the assessment, which includes discussion about baseline data. The data sources cited in 9.4.1 and 9.4.2 should include any relevant data supplied by the Environment Agency and lead local flood authorities, such as for information regarding private water supplies. The ES should address this omission in the assessment of effects on receptors, setting out any data that has been supplied as a result of external consultation and any resulting significant environmental effects from the Proposed Development.</p> <p>The data supplied should also be used to inform the geology and hydrogeology aspect assessment as relevant.</p>
4.4.12	9.5.2	Trenchless crossing methods	<p>The Inspectorate notes that the Applicant proposes to use a trenchless method of crossing the River Stour and paragraph 9.5.2 of the Scoping Report notes that a trenchless method has been selected to reduce direct effects on hydro morphology and water quality within the watercourse. However, trenchless methods of construction can have other, potentially significant, environmental effects as stated in the Scoping Report in sections 4.5.27 to 4.5.29. For example, there is no mention of the potential effects of dewatering of excavations or effects of run-off of soil to watercourses. These matters should be addressed in the ES where significant effects are likely to occur. The Inspectorate notes that effects of trenchless watercourse crossing</p>

ID	Ref	Other points	Inspectorate's comments
			methods on underground aquifers and groundwater are scoped into the assessment in Chapter 10: Geology and Hydrogeology.
4.4.13	9.7.3	Flood risk assessment	The Inspectorate notes that a flood risk assessment (FRA) will be produced and appended to the ES. The ES should take into account the latest EA guidance on climate change, including climate change allowances (currently UKCP18).
4.4.14	N/A	Piling	<p>The Inspectorate notes that there is no specific reference to potential effects of piling, such as for substation or pylon foundations, on existing abstractions. The ES should consider the effects of piling on relevant receptors where significant effects are likely to occur.</p> <p>The Applicant's attention is drawn to the Environment Agency's guidance, Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination.</p>

4.5 Geology and Hydrogeology

(Scoping Report Section 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.1	Table 10.4 10.6.4	Dewatering and discharge during construction – groundwater levels	<p>The Applicant proposes to scope out the effects of dewatering to groundwater levels from temporary construction excavations, unless specified criteria for further assessment are met. The Scoping Report references Environment Agency guidance, which would be used to determine whether dewatering activities are likely to have a significant effect to groundwater levels on identified receptors. The Scoping Report states that by using this approach, effects could then be scoped in or scoped out of the assessment.</p> <p>Given that at this stage of the project there is no information available to determine the requirement for, duration or location of dewatering activities, there remains the potential that significant environmental effects could arise. As such, the Inspectorate agrees with the proposed approach to undertake further scoping using the Environment Agency guidance once further detail is known about the location, duration and depth of this activity.</p> <p>The Inspectorate considers that this approach should be applied to all instances of temporary dewatering.</p> <p>Where it is concluded that significant effects are likely, these should be assessed within the ES.</p> <p>This should include consideration of potential impacts to the receptors identified within Chapter 7: Biodiversity, such as statutory and non-statutory designated sites and priority habitats, and fish and other aquatic fauna.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.2	Table 10.4 10.6.4	Dewatering and discharge during construction – pumped discharge	<p>It is proposed to scope out effects relating to discharge of pumped groundwater from the ES on the basis that this activity would be managed in accordance with a CEMP and direct discharge of untested water would be avoided. It is stated that water discharges would be disposed of in accordance with agreements made with relevant authorities.</p> <p>Please refer to the Inspectorate's comments at ID 4.5.1, which also apply to this matter.</p>
4.5.3	Table 10.4 10.6.6	Effects of dewatering and discharge during operation	<p>The Applicant proposes to scope out effects of dewatering and discharge during operation. The Scoping Report notes that dewatering will not be required during operation and as such, the Inspectorate agrees that this matter can be scoped out of the assessment.</p> <p>However, the Scoping Report indicates that there is a potential requirement for discharges requiring a discharge consent from the completed GSP substation at Butler's Wood. Chapter 4: Project Description indicates that once completed, the substation would be unmanned. It is unclear what the source of this discharge would be. Chapter 9: Water Environment does not include assessment of potential discharges during operation. Discharges from the operational GSP substation should be quantified and should also be assessed within the ES, where significant environmental effects are likely to occur.</p>
4.5.4	10.6.7	Spills or accidents involving construction plant to groundwater quality	<p>On the basis that measures would be in place to manage this type of impact in line with the CoCP, the Inspectorate agrees that this matter can be scoped out of the ES.</p> <p>Please note the comments at ID 4.4.1 with regard to construction stage impacts to water quality more generally.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.5	Table 10.4 10.6.8 10.6.11	Groundwater quality and ground disturbance on flow during construction (excluding trenchless crossings)	<p>The Applicant proposes to scope into the ES the effects of deeper (greater than 2m) excavations on groundwater receptors including aquifers, in terms of groundwater quality and disturbance to flow.</p> <p>The Inspectorate agrees that it is unlikely that shallow depth excavations would give rise to likely significant effects; however, there are potential for changes to flow that could impact shallow wells and/ or create transport pathways to groundwater receptors at shallower depths. The Inspectorate does not consider that sufficient information has been presented in the Scoping Report to conclude that excavations at shallower depths would not give rise to significant effects and therefore this matter should be scoped into the ES or a robust justification demonstrating the absence of transport pathways should be presented.</p> <p>It is noted that effects relating to trenchless crossings are scoped into the ES. This should include consideration of potential for mobilisation of contamination around the Sudbury Branch Line railway.</p>
4.5.6	Table 10.4 10.6.12	Ground disturbance effects on receptors	<p>The Applicant proposes to scope out the effects of ground disturbance from non-contaminated land affected by the Proposed Development (with effects of disturbance from landfill or contaminated land scoped in). The Scoping Report states that this is because these effects can be controlled by measures set out in the CoCP (Appendix 4.1, Volume 2). However, the Scoping Report is not clear as to what areas are classed as 'non-contaminated' and the Planning Inspectorate understands that areas away from landfill or contaminated sites can become polluted and cause contamination with potential for mobilisation into groundwater. The Scoping Report also alludes to this in paragraph 10.4.7. Given the lack of baseline information at this stage of the project, and as potential receptors or potential pathways</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			are not yet defined, the Inspectorate does not agree that 'non-contaminated' land can be scoped out of the assessment.
4.5.7	Table 10.4 10.6.13 10.6.14	Infiltration and recharge during operation	<p>On the basis that the Proposed Development requires only small areas of new hardstanding, which would be designed to relevant drainage standards in place at the time of submission of the DCO application, the Inspectorate agrees that there is unlikely to be a significant change to permeability of ground surfaces and/ or re-routeing of recharge to other groundwater catchment. Effects of infiltration and recharge from new hardstanding are therefore not likely to be significant and this matter can be scoped out of the ES.</p> <p>However, given the installation of new underground cabling could impact on infiltration and recharge of groundwater, the Inspectorate considers that these potential effects should be scoped into the assessment where significant effects are likely to occur.</p>
4.5.8	10.6.15	Access to mineral deposits during construction and operation	<p>The Scoping Report states that the only component of the Proposed Development that passes through a designated mineral reserve or Mineral Safeguarding Area is a section of 400kV OHL that would replace existing 132kV OHL, and would therefore not change the status of the mineral reserve. However, the Inspectorate notes that the majority of land within the scoping boundary falls within a Mineral Safeguarding Area as designated in the adopted Essex Minerals Local Plan. The ES should include an assessment of this matter, where significant effects are likely, or otherwise explain why the Proposed Development will not result in likely significant effects in terms of access to mineral deposits.</p>

ID	Ref	Other points	Inspectorate's comments
4.5.9	N/A	Scope of the assessment	<p>It is noted that the study area includes areas designated as Source Protection Zones (SPZ) 1 and 2, and that the proposed trenchless crossing of the River Stour is proximal to the SPZ1 of a local public water supply. The ES should demonstrate how the design of the Proposed Development has avoided the most sensitive locations, or any protective and emergency measures that would be required to safeguard drinking water supplies.</p> <p>The scope of assessment should include consideration of impacts associated with the proposed trenchless crossings, including loss of cable oil to watercourses via groundwater, and creation of preferential pathways that could result in impacts to habitats and flow volumes.</p>

4.6 Agriculture and Soils

(Scoping Report Section 11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.1	Table 11.4 11.6.2	Temporary disturbance to soils and loss of Best and Most Versatile (BMV) agricultural land during construction	<p>The Applicant proposes to scope out temporary effects of loss of soils and agricultural land during construction. The Scoping Report states that this is because of the good practice soil management measures set out within the outline CoCP (Appendix 4.1, Volume 2) and as the land will be reinstated following completion of the works.</p> <p>However, given the lack of baseline information available in terms of quantity of BMV agricultural land that would be affected and the nature and location of the Proposed Development, which is likely to involve soil removal, handling and storage over a large area, the Inspectorate does not agree that these matters can be scoped out of the assessment.</p>
4.6.2	Table 11.4 11.6.4	Permanent disturbance to soils and loss of agricultural land during operation	<p>The Scoping Report describes that there will be some permanent loss of soils and agricultural land as a result of the Proposed Development, associated with the new substations, pylons and associated access infrastructure. The Applicant proposes to scope out permanent losses of soils and agricultural land during operation where site surveys identify that the land is not classified as BMV agricultural land. Once further data collection is completed to establish the location and extent of BMV agricultural land and the likely significant effects, the Scoping Report states that this matter will be scoped out of the assessment if permanent land affected is not BMV or that the cumulative loss is below the magnitude threshold; otherwise, it would be scoped in to the ES.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			The Inspectorate considers that this approach is acceptable. The assessment should consider effects on BMV agricultural land and soils as separate assessments.
4.6.3	11.6.5	Operational maintenance	The Applicant proposes to scope out the potential effects on soils and agricultural land associated with any operational maintenance activities. The Scoping Report states that this is because these activities will be carried out in accordance with good soil handling practice. The Inspectorate notes that no mechanism is described for ensuring good practice measures are adhered to during any future maintenance works. However, the Inspectorate agrees that given the likely short-term and small-scale nature of any routine inspection or maintenance works that significant effects are unlikely to arise and this matter can be scoped out of the assessment. The ES should include a description of the good practice measures that would be in place to control maintenance effects.
4.6.4	11.6.6	Agricultural operations during construction	On the basis that impacts to agricultural operations during construction would be temporary and land required temporarily would be reinstated at the end of construction, and that land drainage impacts would be considered as part of the assessment of effects on the water environment, the Inspectorate agrees that this matter can be scoped out of the ES.
4.6.5	11.6.8	Agricultural operations during operation	The Applicant proposes to scope out the effects of the Proposed Development on agricultural operations during operation. The Scoping Report states that this will be addressed through compensation agreements for landholders affected by the permanent infrastructure. However, given that the location and design of the OHL are yet to be confirmed and that the project crosses a largely rural area, the Inspectorate considers that there is potential for significant changes to agricultural practices as a result of the Proposed Development,

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>including to the established fruit farming industry within the study area. This includes consideration of any beneficial effects as a result of removal of the 132kv OHL.</p> <p>The Inspectorate therefore does not agree that these matters can be scoped out of the assessment.</p>
4.6.6	11.6.10	Electromagnetic fields (EMFs)	<p>The Applicant proposes to scope out the operational effect of EMFs on land use due to the lack of evidence for effects on agricultural operations. On the basis that the Proposed Development will comply, as a minimum, with relevant EMF guidelines in all of its operations and will include a separate document with comprehensive information as described in paragraph 11.6.10 of the Scoping Report to demonstrate that the Proposed Development will not give rise to likely significant effects in respect of EMF, the Inspectorate agrees that this matter can be scoped out of the assessment.</p>
4.6.7	Table 11.4 11.6.9	Economic effects on landowners	<p>The Applicant proposes to scope out the economic effects of the Proposed Development fragmenting existing farm businesses and land holdings on the basis of compensation agreements that would be made outside of the EIA process. However, given the stage of the project and the extent of the baseline data available so far, the Inspectorate believes that there is insufficient evidence to scope out these matters at this stage. The ES should identify where fragmentation would affect the viability of agricultural land holdings during construction and operation, and include an assessment where significant effects are likely to occur.</p>
4.6.8	Table 11.4	Soil quality and associated ecosystem services	<p>The Scoping Report acknowledges that during construction there will be disturbance to soils through the creation of construction accesses and compound areas, soil stripping and movement of soil to allow cable laying. The Scoping Report states that this would affect other ecosystem services that the soils provide although no further details</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>are provided as to the nature of these services. The Scoping Report concludes that as the effects will be temporary and controlled through measures in the CoCP and soils reinstated on completion, that effects on soils can be scoped out of the assessment.</p> <p>The Inspectorate considers that given the stage of the project and the lack of information on the methods of working and locations, that there is not enough evidence to conclude that significant effects will not occur. The Inspectorate does not agree that soil quality and associated ecosystem services can be scoped out of the assessment.</p>

ID	Ref	Other points	Inspectorate's comments
4.6.9	11.4.6 Table 11.1	Climate data	In addition to the National Soil Resources Institute data, the ES should also be informed by the Met Office UK National Climate Projects (UKCP18) in order that forecasts of long term changing climatic conditions can be taken into account.
4.6.10	N/A	Effects of removal of 132 kV OHL	The Inspectorate notes that there is no reference to potential effects on agricultural land, soils or agricultural businesses of the proposed removal of the 132kV OHL, nor evidence to show whether, for example, this land would be returned to agricultural production. The Inspectorate considers that the potential effects associated with removal of the current 132kV route should be addressed within the ES.

4.7 Traffic and Transport

(Scoping Report Section 12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.7.1	Table 12.4	Construction traffic impacts on the Strategic Road Network (SRN)	<p>Paragraph 12.6.8 of the Scoping Report states that roads forming part of the SRN within the study are expected to experience a negligible increase in daily traffic flows during construction of the Proposed Development; it is stated that, for example, the A12 and A14 exceed 50,000 vehicles per day based on 2019 data.</p> <p>The Inspectorate considers that, given the nature of the Proposed Development, it is not likely that the increase in traffic flows comparative to the existing baseline would result in significant effects. However, the Scoping Report has not presented any information regarding the expected daily traffic flows and therefore the Inspectorate is not in a position to agree to scope out this matter. The ES should consider impacts arising from construction traffic on the SRN where these are likely to give rise to significant effects.</p> <p>Please note the Inspectorate's additional comments at ID 4.7.12.</p> <p>The Inspectorate notes that reference is made to the Highways England project to widen the A12 between junction 19 and junction 25, at paragraph 12.4.14 of the Scoping Report, which, subject to consent, would involve a similar construction timescale as the Proposed Development. The project is at pre-application stage, with submission of a DCO application expected in Q2 2022. Appendix 18.1 indicates that the project is proposed to be scoped out of the cumulative assessment as it is outside of the Applicant's defined zone of influence. The Inspectorate considers that there is potential for cumulative significant effects arising from the projects as a result of increased traffic flows and redistribution of traffic across the highway</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			network. An assessment of the cumulative effects should be presented in the ES.
4.7.2	Table 12.4	Construction traffic impacts on public rights of way (PRoW) in the study area	The Scoping Report states that any closures or diversions to existing PRoWs would be temporary and for a short duration, with appropriate management measures in place through a Construction Traffic Management Plan (as described in paragraphs 12.6.14 and 12.6.15). However, limited information is presented in the Scoping Report as to the location of closures and diversions, the value of these routes and their usage by receptors. Given the nature of the study area and the presence of PRoWs within it, the Inspectorate considers that there is potential for likely significant effects to users of PRoWs in terms of journey length and severance. This matter should therefore be scoped in to the ES.
4.7.3	Table 12.4	Traffic and transport matters during operation	The Inspectorate agrees that due to the likely low number of staff/visits required to maintain the proposed GSP substation and the limited maintenance activity required for other components of the Proposed Development as described at paragraph 12.6.17 of the Scoping Report, this matter can be scoped out of the ES.
4.7.4	12.6.9	Temporary road restrictions and traffic management measures during construction	<p>The Inspectorate notes that it is proposed that this matter would be scoped out of the ES if, following further development of the construction access routes, the criteria presented at paragraph 12.6.9 of the Scoping Report are not met or exceeded on any diverted or managed roads. These criteria are stated to be based upon EIA requirements for assessing air quality impacts of road schemes.</p> <p>The Inspectorate agrees that if the relevant screening criteria are not met following confirmation of the construction access routes then the impact of this matter in terms of air quality can be scoped out of the ES. There should be a consistent approach between the aspect assessments and therefore the criteria stated in paragraph 12.6.9 of</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>the Scoping Report should be reviewed and amended as necessary to be consistent with the criteria referenced in Chapter 13: Air Quality before they are applied as part of the screening exercise. The ES should include the results of the screening exercise.</p> <p>The impact of this matter should be assessed in the ES where it could give rise to likely significant effects to other receptors, eg contributing towards increased traffic flows and/ or delays to other links experienced by drivers.</p>

ID	Ref	Other points	Inspectorate's comments
4.7.5	12.1.4	Links to other aspects	The Inspectorate notes that traffic and transport is also relevant to the assessments of air quality and noise and vibration; the ES should confirm how the traffic flow data used in these assessments has been derived from the traffic and transport assessment, or if not how it has been prepared.
4.7.6	12.3	Study area	The ES should include a figure to illustrate the extent of the study area used as the basis for the assessment.
4.7.7	12.4	Existing baseline	The ES should include in the description of the existing baseline any data gathered in respect of the frequency of use of walking, cycling and horse-riding (WCH) routes and their condition and/ or use of community land and assets identified within the study area.
4.7.8	12.6	Likely significant effects	The Inspectorate notes that a trenchless crossing is proposed beneath the existing Sudbury Branch Line to reduce impacts on rail users. It is not clear from the Scoping Report as to whether there would be any disruption to rail services during construction of the crossing. This should be confirmed and, where significant effects are likely, this should form part of the assessment in the ES.

ID	Ref	Other points	Inspectorate's comments
4.7.9	12.6.3	Abnormal loads	The Inspectorate notes that an abnormal indivisible load (AIL) access study will be undertaken to assess the suitability of the road network, and impacts associated with AIL are scoped into the ES. This should include consideration of potential cumulative effects on the road network with other committed developments, as well as impacts on bridges, culverts and SRN junctions.
4.7.10	12.7.10 12.7.12 12.7.13	Assignment of construction traffic to the network	The ES should explain the methodology by which the project engineering team has derived the vehicle requirement and staff resource profiles used as the basis for traffic forecasts. In addition to 24 hour annual average daily traffic (AADT) and 18 hour annual average weekday traffic data, information about the proportion of HGVs should be provided for the assessments of air quality and noise.
4.7.11	12.7.19	Assessment methodology – road network performance	The Inspectorate notes that it is proposed to define impact magnitude for road network performance by reference to withdrawn guidance (DMRB Volume 3, Section 3, Part 8). The ES should explain why it is appropriate to utilise withdrawn guidance or use an alternative methodology. It is considered that traffic flow increases of less than 30% can be significant in some cases, for example on the minor arm of a problem junction operating close to design capacity. Therefore, junctions and/ or routes should not be excluded from further assessment in the ES on that basis unless this position is agreed with relevant consultation bodies, including Highways England and local highway authorities.
4.7.12	N/A	Use of alternative transport modes for construction traffic	Consideration should be given within the ES to the potential for use of rail for transportation of construction materials and whether this could result in reduced environmental effects.

4.8 Air Quality

(Scoping Report Section 13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.1	Table 13.5	Construction dust (human and ecological receptors)	<p>On the basis of the background PM2.5 and PM10 concentration data presented at paragraph 13.4.9 of the Scoping Report and given the nature, scale and location of the Proposed Development is likely to generate a low risk in respect of construction dust on human health receptors, which would be mitigated in accordance with the outline CoCP (Appendix 4.1, Volume 2), the Inspectorate agrees that this matter can be scoped out of the ES.</p> <p>The Inspectorate does not consider that sufficient information has been provided within the Scoping Report to confirm that the effect of construction dust on amenity receptors can be scoped out of the ES. Further information should be provided regarding the potential dust emission magnitude (demolition, earthworks, construction and track-out) and sensitivity of the human receptors (amenity) within the study area to support a conclusion that this matter would not give rise to significant effects.</p> <p>Please note the Inspectorate's comment at ID 4.2.9 with regard to construction dust and ecological receptors.</p>
4.8.2	Table 13.5	Construction generators	<p>Limited information has been provided in the Scoping Report about use of generators and other non road mobile machinery; specifically, no information has been provided as to the type, number, location or operational hours of such machinery and likely emissions other than a brief reference within the CoCP (Appendix 4.1, Volume 2) to plant being switched off when not in use. On this basis, the Inspectorate does not agree that this matter can be scoped out of the ES.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.3	Table 13.5	Construction traffic emissions	<p>The Inspectorate notes that the impact of construction traffic emissions on human and ecological receptors are proposed to be scoped out if the screening criteria for air quality assessment set out in IAQM's Land Use and Development Planning for Air Quality (2017) are not met. If the screening criteria are met, the Applicant proposes that this matter will be scoped in to the ES.</p> <p>If the predicted numbers of construction traffic movements generated by the Proposed Development do not exceed the relevant indicative threshold presented in the IAQM guidance (referenced at paragraph 13.3.2) as relevant to each of the affected roads used for construction traffic (once the route has been confirmed), the Inspectorate agrees that this matter can be scoped out of the ES.</p> <p>Some roads that are likely to be used for construction traffic, eg in Sudbury (including Cross Street air quality management area (AQMA)) and along the A12, have elevated concentrations of air pollutants in the baseline position; when applying the screening criteria to any affected roads in an AQMA to establish whether these should be assessed within the ES, the lower traffic volume threshold for AQMAs should be applied accordingly.</p>
4.8.4	Table 13.5	Existing traffic diverted by temporary construction measures	<p>The Inspectorate agrees that construction traffic emissions associated with redistribution of existing traffic flows as a result of temporary road closures and/ or diversions can be scoped out of the ES on the basis such measures would not be in place for any longer than four weeks and that the existing low vehicle flows on potentially affected roads mean that the screening criteria for air quality assessment set out in IAQM's Land Use and Development Planning for Air Quality (2017) would not be met.</p>
4.8.5	Table 13.5	Operational vehicle emissions	<p>On the basis of information in Chapter 7: Biodiversity and Chapter 12: Traffic and Transport with regard to low traffic flows during</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			operation, the Inspectorate agrees that operational vehicle emissions can be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.8.6	13.3	Study area	The final study area used for the assessment should be shown on a figure within the ES. This should include identification of any AQMAS within the study area.
4.8.7	13.4.11	Receptors	A list of potential human receptors within the study area is presented at paragraph 13.4.11 of the Scoping Report. This should be reviewed and updated as the Proposed Development boundary and construction routes are finalised. Relevant ecological receptors within the study area should also be identified and it should be explained whether these receptors are sensitive to dust deposition. This could be through cross reference to Chapter 7: biodiversity.
4.8.8	13.7.5	Assessment methodology	The ES should confirm the source of construction traffic flow data used in the assessment and that this has been calculated by reference to an appropriate methodology.

4.9 Noise and Vibration

(Scoping Report Section 14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.9.1	Table 14.7	Construction traffic vibration	<p>The Scoping Report states that vibration levels are expected to be less than 0.3mm/s peak particle velocity (PPV) assuming a baseline of negligible (which would be below the Lowest Observed Adverse Effect Level (LOAEL) where vibration might be perceptible in residential environments) beyond 1m from the road and therefore not perceptible at building receptors beyond this distance within the study area. This conclusion is based on initial calculations using Traffic Induced Vibration in Buildings (Transport and Road Research Laboratory, 1990). Mitigation would be included within the CEMP forming part of the DCO application to prevent nuisance eg through ensuring the road surface is free of irregularities. On that basis, the Inspectorate agrees that further assessment of this matter can be scoped out of the ES. The calculations referenced at paragraph 14.6.10 of the Scoping Report should be appended to the ES.</p>
4.9.2	Table 14.7	Operational noise from the GSP substation, OHL, CSEC and underground cables	<p>On the basis that the conductor bundle and pylon fittings used within the Proposed Development conform to the Technical Specification and Type Registration process outlined in Chapter 4: Project Description and Chapter 14: Noise and Vibration (paragraphs 14.6.13 and 14.6.14) and therefore would result in no audible noise generation on the proposed new and modified OHL, the Inspectorate agrees that further assessment of this matter as part of the operation of the Proposed Development can be scoped out of the ES.</p> <p>On the basis that the CSECs and sections of underground cable would not generate noise during operation, the Inspectorate agrees that further assessment of this matter as part of the operation of the Proposed Development can be scoped out of the ES.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>The Inspectorate agrees that on the basis of the design measures to be incorporated into the Proposed Development as described at paragraph 14.6.11 of the Scoping Report and the distance of the nearest noise sensitive receptors (NSR) from the location of the GSP substation (circa 300m), it is unlikely that significant effects from operational noise would arise from the GSP substation. On that basis, the Inspectorate agrees that further assessment of operational noise relating to human receptors can be scoped out of the ES. However, as noise impacts from the proposed GSP substation have not yet been fully quantified and given the proximity of potential ecological receptors to this location, consideration of noise impacts on ecological receptors should be scoped into the ES.</p>
4.9.3	Table 14.7	Operational vibration	<p>On the basis that the proposed GSP substation is located more than 100m from the nearest receptor (circa 300m), the Inspectorate agrees that vibration effects on human receptors can be scoped out of the ES.</p> <p>The Inspectorate does not consider that sufficient evidence has been provided within the Scoping Report to conclude that there would be no operational vibration impact to ecological receptors from the proposed GSP substation; where significant effects are likely, this matter should be scoped into the ES.</p>
4.9.4	Table 14.7	Operational noise associated with maintenance activities for the OHL and GSP substation	<p>On the basis that operational maintenance activities would be infrequent and localised as described in paragraph 14.6.19 of the Scoping Report and that traffic flows associated with operational maintenance would be low (as described in Chapter 12: Traffic and Transport), the Inspectorate agrees that this matter can be scoped out of the ES.</p> <p>The ES should consider the potential that more substantial activity is required as part of maintenance, eg replacement of components of</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			the Proposed Development, which would be more akin to the impacts described during the construction stage. The ES should include an assessment of where significant effects would be likely.
4.9.5	14.7.9	Survey of existing road traffic noise	The Inspectorate agrees that survey of existing road traffic noise on construction routes may be scoped out of the ES on the basis that construction traffic noise will be determined through calculation in line with Calculation of Road Traffic Noise (CRTN) (1988). The assessment should demonstrate that CRTN is an appropriate assessment method for the nature of the road network and the baseline traffic flows.
4.9.6	14.7.11	Baseline vibration study	The Inspectorate agrees that a baseline vibration study may be scoped out of the ES on the basis that construction vibration baseline will be assumed as negligible or zero due to absence of construction work prior to commencement.

ID	Ref	Other points	Inspectorate's comments
4.9.7	14.3 Figure 14.1	Study area	The ES should include appropriate figures to illustrate the study area adopted for construction traffic and vibration impacts, and associated receptors within the defined study area. This should include non-residential NSRs such as ecological receptors, areas used for leisure activities and sites of historic or cultural importance.
4.9.8	14.6.3	Likely significant effects during construction	The Inspectorate notes that this matter is scoped in to the ES in particular in relation to potential for construction noise hotspots. The assessment should consider activity that would give rise to likely significant effects to identified NSRs, including cutting of old pylons and breaking out of piled foundations, where relevant.

ID	Ref	Other points	Inspectorate's comments
4.9.9	14.7.2	Baseline data	<p>The Inspectorate notes that it is proposed to use desk based information and survey data undertaken prior to 2013 for the purposes of establishing the baseline for the assessment of construction noise impact (excluding construction traffic). The ES should explain why the historic data is still appropriate, including a description of any change(s) to the study area in terms of new receptors or noise sources that may have affected the noise baseline in the intervening period and why the data remains valid.</p>
4.9.10	N/A	Receptors (construction impacts)	<p>The Inspectorate notes that ecological receptors are identified as potentially subject to significant effects as a result of construction noise and vibration (Chapter 7: Biodiversity). These receptors should therefore form part of the assessment in the ES for the matters identified in section 4.9.</p> <p>The Inspectorate notes that indirect damage to historic buildings from construction vibration impact is scoped in to the assessment of effects to the Historic Environment (Chapter 8) and therefore these receptors should form part of the assessment in the ES where significant effects are likely, or further justification should be provided for scoping them out, eg distance from the works.</p> <p>The ES should also assess likely significant effects arising from construction noise on other non-residential NSRs where relevant, such as areas used for leisure activities and sites of historic or cultural importance.</p>

4.10 Socioeconomic, recreation and tourism

(Scoping Report Section 15)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.10.1	15.1.8	Economic impact to individual businesses	The Inspectorate is content that the location of the Proposed Development is predominantly rural and that the indicative alignment has been designed to avoid direct impact to business properties (noting that agricultural and farmholdings are addressed separately in Chapter 11). On that basis, the Inspectorate agrees that it is unlikely that there would be significant effects in relation to this matter and it can therefore be scoped out of the ES.
4.10.2	15.1.8	Economic impact to property values	On the basis that the Proposed Development is located in a predominantly rural location and that the indicative alignment has been designed to avoid direct impact to residential properties, the Inspectorate agrees that it is unlikely that there would be significant effects in relation to this matter and it can therefore be scoped out of the ES.
4.10.3	15.1.9	Electromagnetic disturbance to TV or radio equipment in the local area	The Inspectorate agrees that this matter can be scoped out of the ES on the basis that the design of the Proposed Development is compliant with relevant legislation and a Certificate of Conformity will be produced within the DCO application to that effect. The ES should explain how any effects attributable to the Proposed Development would be addressed during operation.
4.10.4	15.6.2	Effects on the tourism economy during construction	The Inspectorate agrees that this matter can be scoped out of the ES on the basis that impacts will be limited in duration and mitigated through the implementation of measures described in the CoCP (Appendix 4.1, Volume 2), and given that the nature and scale of the construction activity would mean that the likely impacts are temporary and small comparative to the overall value of the tourism

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>economy at a county and district scale (as described at paragraph 15.4.15 and Table 15.2 of the Scoping Report).</p> <p>It is noted that the baseline conditions presented in the Scoping Report utilise some historic data from 2017-2019; it is understood that there is more recent data available, which should be reviewed as part of the preparation of the ES to confirm that there are no likely significant effects.</p>
4.10.5	15.6.3 15.6.4 15.6.5 15.6.5	Effects on tourism accommodation during construction	<p>The Inspectorate agrees that this matter can be scoped out of the ES on the basis that impacts will be limited in duration and that there is sufficient capacity within the private sector market (circa 40% across all accommodation types) to accommodate the expected demand from construction workers without comprising the availability for tourists during the construction period.</p> <p>It is noted that the baseline conditions presented in the Scoping Report utilise some historic data from 2017-2019; it is understood that there is more recent data available, which should be reviewed as part of the preparation of the ES to confirm that there are no likely significant effects.</p> <p>The potential for significant cumulative effects arising from other committed infrastructure projects within the defined zone of influence (ZOI) should be assessed within the ES as part of the assessment of cumulative effects.</p>
4.10.6	15.6.7	Effects on the local economy during construction	<p>The Inspectorate notes that the project may source construction materials and supplies locally, which could have an impact to the local economy. It is stated that the effect is not likely to be significant and the Applicant therefore seeks to scope out this matter from the ES.</p> <p>The Inspectorate acknowledges that given the scale and nature of the Proposed Development, the likelihood of it generating significant</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			effects in this matter is low. However, limited information is presented in the Scoping Report from which to confirm this conclusion. Further information about the current value of this sector and the likely contribution of the Proposed Development to it, should be provided to support a conclusion that this matter would not give rise to significant effects.
4.10.7	15.6.8	Effects on the wider economy during operation	The Inspectorate agrees that the general effects of the Proposed Development to the wider economy in terms of creation of additional and more secure power supply do not need to be assessed within the ES.
4.10.8	15.6.9	Effects on the local economy (including tourism economy) during operation (excluding land in agricultural use)	<p>Given the nature of the Proposed Development, the proposals to underground cables in locations (including tourist attractions such as Dedham Vale AONB and the Stour Valley) with the highest amenity value and noting that any land used temporarily for construction would be reinstated to its former use, the Inspectorate agrees that its operation is not likely to have significant effects on the local economy and this matter can therefore be scoped out of the ES.</p> <p>The Inspectorate's comments in respect of land in agricultural use are provided at section 4.6 of this Scoping Opinion.</p>
4.10.9	15.6.10	Direct effects on local businesses during construction (excluding agricultural businesses)	As noted at ID 4.10.1, the Inspectorate agrees that this matter can be scoped out of the ES.
4.10.10	15.6.11 15.6.12	Indirect effects on local businesses during construction	As noted at ID 4.10.1, the Inspectorate considers that indirect effects to individual businesses are likely to be short term and temporary in nature and unlikely to give rise to significant effects and can therefore be scoped out of the ES.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			The Inspectorate acknowledges that given the scale and nature of the Proposed Development, the likelihood of it generating significant indirect effects to the local economy in respect of general construction workforce spend is low and therefore this matter can be scoped out of the ES.
4.10.11	15.6.13 15.6.14 15.6.15	Effects on local jobs and employment during construction	The Inspectorate agrees that this matter can be scoped out of the ES on the basis that impacts will be limited in duration and given that the likely number of temporary jobs to be created would be small comparative to the population at district and ward levels within the scoping boundary (as described at Table 15.1 of the Scoping Report) and could be accommodated within the job density ratios for the local labour pool (as described at section 15.4 of the Scoping Report).
4.10.12	15.6.16	Direct and indirect effects on local businesses due to disruption during operation (excluding land in agricultural use)	<p>Given the nature of the Proposed Development, and noting that any land used temporarily for construction would be reinstated once it is operational, the Inspectorate agrees that its operation is not likely to cause significant disruption effects to local businesses and this matter can therefore be scoped out of the ES.</p> <p>The Inspectorate's comments in respect of land in agricultural use are provided at section 4.6 of this Scoping Opinion.</p>
4.10.13	15.6.17	Effects on local jobs and employment during operation	The Inspectorate agrees that this matter can be scoped out of the ES on the basis that operational maintenance of the Proposed Development will be undertaken by existing employees of the Applicant and therefore no additional jobs or employment will be created.
4.10.14	15.6.18 15.6.19 15.6.20	Effects to planning and development during construction	On the basis of the nature and scale of the Proposed Development, the identified committed and/ or reasonably foreseeable developments within the study area (as shown on Figure 18.1, Volume 3), and the commitment to collaborate with other developers

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>regarding management of construction stage impacts, it is unlikely that this matter would give rise to significant effects and that any potentially significant cumulative effects arising from this or other aspects would be assessed as relevant within the assessment of cumulative effects in the ES. The ES should confirm whether there is potential for significant effects in respect of potential future access to any land falling within the Mineral Safeguarding Areas as designated in the Essex Minerals Local Plan. If there are no likely significant effects, the Inspectorate therefore agrees that this matter can be scoped out of the ES.</p>
4.10.15	15.6.22	Effects to planning and development during operation	<p>On the basis of the nature and scale of the Proposed Development, the identified committed and/ or reasonably foreseeable developments within the scoping boundary (as shown on Figure 18.1, Volume 3), and the measures for restoration of access (as described in the CoCP at Appendix 4.1, Volume 2), it is unlikely that this matter would give rise to significant effects. The ES should confirm whether there is potential for significant effects in respect of potential future access to any land falling within the Mineral Safeguarding Areas as designated in the Essex Minerals Local Plan. If there are no likely significant effects, the Inspectorate therefore agrees that this matter can be scoped out of the ES.</p>
4.10.16	15.6.23 15.6.24 15.6.25	Effects on access to community services during operation and construction	<p>On the basis of the information presented within Chapter 15: Socioeconomics and Tourism regarding the number and origin of temporary construction workforce (circa 300 maximum during the peak construction period) and no generation of new operational employment, the Inspectorate agrees that the Proposed Development is unlikely to have significant effects on capacity within community services, although it would be beneficial if the ES could include confirmation of the number and capacity of healthcare facilities within the study area. It is noted that potential impacts arising from delay in</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			access to community services by users owing to construction traffic would be addressed within the traffic and transport assessment where significant effects are likely. The Inspectorate therefore agrees that this matter can be scoped out of the ES.
4.10.17	15.6.26 15.6.27 15.6.28 15.6.29	Effects on visitor attractions during construction	On the basis of the temporary and short time duration of the impact, the information presented in the Scoping Report and the commitment set out in the CoCP (Appendix 4.1, Volume 2) to minimise the extent and duration of any access restrictions within the small areas (less than 1% of total area) of the Dedham Vale AONB and Stour Valley Project Area that would be required during construction, as well as the consideration of impacts to visitors in other aspect assessments (eg noise and landscape and visual impact) the Inspectorate agrees that this matter can be scoped out of the ES.
4.10.18	15.6.30 15.6.31 15.6.32 15.6.33	Effects on greenspaces during construction	The Inspectorate agrees that this matter can be scoped out of the ES on the basis of the information presented, noting that the route alignment has been designed to avoid greenspaces where possible and that there might be temporary, localised and short term impacts to part of the greenspace at Ramsey and Hintlesham Woods and Millfield Wood but that visitors would still be able to access the wider space and a range of other greenspaces in the area, and impacts would be minimised through the measures outlined in the CoCP (Appendix 4.1, Volume 2).
4.10.19	15.6.34	Effects on PRoW and the National Cycle Network (NCN) during construction	The Inspectorate agrees that this matter can be scoped out of the assessment of socioeconomic, recreation and tourism effects during construction on the basis that effects on relevant receptors (walkers, cyclists and horse-riders) have been scoped in to the ES as part of Chapter 12: Traffic and Transport.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.10.20	15.6.35	Effects on water based recreation and navigation during construction	On the basis that construction activity would be temporary, localised and short term in duration, the Inspectorate agrees that it is unlikely that works to install the trenchless crossing at the River Stour would result in significant effects to recreational users and navigation. However, the Inspectorate does not consider that sufficient information has been provided to confirm this conclusion, and the ES should include information about the number, type and frequency of users, and any closures or restriction of access that would be required and, if so, when these would be scheduled to understand the impact.
4.10.21	15.6.36	Effects on visitor attractions and greenspaces during operation	Given the nature and scale of the Proposed Development, the use of underground cabling within the areas of highest amenity value to minimise visual impact and commitment to mitigation through reinstatement and mitigation planting (as described in the CoCP (Appendix 4.1, Volume 2) and to be further developed in the Landscape and Ecological Mitigation Plan (LEMP)), the Inspectorate agrees that there are unlikely to be significant effects in respect of this matter and it can be scoped out of the ES.
4.10.22	15.6.37	Effects on water based recreation and navigation during operation	On the basis that a trenchless crossing is proposed to the River Stour, and that none of the other watercourses within the scoping boundary are navigable (paragraph 15.4.32 of the Scoping Report), the Inspectorate agrees that there are not likely to be any significant effects on water based recreation and navigation during operation and therefore this matter can be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.10.23	15.4.25	Baseline environment – community service providers	It is stated that there are no community facilities within the scoping boundary, although there are some (including a health centre, schools and a nursery) in the wider 2km study area. The information

ID	Ref	Other points	Inspectorate's comments
			<p>presented appears to be inconsistent with the baseline described in other aspect chapters, eg air quality, which describe some additional community facilities (at paragraph 13.4.12) that are not listed at paragraph 15.4.25, eg Yanas House Nursery, Pump Farm School and Daws Hill Education Centre. The ES should present a consistent description of the baseline and where any additional community facilities are identified that could be subject to likely significant effects, these should be scoped in to the ES.</p>

4.11 Health and wellbeing

(Scoping Report Section 16)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.11.1	Table 16.1	Electric and magnetic fields (EMFs) during the construction phase	On the basis that EMFs are associated with power distribution and would therefore not generate levels to affect human health during the construction of the Proposed Development, the Inspectorate agrees that this matter can be scoped out of the ES.
4.11.2	Table 16.1	Electric and magnetic fields (EMFs) during the operational phase	<p>Paragraphs 16.7.2 to 16.7.6 of the Scoping Report describe the potential impact of EMFs during the operational phase for each component of the Proposed Development. It is stated that the Proposed Development will comply with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines and Department for Energy and Climate Change (DECC) (now BEIS (Department for Business, Energy and Industrial Strategy)) Codes of Practice.</p> <p>On the basis that the Proposed Development will as a minimum comply with the current relevant EMF guidelines in all of its operations and that any DCO application will include a separate document that provides relevant information for members of the public demonstrating that the Proposed Development will not give rise to likely significant effects as a result of EMF (as described at paragraph 16.7.6 of the Scoping Report), the Inspectorate agrees that this matter can be scoped out of the ES.</p>
4.11.3	Table 16.1	Health and wellbeing during the operation phase	The Scoping Report states that impacts of the Proposed Development on geology and hydrogeology, traffic and transport, air quality and noise and vibration will be assessed as part of separate aspect chapters, and that this will include where relevant assessment of the

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>likely significant effects of those aspects during operation to human (health) receptors.</p> <p>The Inspectorate notes that the relevant sections of the Scoping Report have concluded that there are no likely significant effects to human (health) receptors from the Proposed Development arising from these aspects during operation, and therefore they are also proposed to be scoped out of the relevant assessment.</p> <p>The Inspectorate considers that a standalone assessment of health and wellbeing during operation is not required on that basis.</p>

ID	Ref	Other points	Inspectorate's comments
4.11.4	16.3.8 Table 16.1	Scope of assessment	<p>The Inspectorate notes that impacts of the Proposed Development on geology and hydrogeology, traffic and transport, air quality and noise and vibration during construction will be assessed as part of separate aspect chapters, and that this will include where relevant assessment of the likely significant effects of those aspects during construction to human (health) receptors.</p> <p>The ES should ensure that likely significant effects on health receptors during the construction phase associated with changes to water quality, flood risk, residual soil contamination, air quality and noise and vibration are assessed and reported in the ES.</p> <p>Consideration should be given to direct and indirect impacts to both physical and mental health of receptors, as well as the potential for particular effects on any vulnerable populations. However, the ES should avoid duplication of assessment and, where relevant, the health and wellbeing aspect chapter should cross refer to information contained in other aspect chapters.</p>

ID	Ref	Other points	Inspectorate's comments
			<p>It is stated at paragraph 16.3.8 of the Scoping Report that where there is potential for intra-project effects on a human health receptor from two or more aspects, that this will be assessed as part of the assessment of cumulative effects. Inter project cumulative effects should also be considered. The Inspectorate agrees with this approach and considers that it should be applied to impacts during construction and operation.</p>
4.11.5	16.5	Baseline conditions	<p>Limited information is presented in the Scoping Report regarding the baseline for health and wellbeing within the study area. It is noted that the study area is predominantly rural, however there are residential properties and other potentially sensitive community facilities, eg schools within the study area. The ES should include a description of the baseline for health and wellbeing by reference to appropriate data sources such as general population data (this could be cross referenced to Chapter 15: Socioeconomics and Tourism), environmental information (this could be cross referenced to other aspect chapters, eg transport, air quality, noise and socioeconomics and tourism) and health status.</p>

4.12 Major accidents and disasters

(Scoping Report Section 17)

ID	Ref	Applicant's proposed aspect to scope out	Inspectorate's comments
4.12.1	17.8.1 Table 17.2	Vulnerability of the Proposed Development to a major accident or disaster during construction and operation	Chapter 17: Major Accidents and Disasters of the Scoping Report (Volume 1) and associated Appendix 17.1 (Volume 2) present the Applicant's scoping exercise in respect of the vulnerability of the Proposed Development to a major accident or disaster. It is stated that the exercise has been informed by guidance set out in Major Accidents and Disasters in EIA: A Primer (Institute of Environmental Management (IEMA)) (September 2020). On the basis of the information presented in Chapter 17 and Appendix 17.1, the Inspectorate considers that the Proposed Development is unlikely to be vulnerable to a major accident or disaster that would result in likely significant effects to the environment. However, it is noted that two existing major accident hazard pipelines, are identified by the Health and Safety Executive, which have not been specifically considered within the Scoping Report. The potential for the Proposed Development to be vulnerable to impacts arising from a major accident occurring at these pipelines should be considered and, where significant effects are likely, these should be assessed within the ES. The Inspectorate agrees that other matters relating to this aspect can be scoped out of the ES. The outcome of the scoping exercise should be presented within the ES.
4.12.2	17.8.1 Table 17.2	Potential for the Proposed Development to cause a major accident or disaster during construction and operation	On the basis of the information presented in Chapter 17: Major Accidents and Disasters and Appendix 17.1, the Inspectorate agrees that the Proposed Development is unlikely to cause a major accident or disaster that would result in likely significant effects to the environment, as it will be subject to appropriate design measures and compliance with legislation and best practice, and in most instances there is no source-pathway-receptor linkage to trigger such effects.

ID	Ref	Applicant's proposed aspect to scope out	Inspectorate's comments
			This aspect can therefore be scoped out of the ES. The outcome of the scoping exercise should be presented within to the ES.

4.13 Transboundary Effects

(Scoping Report Section 1.5)

ID	Ref	Applicant's proposed aspect to scope out	Inspectorate's comments
4.13.1	1.5	Transboundary effects	<p>Appendix 1.1 (Volume 2) presents the outcome of the Applicant's transboundary screening exercise, which concludes that there is no pathway for effects to occur outside of the UK and therefore no likely significant effects from the Proposed Development to a European Economic Area (EEA) state. The Inspectorate agrees that on the basis of the information presented in Appendix 1.1 and Appendix 7.3 (Volume 2) confirming that 2011 surveys indicate low presence of qualifying bird species functionally linked to European sites (Stour and Orwell Estuaries Ramsar and SPA) in suitable habitats that would be affected by the OHL forming part of the Proposed Development, the likelihood of significant effects on EEA states as a result of the Proposed Development is low.</p>

4.14 Cumulative Effects

(Scoping Report Section 18)

ID	Ref	Applicant's proposed aspect to scope out	Inspectorate's comments
4.14.1	Table 18.4	N/a	No matters have been proposed to be scoped out of the assessment.

ID	Ref	Other points	Inspectorate's comments
4.14.2	Table 18.3	Zone of influence (ZOI)	The assessment of cumulative effects should be based on a robust ZOI for environmental receptors. The ES should provide further justification for selection of the geographical zone for environmental impacts and identify the receptors to be included within the assessment. It is considered that the ZOI should be further informed by an understanding of receptors and potential impact pathways, rather than application of a distanced based zone, and this should be explained within the ES.
4.14.3	18.4.6 Appendix 18.1	ZOI	The Inspectorate notes that a 10km study area has been chosen for preparation of the long list, with a 50km study area used to identify NSIPs, although these were not considered as part of the long list due to distance from the Proposed Development. Given the number and scale of large scale infrastructure projects in the wider 50km study area, and the potential overlap in construction programmes, the Inspectorate considers that there is potential for likely significant cumulative effects arising from NSIPs in the wider 50km study area, for example in relation to construction traffic. The overlap with identified NSIPs should therefore be considered as part of the assessment, including Sizewell C.
4.14.4	18.6.25	Assessment methodology	The Inspectorate notes that it is proposed to use professional judgement to determine the significance of cumulative effects for

ID	Ref	Other points	Inspectorate's comments
	18.7.1 18.7.2		both inter project and intra project effects. Where relevant to the aspect and sufficient information is available in respect of identified committed developments, the Inspectorate considers that quantitative modelling may also be used to inform the assessment.
4.14.5	Appendix 18.1	Provisional long and short list of developments	The Inspectorate notes that it is not proposed to take forward the potential widening of the A12 between junctions 19 and 25 (DCO application expected Q2 2022) to the short list of developments, on the basis that it is outside of the defined 10km ZOI. At its closest, it would be circa 12km from the Proposed Development. Whilst the development falls outside of the ZOI, it is noted that construction timescales for both projects are potentially similar. As part of the SRN, the A12 could be used for construction access to the Proposed Development; this is not yet known as routes have not been defined. The Inspectorate considers that there is potential for significant cumulative effects arising from combination of these developments, for example noise and air quality impacts from redistributed traffic. The A12 project should therefore be included on the short list.
4.14.6	N/A	Review of provisional long and short list of developments	The Inspectorate notes that the long list of developments for the cumulative effects assessment at Appendix 18.1 (Volume 2) is provisional and will be kept under review (paragraph 18.6.10 of the Scoping Report). This should include the status of development; where a development is expected to be completed before construction of the Proposed Development and effects are fully determined, effects arising should be considered as part of the baseline. The ES should distinguish between projects forming part of the baseline and those in the cumulative effects assessment.
4.14.7	N/A	Scope of assessment	The Inspectorate considers that an assessment of the intra and inter project cumulative effects on amenity in terms of socioeconomic and tourism receptors should be provided in the ES where significant effects are likely.

4.15 Climate Change

(Scoping Report Section 4 and 17)

ID	Ref	Applicant's proposed aspect to scope out	Inspectorate's comments
4.15.1	4.4.14 4.4.15 Chapter 17 Appendix 17.1	Climate change	<p>Paragraphs 4.4.14 and 4.4.15 of the Scoping Report, and Chapter 17: Major Accidents and Disasters (plus accompanying Appendix 17,1. Volume 2), describe the baseline environment, receptors, and likely significant effects in terms of extreme climatic events, together with the design measures that would be incorporated into the Proposed Development to reduce its susceptibility to these effects. It is stated that above ground elements of the Proposed Development would be sited outside of Flood Zones 2 and 3, and the resilience of the project to climate change in terms of flood risk would be considered as part of the assessment of the water environment (Chapter 9) and a separate FRA, which would include consideration of the latest climate change allowance in respect of rainfall intensities (paragraph 9.4.12 of the Scoping Report). Although outside of the scope of the EIA, the Inspectorate notes that the FRA should consider the application of sensitivity testing based on the maximum credible scenarios, for example using HH+ allowances for peak river flow (if required).</p> <p>On that basis, the Inspectorate agrees that no further assessment of likely significant effects in terms of the Proposed Development's susceptibility to climate change is required in the ES.</p> <p>The Inspectorate notes that the Scoping Report does not reference other potential impacts associated with climate change, for example greenhouse gas (GHG) emissions (beyond those forming part of the air quality assessment (Chapter 13). The ES should provide an assessment of GHG emissions during construction and operation.</p>

5. INFORMATION SOURCES

5.0.1 The Inspectorate's National Infrastructure Planning website includes links to a range of advice regarding the making of applications and environmental procedures, these include:

- Pre-application prospectus⁵
- Planning Inspectorate advice notes⁶:
 - Advice Note Three: EIA Notification and Consultation;
 - Advice Note Four: Section 52: Obtaining information about interests in land (Planning Act 2008);
 - Advice Note Five: Section 53: Rights of Entry (Planning Act 2008);
 - Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements;
 - Advice Note Nine: Using the 'Rochdale Envelope';
 - Advice Note Ten: Habitats Regulations Assessment relevant to nationally significant infrastructure projects (includes discussion of Evidence Plan process);
 - Advice Note Twelve: Transboundary Impacts;
 - Advice Note Seventeen: Cumulative Effects Assessment; and
 - Advice Note Eighteen: The Water Framework Directive.

5.0.2 Applicants are also advised to review the list of information required to be submitted within an application for Development as set out in The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009.

⁵ The Planning Inspectorate's pre-application services for applicants. Available from: <https://infrastructure.planninginspectorate.gov.uk/application-process/pre-application-service-for-applicants/>

⁶ The Planning Inspectorate's series of advice notes in relation to the Planning Act 2008 process. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

TABLE A1: PRESCRIBED CONSULTATION BODIES⁷

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board	NHS England
The relevant Clinical Commissioning Group	NHS West Suffolk Clinical Commissioning Group
	NHS Mid Essex Clinical Commissioning Group
	NHS Ipswich and East Suffolk Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England
The relevant fire and rescue authority	Suffolk Fire and Rescue Service
	Essex County Fire and Rescue Service
The relevant police and crime commissioner	Suffolk Police and Crime Commissioner
	Essex Police, Fire and Crime Commissioner
The relevant parish council(s) or, where the application relates to land [in] Wales or Scotland, the relevant community council	Gestingthorpe Parish Council
	Alphamstone and Lamarsh Parish Council
	Bulmer Parish Council
	Wickham St. Paul Parish Council
	The Hennys', Middleton and Twinstead Parish Council

⁷ Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations')

Scoping Opinion for
Bramford to Twinstead Overhead Line Project

SCHEDULE 1 DESCRIPTION	ORGANISATION
	Bramford Parish Council
	Bures St. Mary Parish Council
	Assington Parish Council
	Stoke-by-Nayland Parish Council
	Polstead Parish Council
	Layham Parish Council
	Hadleigh Parish Council
	Hintlesham and Chattisham Parish Council
	Copdock and Washbrook Parish Council
	Sproughton Parish Council
	Little Cornard Parish Council
	Leavenheath Parish Council
	Shelley Parish Council
	Raydon Parish Council
Burstall Parish Council	
The Environment Agency	The Environment Agency
The Civil Aviation Authority	Civil Aviation Authority
The Relevant Highways Authority	Essex County Council
	Suffolk County Council
The relevant strategic highways company	Highways England
The relevant internal drainage board	East Suffolk Internal Drainage Board
Public Health England, an executive agency of the Department of Health	Public Health England
The Forestry Commission	The Forestry Commission - East and East Midlands

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Secretary of State for Defence	Ministry of Defence

TABLE A2: RELEVANT STATUTORY UNDERTAKERS⁸

STATUTORY UNDERTAKER	ORGANISATION
The relevant Clinical Commissioning Group	NHS West Suffolk Clinical Commissioning Group
	NHS Mid Essex Clinical Commissioning Group
	NHS Ipswich and East Suffolk Clinical Commissioning Group
The National Health Service Commissioning Board	NHS England
The relevant NHS Trust	East of England Ambulance Service NHS Trust
Railways	Network Rail Infrastructure Ltd
	Highways England Historical Railways Estate
Canal Or Inland Navigation Authorities	Environment Agency
Civil Aviation Authority	Civil Aviation Authority
Licence Holder (Chapter 1 Of Part 1 Of Transport Act 2000)	NATS En-Route Safeguarding
Universal Service Provider	Royal Mail Group
Homes and Communities Agency	Homes England
The relevant Environment Agency	The Environment Agency
The relevant water and sewage undertaker	Anglian Water
The relevant public gas transporter	Cadent Gas Limited

⁸ 'Statutory Undertaker' is defined in the APFP Regulations as having the same meaning as in Section 127 of the Planning Act 2008 (PA2008)

STATUTORY UNDERTAKER	ORGANISATION
	Last Mile Gas Ltd
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd
	ESP Connections Ltd
	Fulcrum Pipelines Limited
	Harlaxton Gas Networks Limited
	GTC Pipelines Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Leep Gas Networks Limited
	Murphy Gas Networks limited
	Quadrant Pipelines Limited
	National Grid Gas Plc
	Scotland Gas Networks Plc
Southern Gas Networks Plc	
The relevant electricity generator with CPO Powers	EDF Energy Renewables Limited
	East Anglia 3 Limited
The relevant electricity distributor with CPO Powers	Eclipse Power Network Limited
	Last Mile Electricity Ltd
	Energy Assets Networks Limited
	ESP Electricity Limited
	Forbury Assets Limited
	Fulcrum Electricity Assets Limited

STATUTORY UNDERTAKER	ORGANISATION
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Indigo Power Limited
	Leep Electricity Networks Limited
	Murphy Power Distribution Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
	UK Power Networks Limited
The relevant electricity transmitter with CPO Powers	National Grid Electricity Transmission Plc

TABLE A3: SECTION 43 LOCAL AUTHORITIES (FOR THE PURPOSES OF SECTION 42(1)(B))⁹

LOCAL AUTHORITY ¹⁰
South Cambridgeshire District Council
Uttlesford District Council
Chelmsford City Council
Braintree District Council
Breckland District Council
Mid Suffolk District Council
Ipswich Borough Council
Tendring District Council

⁹ Sections 43 and 42(B) of the PA2008

¹⁰ As defined in Section 43(3) of the PA2008

LOCAL AUTHORITY¹⁰
Colchester Borough Council
Maldon District Council
South Norfolk District Council
East Suffolk Council
Babergh District Council
West Suffolk Council
Broads Authority
Medway Council
Southend-on-Sea Borough Council
Thurrock Council
London Borough of Havering
Enfield Council
London Borough of Waltham Forest
London Borough of Redbridge
Hertfordshire County Council
Suffolk County Council
Norfolk County Council
Essex County Council
Cambridgeshire County Council

APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:
Alphamstone and Lamarsh Parish Council
Assington Parish Council
Babergh District Council (joint response with Mid Suffolk District Council)
Braintree District Council
Bures St. Mary Parish Council
Burstall Parish Council
Cadent Gas Limited (submitted a standalone response and a combined response with National Grid Electricity Transmission plc and National Grid Transmission plc)
Chattisham and Hintlesham Parish Council
East Suffolk Council
East Suffolk Internal Drainage Board
Environment Agency
ESP Utilities Group (on behalf of ES Pipelines Ltd, ESP Networks Ltd, ESP Pipelines Ltd and ESP Electricity Ltd)
Essex County Council
Health and Safety Executive
Hennys', Middleton and Twinstead Parish Council
Highways England
Historic England
Layham Parish Council
Leavenheath Parish Council
Little Cornard Parish Council
London Borough of Waltham Forest

CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:
Medway Council
Mid Suffolk District Council (joint response with Babergh District Council)
National Grid Electricity Transmission plc (submitted as a combined response with Cadent Gas Limited and National Grid Gas plc)
National Grid Gas plc (submitted as a combined response with Cadent Gas Limited and National Grid Electricity Transmission plc)
NATS En-Route Safeguarding
Natural England
Network Rail Infrastructure Ltd
Polstead Parish Council
Public Health England
Sproughton Parish Council
Stoke-by-Nayland Parish Council
Suffolk County Council
Tendring District Council
The Forestry Commission
Uttlesford District Council
West Suffolk Council

NATIONAL GRID

BRAMFORD TO TWINSTEAD REINFORCEMENT

CONSULTATION RESPONSE of the **ALPHAMSTONE AND LAMARSH PARISH COUNCIL** **ON SCOPING ISSUES**

1. Attached to this submission is the consultation response already made by this Parish council to National Grid. It will be seen that there is a serious criticism of National Grid's public consultation. They gave assurances in about 2013 during the last consultation that the section of cabling through the Stour Valley and our parishes would be placed underground. This year, they have delivered to all affected households a document that makes it clear that the cables *are to be undergrounded*. However, when one consults the documents on their website, one then discovers that their default position is that there will be NO undergrounding and that locals have to make out an economic case for this.

First issue: Overground or Underground?

2. It seems clear to us that unless Nations Grid make their mind up on this issue, then any environmental audit will have to consider both overhead and underground cabling.
3. These parishes contain deep valleys, ancient woodland, rare surviving elm hedgerows and sunken lanes which have 'protected' status under an Essex County Council designation. So it is clear that both overground and underground lines will have a major environmental impact. We ask that the Planning Inspectorate ensures that National Grid produce an Environmental Impact statement that clearly distinguishes between the two different methods.

Second issue: superconductive cabling

4. We also consider it is essential that the Inquiry considers the comparative environmental impact of conventional undergrounding (as proposed by National Grid) and the less intrusive method of underground superconductive cabling. We attach also a discussion paper prepared by a retired engineer from Cable and Wireless which makes the point that only superconductive cabling will have the necessary future capacity. Essentially this Parish Council argues that National Grid are pressing ahead with a very evasive but fundamentally outdated technology that will be full to capacity even when it first comes online.

Third issue: the need to consider this proposal in its full context

5. This leads to our third point: that because this proposal is all about future capacity, it is reasonable for the Inquiry also to concern itself with these issues:
- (i) On 20th May 2021 the Prime Minister endorsed as '*spot on*' the need for an **offshore grid** which would make the present proposals unnecessary. Plainly the merits of an offshore grid must now be addressed and the comparative environmental impact between the alternatives.
 - (ii) The present proposal cannot be considered in isolation. Consideration must be given as to whether there will then be increased capacity requirements that can only be addressed by a different scheme such as superconductors. National Grid appears to be unwilling to address wither the need for further Norwich to Tilbury (**ATNC**) **capacity** will be routed via the Twinstead to Bramford route. So are we then to have double teh cabling presently proposed? National Grid need to be transparent about this.
 - (iii) National Grid has refused to consider the environmental consequences or an informed understanding of the nearby substation proposal and its cumulative impact, taken in conjunction with pylons. It is in our view ludicrous to bring forward only part of the present proposal and not also consider the substation, which is a necessary adjunct. We think that such a substation is likely to lead to inexorable pressure to allow solar plant in open farmland and residents should have a chance to comment on the full proposals, not just the part National Grid choose to bring forward in isolation from the rest.

Fourth issue: the AONB extension

6. Fourth and finally, we insist that the scope of the Inquiry includes an assessment of the impact of the pylons on the proposed Stour Valley AONB extension. In consultation with National Grid surveyors it has been made clear that if this section of valley were an AONB they would concede underground cabling. We regard the timing of the present proposal, with the refusal to delay consultation during the pandemic, aindicative of an attempt by National Grid to rush through these proposals before there has been a ruling on AONB status. If we are forced into a situation where the Inquiry takes place before the AONB determination has been made then the Inspector will have to consider our submission that new pylons will so greatly devalue the landscape as to ruin our chances or achieving a status for which all Parish, District and County Councils have put in so much work over many years.

.....

NIGEL AULTON

Chairman

8th June 2021

NATIONAL GRID

BRAMFORD TO TWINSTEAD REINFORCEMENT

CONSULTATION RESPONSE of the

ALPHAMSTONE AND LAMARSH PARISH COUNCIL

1. This is the response of the Alphamstone and Lamarsh Parish Council (ALPC). The Parish council comprises the two civil parishes which are most directly affected by an important issue: whether the proposed 400 kV extra line should be placed underground.

Description of the villages

2. Lamarsh is a village on the Stour Valley floor. It is about 2 miles from Bures railway station. It can be approached on foot by a river walk along the valley bottom, or by a highly scenic country lane with numerous hills, one of which provides a parking and picnic spot and one of the best views of the Stour Valley.
3. Central to the view is the Grade I Church of the Holy Innocents, Lamarsh, which dates back to 1135 and has one of only three round towers in Essex. The village is attractive. About half of its buildings are listed.
4. Alphamstone is a hill village, centred on its ancient church. It is set among a network of very attractive hills and valleys, more reminiscent of the Chilterns or Cotswolds than East Anglia.
5. Crucial to an understanding of the topography is the network of paths and viewpoints. From a point near Lamarsh Church two footpaths rise westwards towards Alphamstone and leads to other paths which offer different but dramatic views of the Stour Valley.
6. Alphamstone and Lamarsh have become important walking and cycling venues, centred as they are on the Stour Valley Path and served by Bures station. A circuit of our villages taking in lunch at the Lamarsh Lion or Henny Swan public houses has become extremely popular. At Coppins Farm, Alphamstone, an important tourist accommodation facility has been developed around former showman's vans and railway carriages. Our visitors come here for a very special landscape of beautiful trees and valleys, wild flowers and peace.
7. Two other locations of particular importance need to be mentioned. First, the Lamarsh Lion was saved as a community asset and reopened in 2018 with the efforts of several hundred mainly local subscribers. This pub faces down the valley northwards and its views of relatively unspoiled countryside are its great selling point. Indeed it has one of the best views of any public house in the Stour Valley.

8. Second, Daws Hall is an ancient listed house, painted by Constable, whose gardens are of national importance and often open to the public. Much of its land down to the river is leased to a charitable trust for the education of schoolchildren in ecology, birds, flowers, insects and country matters. In a non-Covid year this facility is visited by about 2,500 schoolchildren. The Trust has ambitious plans to develop a new schoolroom and visitor centre. Much of its land, once painted (unlike the house) by Gainsborough, is very high above the river, with views down to the valley floor from what might be termed 'Lamarsh Cliff'. Astonishingly, National Grid is now threatening an overground line right next to this magical venue.

The inadequacies of the consultation exercise

9. When this proposal was last out for consultation in 2013, it was possible for parish councillors to consult widely with villagers and for people to attend explanatory exhibitions in village halls. Since 2013, some have died or moved away. Many people have arrived in the villages from elsewhere. However, for the majority who knew of the proposal, one feature was clear. Although the existing 400kV line crossing the Bures to Sudbury C-road north of Daws Hall towards Henny Street would remain, we would lose the 125kV line of pylons and they would be replaced by a new but undergrounded 400kV line. The assurance our communities were given was clear. Many people are presently still under the impression that undergrounding is assured.
10. ALPC are extremely critical of the consultation process for three reasons:
 - (i) It has been launched at a time when Central Government are actively considering an application for an AONB extension to include the parishes of Alphamstone and Lamarsh. We understood that the blight on such an application another row of pylons would create was a telling reason why undergrounding was accepted by National Grid. Indeed, we are told that National Grid considered the imminent prospect of that extension as a persuasive reason for undergrounding. Yet now uncertainty is being cast on its commitment to undergrounding because the AONB extension is said not to be imminent. To the contrary, many years of work has gone into bringing this project forward, invoking tireless work by County and District Councils and many others. It is clear from a reading of the Project Development Options Report that National Grid considers AONB or non-AONB status as a relevant consideration. There is a justifiable belief that this consultation and project are being rushed through to avoid the financial ramifications that would arise from Alphamstone and Lamarsh being included in an extended AONB. We think a decision on AONB status should come first.
 - (ii) Our second complaint is that consultation has been launched *and concluded* in a period of Covid-19 lockdown. Many of our residents are older and retired. Some have no internet facilities. All Parish Council meetings have had to be by Zoom and were therefore not attended by the public (although invited). Parish

Councillors have not been able to visit villagers to explain the proposals, nor have they been able to organise public meetings. National Grid itself has not been able to organise any exhibitions. This is particularly important because the detailed maps are only visible online.

- (iii) We reserve our third and strongest criticism for the highly misleading paper “Consultation Response Form” delivered to homes in our villages. It is not merely inadequate in explaining the Section G Stour Valley proposals. It actively misleads the reader. We deal with this in separate paragraphs.

11. On the page marked Section G (Stour Valley), there is a diagrammatic representation of the proposed 400kV underground cable, located to the south of and adjacent to a line marked “*Removal of existing 132kV overhead line*”. So it appeared from this that the solid blue line of existing pylons north of Daws Hall towards Henny Street was to remain, but there would be a net gain: Lamarsh would lose the existing line of 132 kV pylons to the south of Daws Hall in favour of an underground 400 kV line instead, apparently to be dug somewhere between Daws Hall and Lamarsh Hall.

12. Nowhere in this paper document is there any suggestion that “*Our Proposals*” might include a second line of *overhead* cables and pylons. To the contrary, Question 20 reinforces the impression that undergrounding is a given. It asks: “*To what extent do you agree that our proposals in this location strike the right balance between the visual impact of overhead lines and the high cost of underground cables?*”

13. However, if one turns up the Project Development Options Document – in itself not easy to find because no link is printed – one finds this:

“6.2.5 Although recognised as a landscape of value and with links to famous artists, the Stour Valley (Section G) is not formally designated as an Area of Outstanding Natural Beauty and the review has identified this area as requiring further work to understand whether the additional cost of underground cables (£118m) in this location is justified. Therefore, the non-statutory consultation seeks views from stakeholders and consumers as to whether the previous decision to underground this section still provides value for money.”

14. Nowhere is it explained in the paper Consultation document that undergrounding is now an open question and that our communities have to prove that it still provides value for money. (One might have thought that the onus was on National Grid to prove a departure from their previous assurance). *The very matter on which National Grid say they want to consult is not included in the Consultation Document.* This in our view makes any decision inevitably ripe for judicial review and we do urge National Grid (i) to pause and extend their consultation and (ii) first inform the public properly about paragraph 6.2.5 quoted above.

A proper cost/benefit analysis

15. ALPC has no way of knowing the accuracy of the £118 million figure quoted. However, it is a one-off capital cost to be recovered from consumers over a period of time. A true analysis would factor in the damage to the local economy of this proposal and attribute to it a capital cost based upon the lifetime of the infrastructure. We are told that the average life of pylons is 60 years. The existing lines are already approaching 70 years. A bad decision now will cost this landscape and communities for many decades. That true cost ought to be weighed against the £118 million.
16. We turn to the features that in our view prove categorically that undergrounding is value for money.

National Grid's legal duty

17. National Grid have a duty under the Electricity Act 1989 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 to do what it reasonably can to '*mitigate any effect*' on those things. This is not limited to areas designated as National Parks or AONBs. The observations set out below all comprise matters to which National Grid must have regard in promoting new power lines through the Stour Valley and in particular deciding whether this is to be by way of an overground or underground line.

The intrinsic quality of the landscape

18. The C-road from Bures to Sudbury via Lamarsh and Henny is a famous scenic and recreational drive. It is also a training and recreational cycling route but quiet enough to be used by pedestrians to obtain access to a network of footpaths leading to high views of the Stour Valley.
19. The wooded hills and valleys on the western side of this road up to Alphamstone are a landscape of high intrinsic quality to be judged on its own merits and not with the blunt instrument of looking at a map to see whether it is or is not yet inside an AONB. It has many sunken lanes. The lanes are verged by that great rarity, Elm hedgerows. These lanes are so important that they have been designated as 'protected lanes' by Essex CC. This is a genuine Essex elm landscape, one of very few left in the county.
20. We remind National Grid that the original Holford Rules said "*Avoid altogether, if possible, the major areas of highest amenity value, for example designations including AONBs*". AONBs were examples. Such status is not a requirement.
21. Under this heading should also be included a special emphasis on the area's wildlife value. Apart from the rare geese bred at Daws Hall (referred to elsewhere), the parishes have bird populations of national importance. Perhaps we could also mention that the area

north of Lamarsh close to the existing pylons and proposed new cables is home to nesting skylarks (they nest in the ground) who are on the RSPB's RED list. This means that they are of the highest conservation priority and needing urgent action, are globally threatened and are in severe decline with at least a 50% decline in UK breeding population over the last 25 years. This area is also home to fieldfare and song thrush, both of whom are on the RSPB's RED list, and nightingales.

Strongly emerging tourist value

22. It is now many decades since it was realised that certain East Anglian 'honeypot' tourist destinations were suffering in consequence: Dedham, Flatford, Long Melford, Lavenham, Aldeburgh and Southwold. Partly because of promotion by the railway companies, we now see our section of the Stour Valley as placed firmly on the walkers' and cyclists' maps, relieving pressure on the over-visited sites and generating an important contribution to the local economy. Apart from Coppins Farm, there are other bed and breakfast establishments, all serviced by a strong local pub, the Lamarsh Lion.
23. The Lion cost nearly £500,000 to buy. Since then it has been completely refurbished and re-equipped, to a large extent by local volunteers. Much public and charitable money has been spent on it – for instance a grant of about £32,000 for a new drainage system, and a loan of £100,000 to help its establishment. A new line of 400 kV pylons striding across to Little Cornard would seriously compromise the views from this pub and its greatest asset, the landscape in which it sits.
24. The Lamarsh Lion trades on being the 'Painters' Pub'. The point can be made with force that Lamarsh is possibly the only village which is known to have been painted by both Constable and Gainsborough, and therefore worthy in its own right to be visited by people on an artistic pilgrimage to the region.
25. In our view an overground line of pylons would do untold harm to Daws Hall, a place whose Open Days (roses and snowdrops) have in recent years been publicised in National magazines and attracted visitors from well outside the region as well as locally. The owner also breeds endangered geese in a programme of international importance. These Open Days are an important part of the fundraising to enable Daws Hall to achieve its educational role with children. We cannot imagine a more sensitive place next to a proposed new pylon route.

Lamarsh Church

26. One of the tourist attractions is the Grade 1 listed church in Lamarsh. Its Norman tower, capped by a later spire, is a most unusual feature, much painted and photographed. We are concerned that National Grid have neither factored the setting of this church into their proposals nor consulted English Heritage about it.
27. From the "*Project Development Options Report*" it is clear that National Grid have consulted carefully with English Heritage about Hintlesham Hall (Grade I) and about

Sawyers Farm Little Cornard (Grade II*). Lamarsh Church has a designation of national importance and makes a telling contribution to the landscape, both from the viewpoint on the Bures/Lamarsh C-road, but also from the ridge footpaths to the west of the church. A row of pylons constructed to the south of the 132kV pylons (as they would have to be) would plainly wreck the setting of this Grade I building. Why has this building been completely overlooked in the Report?

28. The ALPC therefore reject the idea that the decision about undergrounding is purely a fiscal one. Just as Hintlesham Hall must dictate choices, so must Lamarsh Church.

Other points

29. We have above confined our main observations to the issue of undergrounding in Section G. However, we have considered the submission of the Henny, Middleton and Twinstead Parish Council (HMTPC), and gratefully repeat and adopt what they say about the wider issues.

30. We highlight our dissatisfaction at the limited nature of the consultation, omitting any discussion of :

- (i) The likelihood of the Twinstead –Bramford route being used for a third line to serve the Bramford to Tilbury connection;
- (ii) The proposed substation and why additional capacity cannot be achieved at the existing Braintree substation
- (iii) The use of a combined offshore/onshore grid.

Conclusion

31. In short we share the views of HMTPC that the consultation is constrained and artificial, and has been conducted at the wrong time and with misleading material. However, our short point is that the case for undergrounding is overwhelming.

NIGEL AULTON
Chairman
5th May 2021

Power Transmission in East Anglia

- A Strong Case for Underground Superconducting Cables -

Executive Summary

Critical for East Anglia is how, by 2028, truly vast quantities of “green” wind power will need to be exported from the region in a “green” way on various Grid routes, notably on Bramford to Twinstead.

In its recent Consultation on the Reinforcement of the present Bramford to Twinstead 400kV overhead pylon line, National Grid (NG) failed to consider the potential benefits of a 27km underground superconducting cable option that would be, (a) environmentally “green”, and (b) also “future proofed”.

Key Points

We note the following:

1. This is: *“[a] new, separable and high value onshore transmission asset [which] should be competitively tendered”*. (OFGEM quote).
2. It should be: *“[an] innovative project which aim[s] to help make the energy networks smarter, accelerate the development of a low carbon energy sector as well as deliver financial benefits”*. (OFGEM quote). One such benefit should be a reduction in needed support for the Grid from public funds.
3. Its cost is unknown. NG's statement (based on old cable technology) is: *“To use overhead lines throughout the route would cost £142m, compared to the cost of a fully undergrounded scheme, which would cost £694m”*. (NG Project Background Document, 2021). Using up-to-date trenching methods, a superconducting cable line could cost a lot less than this - but we don't actually know because competitive tenders have not been sought. Also, the yardstick should be £ per GW-km for all comparisons.

4. NG's Proposal fails to: “... *do what [it] 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*” (Electricity Act, 1989). A superconducting line would be much less physically and visually damaging to the countryside than either extra 400kV overhead lines or a similar capacity link using buried conventional cables. Effectively, it would be “invisible”.

Noting East Anglia's huge environmental and cultural sensitivities, we think where a 400kV overhead line needs to be doubled up, it should instead become a future-proofed route equipped with underground superconducting cable(s) as the preferred technology; that every link should go out to tender; and that NG should simply hire-in the capacity from the successful tenderer who would remain as owner/provider.

The recently-announced model for the UK railway network could apply to the Grid. OFGEM would become analogous to Great British Railways, and NG (as a natural monopoly) would concentrate on the efficient operation of the Grid as installed.

In parallel with these structural changes, NG should right now be participating proactively with one or several manufacturers of superconducting cables to evolve a product suitable for the 400kV UK Grid, noting that there is plenty of time for the introduction of this technology into the Grid by the required 2028 date if not before.

We also think that OFGEM in conjunction with NG should give a presentation to introduce these changes at COP26 in Glasgow.

-ooOoo-

Nigel and Helen Morgan

[REDACTED]

[REDACTED]

Feekins-Bate, Laura

From: Christine Hargan [REDACTED]
Sent: 07 June 2021 16:15
To: BramfordtoTwinstead
Cc: Feekins-Bate, Laura
Subject: Re: EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

Dear Sirs

In its position as representative of a rural community and valued landscape directly affected by the proposed development, the Parish Council wishes to begin by reiterating to the Planning Inspectorate its position in response to National Grid's non-statutory consultation in May: we believe that greater consideration should be given to offshore transmission to reduce the impact on the communities and environment of East Anglia and, if unavoidable, onshore development should be undergrounded to the maximum extent possible to mitigate ongoing and cumulative impact.

The Planning Inspectorate's notification of publication of the Scoping Report on 11 May, following so closely the end of the non-statutory consultation on 6 May, demonstrates that National Grid has not taken into account the responses of consultees, and contributes further evidence in support of our belief, expressed in the Parish Council's response, that NG is using the statutory timetable to drive through its DCO application without due regard to the opinions of affected communities. Specifically with reference to the Scoping Report, the Parish Council believes that the socio-economic and visual-amenity impact of the proposed development should be considered across the whole 10Km zone of theoretical visibility for the proposal, both by consulting all communities within the corridor, and by considering the broad impact on the tourist industry that is vitally important across East Anglia, and not just in designated AONBs.

The Parish Council is concerned that offshore transmission options were excluded from National Grid's Network Options Assessment, and requests that the Environment Impact Assessment should include full disclosure on the options considered, along with the reasons why offshore transmission is not considered a viable alternative for this project.

Similarly, many of the parishes along the proposed route, including Assington, have expressed a strong preference for the line to be undergrounded in its entirety, not least because the benefit of undergrounding through the Dedham Vale and Stour Valley, which we support, is diminished if other sections remain overhead and dominate important views from the AONB. The Parish Council requests that the EIA should include full and updated disclosure of the cost calculations used to justify the decisions, including evidence of consideration given to technologies which could be employed to make undergrounding more economical, and detail on the calculated savings from removing sealing-end compounds if full undergrounding were pursued. In addition, the EIA regulations require consideration of non-cost metrics, including environmental impact. This should be included.

The Parish Council is aware of the proposed Norwich to Tilbury reinforcement (ATNC/AENC), which also uses the Bramford-to-Twinstead corridor, with considerable potential for cumulative impact throughout the corridor. This full impact must be scoped-in to the EIA, and any potential cost-saving that could be achieved by undergrounding both lines together should be taken into account in the economic argument for the overhead line as opposed to undergrounding.

Considering the local factors specific to the village of Assington, it is vital that the socio-economic effect of the proposed line on every community that it passes through should be fully considered. Assington has a Village Plan, currently at referendum stage, which identifies areas of importance to the village, which the Parish Council believes should be scoped-in:

- The natural environment of the village, of which the majority falls inside Babergh's Special Landscape Area, to which the development of new overhead electrical infrastructure is specifically identified as a threat (§ 8.9)

- Protected views, which are deemed fundamental to Assington's quality and character, and which must be protected from development that would be detrimental to them (policy ASSN13). The Parish Council is happy to assist with the identification of them if required
- The role of tourism in Assington's economy has developed significantly since National Grid's previous study, both in terms of businesses whose success is partly dependent on tourism (including the village pub and Assington Barn) and from holiday lets and camping and caravan sites, of which there are now multiple in the village. The impact on them must be considered, both from the construction and operation phases of the proposed development. The Parish Council can assist with the process of identifying affected businesses if required
- The parish also contains the Arger Fen SSSI, from which the proposed development will be clearly visible

In summary, Assington Parish Council requests that the following should be scoped-in to the EIA:

1. The full extent of community feedback received during the non-statutory consultation, and NG's response to the concerns raised
2. Detailed disclosure of the economic and non-economic basis for the decision not to pursue offshore transmission or full undergrounding instead of the proposed routing
3. Consideration of the cumulative impact of Bramford to Twinstead in conjunction with other proposed developments, including ATNC/AENC
4. Evaluation of the impact on local tourism in its broadest sense, including through the natural environment and important views, both in Assington and in other areas where the overhead elements of the line are visible. In its position as representative of a rural community and valued landscape directly affected by the proposed development, the Parish Council wishes to begin by reiterating to the Planning Inspectorate its position in response to National Grid's non-statutory consultation in May: we believe that greater consideration should be given to offshore transmission to reduce the impact on the communities and environment of East Anglia and, if unavoidable, onshore development should be undergrounded to the maximum extent possible to mitigate ongoing and cumulative impact.

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- The natural environment of the village, of which the majority falls inside Babergh's Special Landscape Area, to which the development of new overhead electrical infrastructure is specifically identified as a threat (§ 8.9)
- Protected views, which are deemed fundamental to Assington's quality and character, and which must be protected from development that would be detrimental to them (policy ASSN13). The Parish Council is happy to assist with the identification of them if required
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- The parish also contains the Arger Fen SSSI, from which the proposed development will be clearly visible

In summary, Assington Parish Council requests that the following should be scoped-in to the EIA:

5. The full extent of community feedback received during the non-statutory consultation, and NG's response to the concerns raised
6. Detailed disclosure of the economic and non-economic basis for the decision not to pursue offshore transmission or full undergrounding instead of the proposed routing
7. Consideration of the cumulative impact of Bramford to Twinstead in conjunction with other proposed developments, including ATNC/AENC
8. Evaluation of the impact on local tourism in its broadest sense, including through the natural environment and important views, both in Assington and in other areas where the overhead elements of the line are visible

Kind Regards

Christine Hargan

Assington Parish Council

On Tuesday, May 11, 2021, 05:30:24 PM GMT+1, BramfordtoTwinstead <bramfordtotwinstead@planninginspectorate.gov.uk> wrote:

Dear Sir/ Madam

Please see attached correspondence on the proposed Bramford to Twinstead overhead line project.

Please note the deadline for consultation responses is **08 June 2021**, and is a statutory requirement that cannot be extended.

Kind regards

Laura

Laura Feekins-Bate

EIA Advisor

Environmental Services

Direct line: [REDACTED]

Mobile: [REDACTED]

Email: [REDACTED]@planninginspectorate.gov.uk

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)

Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: [@PINSgov](https://twitter.com/PINSgov)

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DPC:76616c646f72





Date: June 2021

The Planning Inspectorate by email

INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT)
REGULATIONS, 2017: BRAMFORD TO TWINSTEAD SCOPING REPORT

This document sets out a joint response on behalf of Babergh and Mid Suffolk District Councils (BMSDC) to the Scoping Report (Issue number: BT-JAC-020631-550-0002-EIA, dated May 2021) produced by National Grid in respect of the proposed Bramford to Twinstead NSIP.

The comments have been set out using the headings contained within the report. In commenting upon the content of the Scoping Report BMSDC recognise the early stage of the project and the limitations of the report in respect of the indicative alignment. These comments are therefore not exhaustive and BMSDC reserve the right to provide additional comments later in the engagement process.

It should also be noted any comments made here do not infer agreement with or acceptance of any or all of the supporting documents that National Grid refers to in the Scoping Report.

Introduction

The overview of and need case for the proposal are considered sufficient. However, it is noted that the Indicative Alignment has the potential to change and that the Scoping Report has been prepared based on a Scoping Boundary. BMSDC therefore question whether the request for a Scoping Opinion is premature and should be delayed until such time as the precise parameters of the project are fully known.

Transboundary effects

Whilst it is acknowledged that the physical elements of the proposed development are not likely to have any transboundary effects, the need for the development includes the existing and expected increase in energy export to other countries via interconnectors and therefore BMSDC query whether the development would have indirect effects on other countries and, if so, the ES should include information to demonstrate those effects.

Main Alternatives Considered



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The need for the project is considered to be sufficiently demonstrated however, BMSDC consider that this section should include details and consideration of other relevant energy distribution projects likely to come forward in the near future such as ATNC, AENC and SEAL.

The ES should include a comprehensive assessment of the alternatives considered and BMSDC consider that it should include certainty on the alignment of the line in order to enable adequate assessment of the effects of the development.

Project descriptions

The description of the proposal is generally acceptable and the commitments to a CoCP, CTMP and waste management are welcomed.

The preference of Babergh communities is for the entire route through the district to be undergrounded. BMSDC acknowledge there are both benefits and disbenefits of undergrounding in respect of many aspects including, but not limited to, landscape and visual impact, biodiversity, geology, heritage, socio-economics and health. BMSDC expect to see full evidence to demonstrate the decision on the extent and location of undergrounding.

EIA approach and method

BMSDC have concerns that the recent proliferation of large-scale projects within the region and the expectation of further delivery of sites, including those identified in the emerging BMSDC Joint Local Plan, have the potential to have significant effects when considered together and cumulatively with this proposal. Areas of concern include, but are not limited to, the timing of construction, impacts on highway networks, impacts on commercial operations, skills, and tourism.

Given the character of the districts BMSDC consider that projects beyond the 10km Zone of Influence accounted for in the scoping report may be relevant in terms of the appropriate assessment of cumulative effects and therefore suggest that all relevant large-scale projects within 50km be considered.

Landscape and Visual Assessment

Please refer to comments from the BMSDC landscape adviser (Essex Place Services) at appendix 1.

BMSDC also recognise the comments of the Dedham Vale and Stour Valley AONB team at appendix 2.

Biodiversity

Please refer to comments from the BMSDC ecology adviser (Essex Place Services).

Historic Environment

Please refer to comments from the BMSDC heritage adviser (Essex Place Services) at appendix 3.

BMSDC also recognise the comments submitted by Suffolk County Council regarding archaeology.



Water Environment

BMSDC refer to any comments submitted by the Environment Agency, Suffolk County Council as Lead Local Flood Authority, and the Internal Drainage Board on this topic.

Geology and Hydrogeology

No comments.

Agriculture and Soils

Information should be provided regarding any sterilisation impact of the proposed development on the agricultural and horticulture industry, particularly having regard to the quality of agricultural land and the significance of fruit farming to the local economy in Babergh district.

Traffic and Transport

The area is characterised by minor roads and lanes that are not suitable for large volumes of construction traffic. The ES should include adequate information to enable assessment of the effects of the development on the local area in respect of traffic and transport issues.

BMSDC defer to the advice of the relevant local highway authorities.

Air Quality

The scoping documents has scoped out the majority of the construction and all of the operational impacts from the Environmental Statement.

During the construction phase there is a potential for construction traffic to cause significant impacts on Air Quality due to the movement of vehicles to and from site that may add to the cumulative impact in areas where Nox/No2 is 75%+ of the Air Quality Objective levels. This includes the Cross Street AQMA. This impact has been scoped into the Environmental Statement.

Measures to manage Dust and other potential impacts on air quality that have been scoped out of the ES will be covered in the CoCP, CTMP and CEMP.

BMSDC are satisfied that the scoping has been carried out using the appropriate guidance and are satisfied that the proposals within section 13 of the scoping report are satisfactory.

Noise & Vibration

Construction Noise, Construction Traffic Noise and Construction Vibration are scoped into the ES, while all other identified noise and vibration sources are scoped out.

Noise and vibration mitigation measures will be included within the CoCP, CEMO and CTMP. In addition an Environmental Clerk of Works will be appointed for the project. This is suitable method of mitigating noise from the construction phase.

BMSDC are satisfied that the guidance, assessment methodologies and mitigation proposals in Section 14 of the scoping report are satisfactory.



Socio-Economic, recreation and tourism

Visitor numbers to the Babergh and Mid Suffolk areas have increased. Please refer to:

<https://mediafiles.thedms.co.uk/Publication/ee-stp/cms/pdf/Economic%20Impact%20of%20Tourism%20-%20%20Suffolk%20Report%202019.pdf>.

Consideration should be given to the impact of the Covid-19 pandemic on domestic tourism as we would expect that our occupancy levels are consistently above the 60% national average. Please refer to: <https://www.eastsuffolk.gov.uk/assets/Planning/Suffolk-Coastal-Local-Plan/Local-Plan-Review/Evidence-base/Retail-Leisure-Study-Volume-1-Final-Version-Issued-06-12-17.pdf>

Other major infrastructure and development construction and delivery (e.g., Sizewell and Valley Ridge) should be assessed for other potential impacts on accommodation demands.

Consideration should be given to opportunities to identify those construction phase works that may be retained rather than reinstated where they provide a benefit to the public or a socio-economic benefit to the landowner without unacceptable environmental effects.

Health and wellbeing

We have previously referred to the ICNIRP Guidelines on Limiting Exposure to Electromagnetic Fields, GUIDELINES FOR LIMITING EXPOSURE TO TIME-VARYING ELECTRIC AND MAGNETIC FIELDS (1HZ – 100 KHZ) and ICNIRP recommendations on Power Lines and Low Frequency fields.

It is likely that communities and / or councillors may raise concerns relating to EMF impacts and links to childhood leukaemia with regards to powerlines which is an area of ongoing research.

A site-specific risk assessment should be carried out and include calculations of the maximum possible levels of non-ionizing radiation at the nearest residential properties at various floor levels. The values obtained shall then be compared to the current guidelines of the International Commission on Non-Ionizing Radiation Protection (ICNIRP) limits for exposure to electromagnetic radiation. The levels quoted shall be when all equipment, both existing and proposed, are operating at maximum power. A valid ICNIRP certificate would be expected to be submitted with the consent application.

APPENDICIES

1. EPS ecology and landscape comments
2. AONB team comments
3. EPS heritage comments

Kind regards,



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Assistant Director Planning and Building Control
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W: www.dedhamvalestourvalley.org/

Dedham Vale AONB & Stour Valley Team response: Bramford to Twinstead Scoping Report Consultation (Issue number: BT-JAC-020631-550-0002-EIA) Views endorsed by AONB Chair.

Thank you for consulting the Dedham Vale Area of Outstanding Natural Beauty (AONB) and Stour Valley team on the Environment Impact Assessment (EIA) Scoping Report for the reinforcement of the transmission network between Bramford to Twinstead.

The AONB team response has been prepared jointly by Beverley McClean (AONB Planning Officer) with the support of Simon Amstutz (AONB Manager) and endorsed by the AONB Chair, Cllr Nigel Chapman.

The response focuses mainly on sections 6 (Landscape), 7 (Biodiversity), 8 (Historic Environment), 15 (Socio economics, Recreation and Tourism) and 19 Environmental Management and Mitigation of the Scoping Consultation report. Sections are reviewed below.

This response is summarised as:

- The Scoping report largely describes the project, its access arrangements and associated developments accurately.
- That the scope of the assessment in relation to the historic environment, impacts on local economy and wildlife could be widened, particularly in relation to the Stour Valley project area..
- The proposed methodologies of assessing impacts are broadly acceptable but some further engagement with the AONB would be welcome.
- The evidence base should be widened to include elements suggested in the AONB Partnership's response to the non-statutory consultation.
- That the AONB Partnership, despite not being a statutory consultee, should be further engaged in any future works relating to assess the impacts and development of proposals to minimisation the impacts on the AONB and Stour Valley project area.

The Proposal

The AONB team generally consider the description of the project, as described in the Scoping Report as accurate. It is the AONB teams understanding that the project consists of the elements listed below.

The Development Consent proposal will involve the reinforcement of the network with a new 400 kilovolt (kV) electricity transmission line over a distance of 27km (16.7 miles), the majority of which will follow the general alignment of the existing overhead line network.

The reinforcement will be a combination of overhead line (conductors) and underground cable. It is proposed that approximately 25km of existing overhead line could be removed (25km of existing 132kV overhead line between Burstall Bridge and Twinstead Tee, and 1.5km of the existing Bramford-Braintree-Rayleigh 400kV overhead line to the south of Twinstead). To facilitate the overhead line removal a new grid supply point (GSP) substation is proposed at Butler's Wood, south of Sudbury, in Essex.

The Indicative Alignment runs roughly parallel to the existing Bramford to Pelham 400kV overhead line and follows the existing 132kV line for the majority of the route.

Approximately 25km of the existing 132kV overhead line would be removed as part of the project, including approximately 3km within the Dedham Vale AONB and a further 5.4km within the Stour Valley.

The project comprises the following principal components:

Construction and operation of a 400kV electricity transmission reinforcement between Bramford Substation and Twinstead Tee comprising:

- Installation of c.19km of 400kV overhead line.
- Installation of c.56 new steel lattice pylons (c.50m tall); and
- Installation of c.8km of 400kV underground cables.
- The realignment of the existing 400kV overhead line to the north and west of Hintlesham Woods, to facilitate the use of the existing swathe through the woods by the new 400kV line.
- Construction and operation of four CSE compounds (including permanent access roads), namely CSE Compound Dedham Vale East, CSE Compound Dedham Vale West, CSE Compound Stour Valley East and CSE Compound Stour Valley West.
- The removal of approximately 25km of the existing 132kV overhead line and supporting pylons between Burstall Bridge and Twinstead Tee.
- The removal of approximately 1.5km of the existing 400kV overhead line and supporting pylons between Twinstead Tee and the proposed CSE compound at Stour Valley West.
- Construction and operation of a new 400/132kV GSP substation (including
- Permanent access road) at Butler's Wood, to the west of Twinstead, and associated works (including new underground cables) to tie this into the existing 400kV and 132kV networks.

- Temporary overhead line diversion from 4YLA005 – 4YLA003 to allow the building of the proposed CSE compound at Stour Valley West.
- Temporary land to facilitate construction, which would include construction compounds, haul routes and laydown areas.
- Temporary minor amendments to the existing highway network to facilitate construction vehicles.
- Environmental mitigation and enhancement, including tree planting.

The AONB team acknowledge that the current alignment under consideration is indicative only at this stage and may be subject to change.

Geographical Scope

Paragraph 1.3.4 states

‘The Scoping Boundary includes parts of the Dedham Vale Area of Outstanding Natural Beauty (AONB), which is designated as an exceptional example of a lowland river valley. The landscape comprises a broadly flat plateau dissected by several river valleys. These give rise to lower-lying valley areas surrounded by areas of higher ground. The river valleys run in a broadly northwest–southeast direction and include the Rivers Brett, Box and Stour.’

Paragraph 1.3.4 of the Scoping Report makes no reference to the Stour Valley project area that abuts the Dedham Vale AONB. The Stour Valley project area extends upstream of the AONB, following the River Stour, forming the boundary between Essex and Suffolk. The Stour Valley project area is a well-established recognisable area and has been subject to local authority funding for over 30 years and subject to a management plan agreed by a wide range of partners from around 2001.

The Stour Valley project area covers 302 square kilometres (around 181 square miles) from the AONB boundary at Wormingford, it extends westwards towards Steeple Bumpstead and Haverhill and northwards towards the Great Bradley on the Cambridgeshire border. It extends 3-4 km kilometres either side of the River Stour with extensions along the Bumpstead Brook, Belchamp Brook and River Glem.

The Stour Valley project area does not benefit from the same level of statutory protection as the Dedham Vale AONB, however as recognised in the Dedham Vale AONB and Stour Valley Management Plan 2016-21 (and soon to be published 2021-26 version). Parts of it exhibit many of the similar characteristics as the neighbouring nationally designated landscape.

The AONB Partnership, a grouping of around 25 organisations with the purpose to act as a champion for the area, has had an aspiration to include part of the Stour Valley project area within an extension to the Dedham Vale AONB since 2009. This is discussed further under Section 6 of this response.

The Stour Valley project area is also considered to be a Valued Landscape. Paragraph 170(a) of the National Planning Policy Framework states that planning policies and decisions should contribute to and enhance the natural and local

environment by: 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).

The AONB Partnership commissioned a Valued Landscape Assessment Report for the Stour Valley project area (Farmer 2019) to provide evidence about the special qualities that make it a Valued Landscape.

The Scoping Boundary includes land within the potential AONB extension area and the Stour Valley project area, both of which could be directly or indirectly impacted by the reinforcement of the network between Bramford to Twinstead.

Section 1.3 of the Scoping Report should therefore be amended to reference the Stour Valley project area for accuracy.

2. Regulatory and Planning Policy Context

The AONB team broadly concurs with the Legislation, Policy and Guidance included in section 2.2 of the Scoping Report (paragraphs 2.2.1 - 2.5 2.5.9) but makes the following points.

2.4 Countryside and Rights of Way Act (2000)

The AONB team welcome the reference to the Countryside and Rights of Way Act (2000) in paragraph 2.4 of the Scoping Report.

Section 85 of the Countryside and Rights of Way Act (2000) places an explicit duty on relevant authorities to have regard to the purpose of conserving and enhancing the natural beauty of an AONB when exercising or performing any function in relation to or so as to affect an AONB. The AONB team considers that this includes National Grid as a statutory undertaker.

This Section 85 Duty of Regard applies to all functions, not just those relating to planning and is applicable whether a function is statutory or permissive. It is applicable to land outside as well as within an AONB, where an activity may have an impact on an AONB. The requirement is to 'conserve and enhance' and both aspects are required to be addressed.

In relation to planning, the Duty of Regard applies in respect of both plan making and decision taking. It is good practice to consider the Duty of Regard at several points in the decision-making process.

National Grid should therefore provide written evidence in the Environmental Statement and in any other relevant documents to demonstrate how they have met or will meet their Section 85 obligations.

2.5 National Planning Policy Framework

The National Planning Policy Framework is referenced in paragraph 2.5 9 but there is no reference to the Planning Practice Guidance in section 2 of the Scoping Report.

It is acknowledged that the application for the Bramford to Twinstead project will be determined by the Planning Inspectorate, under the Nationally Significant Infrastructure Projects process, the AONB team consider that the Planning Practice Guidance, should be a material consideration in the Development Consent Order process, and what it has to say about development within the setting of nationally designated landscape.

The national Planning Practice Guidance published by Government provides amplification on the National Planning Policy Framework and explains key issues in implementing the policy Framework. The guidance regarding AONBs was updated in 2019. It recognises that where poorly located or designed, development within the settings of AONBs can do significant harm.

The Planning Practice Guidance (Paragraph: 042 Reference ID: 8-042-20190721) states:

‘Land within the setting of these areas often makes an important contribution to maintaining their natural beauty, and where poorly located or designed development can do significant harm. This is especially the case where long views from or to the designated landscape are identified as important, or where the landscape character of land within and adjoining the designated area is complementary. Development within the settings of these areas will therefore need sensitive handling that takes these potential impacts into account.’

National Grid must consider the full impacts on land within the setting to the AONB when developing proposals for the reinforcement of the power network between Bramford to Twinstead.

Dedham Vale AONB and Stour Valley Management Plan 2016-21

The Scoping Report makes no reference to the Dedham Vale AONB and Stour Valley Management Plan 2016-21, or any subsequent revisions as appropriate in section 2 of the Scoping Report

Section 89 of the Countryside & Rights of Way Act 2000 requires a Management Plan to be produced for each AONB. AONB Management Plans are statutory documents and should be given significant weight in decision making.

The Statement of Significance relating to the AONB in Dedham Vale AONB and Stour Valley Management Plan 2016-21 states:

‘the area retains a rural charm and tranquillity and is largely free of infrastructure associated with modern life’

With regards the Stour Valley project area, the Statement of Significance States

‘Much of the Stour Valley project area shares similar characteristics to the Dedham Vale AONB, particularly the area nearest the existing AONB’

Objective 3.2.6 of the Dedham Vale AONB and Stour Valley Management Plan 2016-2021 seeks to ensure that:

'Infrastructure is fit for purpose and does not detract from the qualities of the area including its relative tranquillity.

The AONB team consider that National Grid should give great weight to all the relevant objectives in the Dedham Vale AONB and Stour Valley Management Plan 2016-21 (and subsequent plans) when developing proposals for the reinforcement of the power network between Bramford to Twinstead.

The AONB team considers that if the above considerations are met then the applicant has considered the required regulatory and planning policy context in respect of the AONB.

Section 6. Landscape and Visual Impact (LVIA)

The AONB team consider that the LVIA should follow good practice as set out in GLVIA version 3.

In addition to assessing effects on the landscape (the landscape effects); and effects on views and visual amenity as experienced by people (the visual effects), the LVIA must also consider impacts on natural beauty, especially where the proposed route passes through the AONB.

Natural Beauty encompasses the following factors - landscape quality, scenic quality, relative wildness relative tranquillity, natural heritage features and cultural Heritage. The Dedham Vale's defined natural beauty and special qualities were assessed by a report commissioned by the AONB Partnership in 2016¹. An assessment of the impact on the proposals on these indicators must be completed as part of the LVIA /EIA.

As poorly located or designed development within the settings of AONBs can do significant harm (PPG 2019), the AONB team consider that National Grid should consider the full impacts on land within the setting to the AONB when developing proposals for the application.

The AONB team has produced a Position Statement on Development within the Setting of the Dedham Vale AONB. It does not define what constitutes setting in terms of physical distance from the AONB boundary.

In this instance the AONB team consider that the proposed 5km and 10km selected respectively for the Study Area and Zone of Theoretical Visibility mapping for the LVIA are appropriate to enable impacts within the AONB and within its setting and within the Stour Valley project area to be properly considered.

Paragraph 6.4.12 references the proposal to extend the Dedham Vale AONB.

¹ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Natural-Beauty-and-Special-Qualities-and-Perceived-and-Anticipated-Risks-Final-Report-July-2016-1.pdf>

The AONB Partnership has a long-held aspiration, communicated to Natural England as body that can recommend a boundary review to the Secretary of State in 2009 to include part of the Stour Valley project area within an extension to the Dedham Vale AONB.

The AONB Partnership commissioned a number of studies to support the extension to the AONB. This included the Special Qualities of the Dedham Vale AONB Evaluation of area between Bures and Sudbury Area² (Alison Farmer Associates, 2016). This study identified an area that in the opinion of the consultant met the criteria for designation as AONB. The organisation with responsibility to develop AONB boundary reviews for consideration by the Secretary of State, Natural England, confirmed in March 2021 that the proposal for boundary variation was registered.

Lord Gardiner of Kimble, Parliamentary Under Secretary of State with responsibility for AONBs wrote to the President of the Dedham Vale Society (4 May 2021) and noted:

...proposals for the extension of the Dedham Vale AONB have not been formally assessed and that an extension has not, therefore, been ruled out for the future. I have also been assured that Natural England will communicate further with local proposers of National Park and AONB designations or variations in due course.

For these reasons, the AONB team urge, National Grid to take a precautionary approach and seek to meet corporate and social responsibility by treating the potential extension area as an AONB. As such, the EIA should assess the impacts of proposals on the natural beauty within the proposed AONB extension area.

The AONB team consider that the factors outlined above need to be considered in the scope of any assessment relating to the Bramford to Twinstead project.

Overview and Environment Baseline

The AONB team concur with the landscape designated information, landscape character descriptions and the information on Existing Environment and Views for the each of the sections defined within the project Section AB: Hintlesham, Section C: Brett Valley, D Polstead, E: Dedham Vale Area of Outstanding Natural Beauty (AONB) F: Leavenheath/Assington and G: Stour Valley.

The AONB team welcome some of the embedded measures set out in paragraph in 6.5.1 of the Scoping Report particularly proposals to underground the overhead cables in both the Dedham Vale AONB and the part of the Stour Valley project area that has been proposed as an extension to the AONB.

² <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Special-Qualities-of-the-Dedham-Vale-AONB-Evaluation-of-Area-Between-Bures-and-Sudbury-Final-Report-July-2016.pdf>

As outlined in the response to the non-statutory consultation (May 2021), the Dedham Vale AONB and Stour Valley Partnership understand current proposals include the following:

Polstead Heath: a new overhead line alignment to the south of the existing line (referred to as sec D)

- Dedham Vale: a new underground cable section from Heath Road, Polstead Heath to Leavenheath (approximately 4km) (referred to as section E).
- Leavenheath and Assington: a new overhead line alignment to the south of the existing line (referred to as section F)
- Stour Valley an underground cable section from west of Dorking Tye to the Bramford-Braintree-Rayleigh overhead line south of Twinstead Tee (approximately 4km) Referred to as section G)

The AONB team supports the proposal to underground the new 400kV line where it crosses or negatively impacts the nationally designated landscape as overhead lines do not contribute to the statutory purpose of AONBs. The AONB team recognise that hidden archaeology as a defined feature of the AONB, namely part of its cultural heritage. Any proposals to underground transmission lines needs minimise any adverse impacts by selecting a route and method to minimise those negative impacts.

As undergrounding in the AONB and Stour Valley project area was already considered as appropriate before the project was paused, the AONB team does not consider there has been any material change to alter that decision, indeed further evidence has emerged for part of the Stour Valley project area meeting the criteria for AONB status.

The AONB team welcomes the ambition to minimise impacts from the transition infrastructure on the defined qualities of the AONB and Stour Valley project area as per the Valued Landscape Assessment Stour Valley project area³ (Farmer, March 2020)

Transitions between underground cable and overhead lines in the setting of the AONB should not negatively impact on the purpose of the AONB.

The AONB team considers that the EIA should include an assessment of the overhead line between Leavenheath and Assington (section F) to determine if the undergrounding of this section would benefit the AONB through lessening visual impacts of lines viewed from the AONB and potential impacts of the Cable Sealing End Compounds.

The team also welcome that further measures will be embedded into the design of the scheme as the proposals for access roads, construction areas and compounds, new above ground infrastructure e.g. pylons, the proposed CSE (4) compounds and GSP substation are progressed.

³ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Final-Report-Stour-Valley-Project-Area-Valued-Landscapes-Assessment.pdf>

To assist this please find a link to the Selection and Use of Colour in Development for the Dedham Vale AONB (Waygood, 2019)⁴ which will be useful when materials and colour finishes are being decided for equipment, security fencing etc.

The AONB team consider that with the addition of points outlined above, and the evidence base included in the AONB Partnership's response to the non statutory consultation in May 2021⁵ the proposed baseline environmental considerations are acceptable.

Landscape-Related Designations

Paragraph 6.5.4 lists some key commitments to good practice in relation to the LVIA.

GG20 states 'Construction lighting will be of the lowest luminosity necessary to safely perform each task. It will be designed, positioned and directed to reduce the intrusion into adjacent properties, protected species and habitats.

The Scoping Report concludes (paragraphs 6.6.8 & 6.6.14) that lighting will be scoped out on the Environmental Statement. There is no anticipation of significant effects from lighting on designated landscapes or Landscape Character at night during the construction or operational phases of the project. This is because good practice measures have been embedded into the scheme design to manage light spill and because operational lighting required at the proposed GSP substation and CSE compounds will only be switched on when needed.

There is an aspiration to secure Dark Sky status for the Dedham Vale AONB. Construction and operational lighting must also be designed, positioned and directed to reduce light spillage negatively impacting the nationally designated landscape.

The proposal to scope in an assessment of both construction and operation landscape effects on the Dedham Vale AONB and its setting (paragraph 6.6.3) is considered appropriate.

Paragraph 6.6.5 proposes assessing the construction and operation landscape effects on the Stour Valley Special Landscape Area, Brett Valley Special Landscape Area, and Gipping Valley Special Landscape Area.

Babergh and Braintree Local Planning Authorities are moving away from Special Landscape Area designations and are relying more on Landscape Character Assessments as evidence. Any assessment of landscape effects on the Special Landscape Areas should draw on evidence from the relevant Landscape Character Assessments that cover each of the Special Landscape Areas.

Paragraph 6.6.4 proposes that the landscape and visual impacts on the Stour Valley project area will be scoped in and assessed under landscape character in the ES.

⁴ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2020/12/Dedham-Vale-Use-of-Colour-Guidance.pdf>

⁵ [AONB-Partnership-Response-Bramford-Twinstead-Non-Statutory-Consultation-May-2021.pdf \(dedhamvalestourvalley.org\)](#)

While it is acknowledged that the Stour Valley project area has no statutory protection, parts of it are considered to be a Valued Landscape and the Dedham Vale AONB and Stour Valley management plan 2021-26. The AONB team recommends that a precautionary approach is taken regards the assessment of the Stour Valley project area within the Scoping Boundary to ensure compliance with paragraph 170(a) of the NPPF.

The Valued Landscape Assessment Report for the Stour Valley project area is a high-level assessment. The study however offers a suitable methodology and the AONB recommend that this is used as a basis for completing a finer grain Valued Landscape Assessment of the project area that fall within the Scoping Boundary.

Table 6.5 summarises the Proposed Scope of the LVIA Assessment. The AONB team broadly concur with the issues identified to be scoped in and out of the Environmental Assessment.

Landscape Character

Paragraph 6.6.9 concludes that the construction and operation of the different elements of the project i.e. proposed 400kV overhead line, underground cables, CSE compounds, and GSP substation have the potential to impact on landscape character along the proposed alignment route.

The assessment of impacts on landscape character during the construction and operation is therefore scoped into the Environmental Statement, which is considered appropriate.

Views

The conclusions in paragraphs 6.6.14- 6.6.17 to scope out visual effects at night, impacts on views for all receptors outside the ZTV and visual effects on private views is considered appropriate.

Paragraph 6.6.18 concluded that the project has the potential to impact on the visual amenity of people living and moving around the area (communities).

One of the special qualities of the AONB is 'the surprisingly long views from higher ground along the valley in an associated with large skies'

Proposals to scope in the construction and operation impacts on views from the community and from recreational receptors is considered appropriate. The proposed approach will need to ensure that impacts on the important long views referenced above are appropriately assessed.

6.7 Proposed Assessment Methodology

Site-Based Assessment Viewpoints

With regards to the selection of viewpoints (paragraphs 6.7.12- 6.7 -19), the AONB team would like the opportunity to review and comment on viewpoints being

considered for use within the LVIA. This would enable the AONB team to ensure it considered the method acceptable.

Wireframes and Photomontages (paragraphs 6.7.20- 6.7 21)

The AONB team fully supports the proposal to include Wireframes and Photomontages in the LVIA. The team request that visualisations are also produced of transition infrastructure and towers to improve understanding around visual impacts. While lighting has been scoped out of the EIA, it would be helpful if a couple of night time images could be included just to evidence that light pollution from the development will not be significant or harmful to the AONB and Stour Valley.

Sections 7 & 8 Biodiversity & Historic Environment

8.2 Regulatory and Planning Policy Context

Para 8.2.1

Paragraphs 5.8.12 and 5.8.14 from Overarching National Policy Statement EN-1 have been considered. We consider that the following are also relevant and should be taken into account:

- Para. 5.8.11: In considering applications, the IPC should seek to identify and assess the particular significance of any heritage asset that may be affected by the proposed development, including by development affecting the setting of a heritage asset.
- Para. 5.8.13: The IPC should take into account the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution of their settings and the positive contribution they can make to sustainable communities and economic vitality. The IPC should take into account the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials and use.
- Para. 5.8.15: Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss.
- Para. 5.8.18: When considering applications for development affecting the setting of a designated heritage asset, the IPC should treat favourably applications that preserve those elements of the setting that make a positive contribution to, or better reveal the significance of, the asset. When considering applications that do not do this, the IPC should weigh any negative effects against the wider benefits of the application. The greater the negative impact on the significance of the designated heritage asset, the greater the benefits that will be needed to justify approval.

NPS EN-5 *Electricity Networks Infrastructure* also makes additional specific references to heritage assets and archaeology, including para 2.2.6 on factors influencing site/route selection by applicants for electricity networks NSIPs:

- Para. 2.2.6: As well as having duties under section 9 of the Electricity Act 1989, (in relation to developing and maintaining an economical and efficient network), developers will be influenced by 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.” Depending on the location of the proposed development, statutory duties under section 85 of the Countryside and Rights of Way Act 2000 and section 11A of the National Parks and Access to the Countryside Act 1949 may be relevant.

8.4 Existing Baselines

Data Sources

Para 8.4.1 The revised Design Manual for Roads and Bridges (2020) [8c51c51b-579b-405b-b583-9b584e996c80 \(standardsforhighways.co.uk\)](https://standardsforhighways.co.uk/8c51c51b-579b-405b-b583-9b584e996c80) states under *Baseline scenario*:

3.9 Where desk-based studies suggest that available information is inadequate for the purpose of the assessment, field surveys shall be undertaken to enhance the data CIFA Standards [Ref 1.], CIFA Field evaluation [Ref 3.] and CIFA Geophysics [Ref 4.].

3.9.1 In addition to national registers and local cultural heritage records, historical maps and aerial photographs, relevant books, journals, previous reports, LiDAR and geotechnical data may be consulted.

The NG Scoping Opinion Existing Baseline Data Sources listed at 8.4.1 call for the Suffolk HER and statutory list of listed buildings to be consulted but many of the other documents referred to are only available for Essex (Aerial Photographic Assessment and protected lanes). Babergh District Council does not have a district wide local list or adopted criteria, and therefore a more comprehensive set of documents to include Neighbourhood Plans should be included to ensure that the Suffolk section is not disadvantaged when preparing the baseline data.

The Dedham Vale and Stour Valley AONB Management Plan and the Alison Farmer Associates Valued Landscape Assessment Stour Valley Project Area (March 2020) should also be included as sources of information on cultural heritage.

8.6 Likely significant effects

Effects on the Setting of Historic Buildings during construction and operation

To be consistent with National Planning Policy Framework terminology (NPPF paras 193 – 196) an assessment of any ‘harm’ to the significance of the heritage asset should be recorded as either ‘substantial’ or ‘less than substantial’.

The AONB team does not wish to comment specifically on the detail of the proposed scope of the Ecological Impact Assessment for the project or the detailed methodology for assessing impacts on the Historic Environment.

The Dedham Vale AONB Management Plan 2016-2021 lists the following habitats and features as contributing to the special qualities of the Dedham Vale AONB

- Valley bottom grazing marshes with associated drainage ditches and wildlife
- Naturally functioning River Stour with associated tributaries, meres and historic river management features
- Semi natural ancient woodlands on valley sides with associated wildlife
- Traditional field boundaries intact and well managed

Areas of Outstanding Natural Beauty should be places of rich, diverse and abundant wildlife. Nature recovery is central to the conservation and enhancement of natural beauty.

The AONB team is fully committed to significantly increasing the scale and pace of nature conservation activity within the designated landscape.

In 2019, the 34 English Areas of Outstanding Natural Beauty made a collective Declaration on Nature in Colchester in 2019, known as the Colchester Declaration 2019⁶

The Colchester Declaration is a collective Declaration on Nature across AONBs, that sets out a strategy for change. It includes targets for nature recovery to redress the declines in species and habitats within the context of a wider response to climate change.

Included within the short-term targets are for each AONB to produce a Nature Recovery Plan but also some ambitious longer-term targets to aim for by 2030. These include:

- 200,000 hectares of SSSI’s in AONBs – in favourable condition.
- 100,000 hectares of wildlife-rich habitat outside of protected sites will have been created / restored in AONBs.
- 36,000 hectares of new woodland will have been planted or allowed to regenerate in AONBs.
- Improve the conservation status of at least 30 species relevant to AONBs.

⁶ <https://landscapesforlife.org.uk/projects/colchester-declaration>

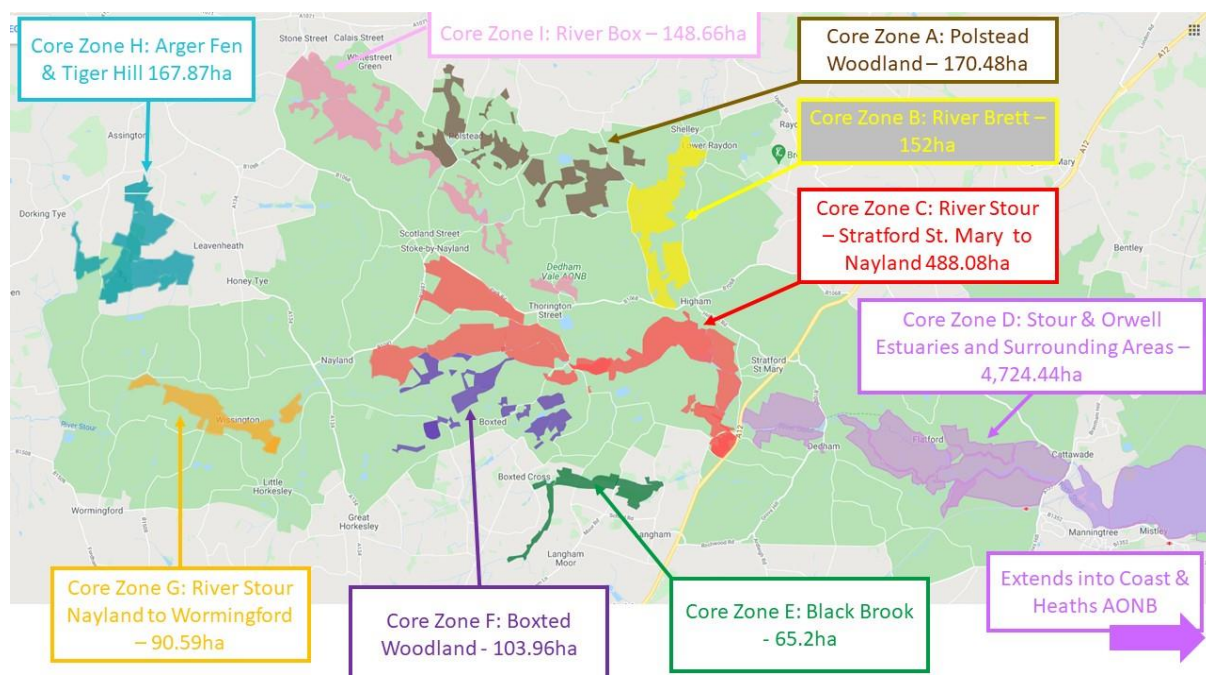
The Dedham Vale AONB Nature Recovery Plan

The developing plan has nine Nature Recovery Core Zones that have been identified. These core zones are made up of the largest connected expanses (in some cases fragmented) of wildlife rich sites and priority habitats within and connected to the AONB.

Four of the Nature Recovery Zones fall within or close to the current Scoping Boundary for the project and include Polstead (Zone A), River Brett (Zone B), Agar Fen and Tyger Hill (Zone 3) and River Box (Zone I).

These are shown in the Figure 1 below

Figure 1 – Nature Recovery Zones



As part of this work, Hazel Dormouse has also been chosen as the flagship recovery species for the Dedham Vale AONB.

Proposals should seek to prioritise avoiding damage to the key habitats and species that help define the character of and underpin the designation as AONB. Where they are impacted measures must be secured to mitigate any damage or loss. The AONB team welcome that National Grid will seek to deliver 10% Biodiversity Net Gain

Biodiversity mitigation measures should seek to support and deliver against the objectives of the Dedham Vale AONB Nature Recovery Plan and contribute to meeting targets in the Colchester Declaration 2019.

The AONB team considers that the impacts of the proposals should consider the impacts on wildlife and in particular the developing AONB nature recovery plan.

Historic Environment

With regards the Historic Environment the special qualities of the AONB are summarised in the Dedham Vale AONB & Stour Valley 2021-26 Management Plan as:

- Historic villages with timber framed housing and prominent churches
- Apparent and buried archaeology indicating millennia of human activity

In terms of Cultural Heritage, the special quality of the AONB is summarised as

- Iconic lowland river valley associated with the artist John Constable RA, the views he painted are still recognisable today

Many other artists are associated with the area. Thomas Gainsborough is particularly associated with areas of the Stour Valley.

Proposals should not adversely impact on these defining qualities and should seek to conserve and enhance them.

The AONB team consider that the scoping report should consider further the impacts on cultural heritage.

Section 15. Socio Economic, Recreation and Tourism

The Scoping Report concludes that the proposed project could cause direct effects to the local economy and local businesses, through severance or disruption to the accesses to businesses or due to traffic congestion caused by construction vehicles and potentially indirect effects due to loss of business.

A standalone socioeconomics, recreation and tourism chapter is not proposed for inclusion within the ES. This is because many of the contributory factors affecting socioeconomics, recreation and tourism during construction (visual, noise, dust and traffic) will already be considered within other chapters within the Scoping Report.

Also, given the type, temporary duration and level of potential construction phase effects, and recognising that any likely significant effects from the various topics will already be reported within separate chapters, it is not considered that additional separate reporting is required in the ES.

The Dedham Vale AONB and Stour Valley is a place to enjoy. The area offers many tourism, leisure, recreational and educational opportunities. The tourism industry relies on these opportunities which are vital to the local economy.

The identified tourism within the Dedham Vale AONB is worth £68M and supports 1,490 jobs (Volume and Value study 2020).

The landscape of the Stour Valley project area is recognised as making a significant contribution to the visitor economy in the area. It is worth £49M and supports 1,283 jobs. These figures are expected to grow substantially in future due to:

- Significant investment in the attractions of the Gainsborough's House Arts Centre in Sudbury.
- Increase in domestic holidays including visitors wishing to visit areas of cultural importance such as visit the Stour Valley which inspired Thomas Gainsborough,
- John Constable and many other artists.
- EU LEADER funding in the Stour Valley to enhance the visitor facilities in the area.
- Recognition of the importance of enhancing personal health and well-being by undertaking informal recreation
- Increasing populations in surrounding towns, leading to larger potential audiences.

There has been a resurgence in interest in the Stour Valley landscape that has seen significant National Lottery Heritage Fund investment in Gainsborough's House museum which will contribute to further interest in the Stour Valley project area in terms of landscape quality and value to tourism. This follows on from LEADER funded work to enhance the Stour Valley for visitors. Both projects will contribute to the value of the Stour Valley for the visitor economy at a time when the domestic visitor economy is recognised as becoming more important.

The AONB team's primary concern is that more National Grid infrastructure within the AONB (Sealing End Compounds) and its setting, and across the Stour Valley project area (overhead 400kv overhead line and substations) will reduce the attraction of the area and the numbers of visitors.

In its response to the non-statutory consultation in May 2021 the Dedham Vale Area of Outstanding Natural Beauty (AONB) and Stour Valley Partnership identified a need for an assessment into what impacts the visitor economy. This need for such an assessment is re-iterated in this team response.

The AONB team considers that further assessment of the impacts on socio economic, recreation and tourism factors of the proposals are required to fully understand the impacts of the proposals.

Section 19. Environmental Management and Mitigation

While the EIA will embed good practice measures and mitigation for the various subjects to be scoped into the EIA, the AONB team wish to inform National Grid about work already being supported within the AONB.

The Landscape Enhancement Initiative (LEI) funding is retrospective mitigation for existing National Grid infrastructure impacting on the AONB. The scheme seeks to support landscape-scale projects which reduce visual impact, improve visual amenity and enhance landscape character, generally within 3km of the National Grid lines. In Dedham Vale, the team is currently working with the Stour Valley Farmer Cluster on a £600k funding application. Projects put forward in the Expression of Interest include enhancements to hedges, woodlands, pollards and orchards – fencing & water provision to support traditional grazing on pasture and grazing marsh – as well as works to some vernacular buildings.

Proposals coming forward through the Bramford - Twinstead should not undermine or compromise the work being implemented through the LEI scheme and should complement the LEI enhancements and enhancements that will be delivered through the Colchester Declaration and Nature Recovery Plan for the Dedham Vale AONB.

Within the Stour Valley project area, mitigations should also be informed by opportunities for enhancements included in the Valued Landscape Assessment Report for the Stour Valley project area.

The AONB team considers that further assessment of impacts in the Stour Valley project area could draw on the findings of this Valued Landscape Assessment.

FAO: Bron Curtis, Planning Department,
Mid Suffolk and Babergh District Councils



Ref: DC/21/01605
Date: 01/06/2021

BUILT HERITAGE ADVICE

Dear Ms Curtis,

RE: Scoping Report, Bramford to Twinsted Tee 400Kv Connection

The following advice concerns the Bramford to Twinstead Scoping Report dated May 2021. This letter identifies areas requiring further work to ensure the impacts of the scheme upon built heritage assets within the Mid Suffolk and Babergh district are understood, prior to the submission of the scheme as a formal application for planning consent.

Chapter Eight of the scoping report refers to the Historic Environment, although it is acknowledged in section 8.1.5 that topics discussed in other chapters (noise, transport and landscape quality) will also affect the significance of heritage assets identified within Chapter Eight. Crucially, section 8.1.3 states: 'The potential for physical impacts on historic buildings is not anticipated but will also be assessed in subsequent stages.' Further information must be provided regarding how the 'potential for physical impacts' will be assessed, and at what stage. Aspects such as below ground drilling and associated vibrations are acknowledged in section 8.6.8 as having the potential to harm historic buildings, yet further information regarding the parameters of any study into these affects should be provided.

The proposals are thus anticipated to impact the setting of built heritage assets only, not their physical fabric; the scoping report refers to appropriate legislation and guidance relating to setting and how this can contribute to the significance of heritage assets. The importance of setting and how this can contribute to the significance of a heritage asset is adequately referenced in the document (section 8.1.4). Appendix 2.1 and 2.2 references the appropriate guidance and policy. The assessment of setting should follow the stepped process set out within GPA3 (The Setting of Heritage Assets) and should fully consider all the attributes of setting and the attributes of the proposal (including environmental considerations as well as visual) which could impact the significance of heritage assets. The assessment of setting should also cross-reference viewpoints within the LVIA discussed in Section 6 of the document to aid in the assessment.

Figure 8.1 identifies designated heritage assets within a defined Study Area: the scoping area plus a 250m area beyond the boundary of the scoping area. The consideration of a further 5km 'wider study area' and the proposed production of ZTV maps up to a 10km distance is positive. The anticipated emphasis on heritage assets 2km away from the scoping boundary should be considered on a seasonal and diurnal basis, as changes in tree cover, for example can greatly affect the setting of a heritage asset.

A desk-based study of the study area has informed the production of Figure 8.1 and the information sources are appropriate. However, no non-designated heritage assets are demarked on Figure 8.1, although they are noted in section 8.4.8 of the report. It is recommended that a field survey is undertaken of the study area to ensure that no non-designated heritage assets have been excluded. From section 8.4.18 and 8.5 it is apparent that there is an awareness that additional assets may be recorded as field investigations take place, however it is unclear if this refers to areas of archaeological interest only.

Conservation Areas within the wider assessment area should also be considered based on their current appearance. Polstead Conservation Area, for example, was appraised in 2012. An assessment of any development which has occurred since Polstead Conservation Area's boundary was appraised would be beneficial. Information regarding the 71 Grade II listed building within the study area, including their NHLE number should be provided as an appendix in any subsequent report relating to built heritage.

At this stage it is acknowledged that there is the potential for negative impact upon the significance of built heritage assets within the scoping and study areas. The most notable impact will be to Hintlesham Hall, a Grade I listed building within Mid Suffolk and Babergh's boundary. Clarification needs to be provided regarding the phrasing of section 8.6.11 which states:

'In particular, there is the potential for effects on the setting of Grade I listed Hintlesham Hall (NHLE 1036917) and the Grade II* listed group of associated designated outbuildings (NHLE 1036918). A site-specific assessment of the interim alignment was produced prior to the project pause (Heritage Collective LLP, 2012), which concluded that an impact to the setting of Hintlesham Hall would occur, but that the effect would be less than significant.'

In reference to the NPPF, harm to heritage assets is identified as either 'less than substantial' (section 196 of the NPPF) or 'substantial' (section 195). Confirmation should be provided of the conclusions, it is acknowledged this may refer to EIA terminology. It is considered that there is a high likelihood of the proposals resulting in less than substantial harm to the significance of Hintlesham Hall.

The acknowledgment of 'potential for significant adverse effects during construction and significant adverse or beneficial effects during operation, to historic buildings' and conclusion that 'Therefore effects on the setting of historic buildings are scoped into the ES' in section 8.6.13 is appropriate. Confirmation should be provided regarding whether an integrated approach is being undertaken with historic buildings, archaeology and historic landscapes.

Section 8.7 outlines the methodology to be used in further detail. As stated previously, field surveys must be used to identify non-designated heritage assets, it is unclear if these will feature in the 'targeted cultural walkover survey' described in section 8.7.6. An enlargement of the 250m desk-based study area (section 8.7.5) for non-designated assets would be beneficial, or an in-depth reasoning against enlarging this study area. It is assumed that the proposals relate to the ZTV, et it would be beneficial to understand the rationale behind this decision. Heights of buildings or buildings in wide reaching landscape settings with long vistas may have to be considered differently to those in a townscape setting, for example. In the former case, the wider setting would thus mean that long views would factor into the multitude of determining factors requiring assessment.

The use of the term 'value' in preference to 'significance' in sections 8.7.12 - 8.8 aids in the description; confirmation needs to be provided regarding the use of the term 'non-designated heritage

asset' which largely implies archaeological sites, however this differs from the NPPF. Conservation areas are not graded, the inclusion of conservation areas within both the 'high' and 'medium' criterion may prove problematic. Clarification must also be provided regarding how the 'Impact Magnitude' relates to the NPPF in a forthcoming Environmental Statement on Cultural Heritage. .

Table 8.4 identifies the scoping of potential impacts to built heritage assets and adequately summarises points raised above. An increase from 250m for the assessment of the impact upon non-designated heritage assets outside the Order Limits is recommended.

Yours sincerely,

Laura Johnson
Historic Environment Team
Place Services

Note: This letter is advisory and should only be considered as the opinion formed by specialist staff in relation to this particular matter

Essex County Council B2T Scoping request response template	Environment response log template
Environment Workstream	Internal Response Deadline 2/6/21

- *We use this to compile the response and we delete shaded comments when the table becomes external document*
- *At the bottom of the table, add a row and enter your comment, please complete all rows in the ECC Response and put your name in the Comment Owners column*
- *If you support an existing comment, please just put your name next to the other comment owner. This way, we can see if more than one person sponsors an issue*

Ref.	Error/Data Issue/Clarification/Form atting /Comment	Comment	Recommended Actions for developer	Comment Owners
<i>Page x Para x</i>	<i>Error</i>	<i>Table 1.2 is dated incorrectly.</i>	<i>Amend date.</i>	<i>JoeB</i>
Chapter 7 Paras 7.1.3 and 7.5.43	Comment	The list of aspects in Para 7.1.3 should include Priority habitats and species so that all the LPAs and SoS can demonstrate their s40 biodiversity duty. Notable has a very specific definition which does not match the status of Priority species so the header (other notable species) is considered to be confusing.	Amend Paras 7.1.3 and 7.5.43	Sue Hooton
Chapter 7 Para 7.2.5	Comment	A large part of the proposals in both Essex and Suffolk are within the Stour Valley Project Area. The proposals fall very close to many statutory and non-statutory sites designated for their importance for wildlife. Whilst undergrounding undoubtedly provides landscape benefits, it may result in greater		Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>adverse effects on wildlife than overgrounding. Underground provision should not disproportionately adversely affect designated sites or other protected and Priority species & habitats. It should be ensured that there is an appropriate balance of underground and overground transmission in this location and this should be thoroughly explored within the assessment</p>		
Chapter 7 Para 7.3.1	Comment	<p>The general approach to ensuring that existing information obtained previously for this project is used in order to inform an up-to-date assessment is welcomed. This should support up to date surveys using standard methodologies.</p> <p>We would welcome sight of the new EIA Scoping Report and Preliminary Environmental Information Report (PEIR), where we may wish to make a more comprehensive response.</p> <p>The ecological assessment should thoroughly explore all reasonable options to enhance the development for protected and Priority species and habitats. Although NSIPs are not required to provide Biodiversity Net Gain, we would encourage the project to seek opportunities for local habitat enhancement and creation including, but not limited to, designated sites and wildlife corridors. The Biodiversity Net</p>		Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		Gain Good Practice Principles For Development (CIEEM, CIRIA and IEMA) should be considered and the mitigation hierarchy should still be followed. Effective and robust measures, in line with the mitigation hierarchy, must be proposed which have a high degree of certainty for their deliverability in the long term.		
Chapter 7 Para 7.3.2	Comment	In addition to the EIA report, it will be necessary to also provide sufficient information on non-significant impacts to protected and Priority species and habitats – those scoped out of the ES - either in a non-EIA chapter or separate documentation, and appropriate mitigation and compensation measures provided. This is necessary for all the LPAs and SoS to demonstrate their s40 biodiversity duty.	Provide no-EIA chapter or Addendum for non-significant impacts	Sue Hooton
Chapter 7 Para 7.3.8	Comment	We welcome the applicant's target to seek 10% biodiversity net gain and the proposed use of Defra Metric v 2.0 <i>or its successor</i> .		Sue Hooton
Chapter 7 Para 7.5.16	Clarification	As the UK Government is no longer bound by the Habitats Directive (and its Annex II species), we recommend that this reference is amended to Barbastelle being listed as an Appendix II species under both Bonn and Berne conventions. This would trigger	Amend para 7.5.16	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		Important Hedgerow status under Hedgerow Regulations 1997.		
Chapter 7 Para 7.7.13	Comment	We support the production of an Outline LEMP and discussion & agreement with relevant stakeholders. The reference to outline LEMP (commitment GG03) needs to ensure cross referencing for species choice and ecological functionality of new hedgerow planting in order to deliver Biodiversity net gain.	Add reference to Chapter 6 para 6.5.6	Sue Hooton
Appendix A of the Connections Option Report Plans showing emerging proposals	Comment	These plans do not show the location of non-statutory sites which are listed in Table 1.2, e.g. Local Wildlife Sites (LoWS) and Special Roadside Verges in Essex and County Wildlife Sites (CWSs) and Roadside Nature Reserves RNRs in Suffolk.	The inclusion of non-statutory sites would show a greater importance of some areas for wildlife, such as the Stour Valley Project Area.	Sue Hooton
Chapter 7 Para 7.2.1 and 7.5.4, Appendix 7.1 Table 1.2 and Appendix 7.2 Para 3.1.1	Error	Please note that Tiger Hill Meadow CWS should read Tiger Hill Long Meadow CWS which is part of Tiger Hill LNR. The acronym used in Essex is LoWS instead of LWS.	Amend all LWS references to LoWS	Sue Hooton
Appendix 7.1 Table 1.2	Clarification	In line with para 7.5.7 <i>“The value of these Priority habitats is medium because the habitats are of county importance”</i> please	Clarify reasons for assigning high value to CWS/LoWS in Table 1.2	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>clarify why some CWS/LoWS have been valued as high in line with Table 7.3 as all these sites of at least county level value. Where this relates to nationally rare species or irreplaceable habitat (e.g. ancient woodland), this should be referenced.</p> <p>Please list RNRs as Suffolk designations and note that RNRs 195 and 202 are also designated as CWS</p>		
Appendix 7.2 Para 2.1.2	Comment	Reference to Biodiversity Metric should reference either HE or Defra v 2.0 or its successor.	Amend para 2.1.2	Sue Hooton
Appendix 7.2 Para 2.2.1	Comment	Whilst we accept that pre-construction surveys for protected species should enable micro-siting of equipment, we seek clarification of how impacts to GCN terrestrial habitat will be avoided completely and the need for EPS mitigation licence.	Provide clarification in PEIR on issue of avoiding impacts on GCN terrestrial habitat which would trigger EPS mitigation licence.	Sue Hooton
Appendix 7.2 Para 2.3.3/2.6.1	Comment	We accept that the targeted validation surveys for high-risk areas are likely to support a statement in the ES which meets the CIEEM advice note on lifespan of ecological reports and surveys. However, this will require a statement in the ES that no further surveys are needed due to any changes or that in line with Natural England EPS licensing Policy 4, the		Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		likely impacts can be predicted with sufficient confidence to inform the mitigation measures necessary to maintain the conservation status of the local population of European Protected Species.		
Appendix 7.2 Section 3.2	Comment	Despite the statement in para 7.4.1, there is no reference to Priority habitats to allow assessment of impacts under NPS and s40 biodiversity duty for LPAs and SoS.	Amend Section 3.2	Sue Hooton
Appendix 7.2 Paras 3.2.11, 3.5.2, 3.5.25 and Table 4.1	Comment	Surveys of hedgerows in 2021 should include bat activity surveys to identify any passes of Barbastelle bats which as Appendix II species under both Bonn and Berne conventions would trigger Important Hedgerow status under Hedgerow Regulations 1997. We support the use of static bat detectors for 2 weeks at each targeted hedgerow during the season to identify flightlines and foraging routes where crossing within the Indicative Alignment assumed. We therefore support the principle in the outline CoCP measure B07 to use dead hedging – we recommend the use of hazel hurdles is also added - where hedge crossings or removals are necessary to retain connectivity during construction. This temporary measure will be needed to enable	Provide clarification that hedgerow surveys will include bat activity surveys listed in Para 3.5.2 and Table 4.1. Confirm that the results of bat activity transects and static surveys will be assessed for any Barbastelle passes to be mapped as part of the heat maps referenced in Para 3.5.2 Include hazel hurdles as dead hedging in CoCP B07.	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		Barbastelle bats to continue to use their network of hedgerows.		
Appendix 7.2 Para 3.5.18	Comment	We support the use of climbing inspection surveys of trees to confirm the presence of likely absence of bat roosts unless trees are not safe to climb. The results of all bat roost surveys particularly in trees will be required to inform the need for any EPS mitigation licences before the DCO can be made.		Sue Hooton
Appendix 7.2 Para 3.6.3	Comment	Both LBAPS for Suffolk and Essex have been archived so this reference should be removed	Update Para 3.6.3	Sue Hooton
Chapter 7 Table 7.4 and Para 7.7.40, Appendix 7.2 Section 3.6, Paras 3.7.1, 3.9.2 and 3.11.4	Comment	There is no reference to Priority species to allow assessment of impacts under NPS EN-1 and s40 biodiversity duty for LPAs and SoS. Notable has a very specific definition which does not match the status of Priority species so the reference to other notable species is considered to be confusing.	Amend Section 3.6 in line with Para 3.11.4 (species of principal importance)	Sue Hooton
Appendix 7.2 Section 3.7.2 and Chapter 7 para 7.7.8	Comment	As the project has applied to be covered by Natural England's GCN District Level Licensing, we advise that good practice mitigation measures will <u>still</u> be needed during the construction period to minimise killing and injury of other Priority amphibians and reptiles which may be within the habitat affected.	Include mitigation measures in Outline Code of Construction Practice in addition to those listed in Chapter 7 para 7.7.8 as these impacts should be included within the scope of the ES and included in the Biodiversity Legislation Compliance Report. This should include s40 duty of NERC Act 2006 for all the LPAs and SoS.	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Appendix 7.2 Section 3.8	Comment	<p>We recommend that Essex and Suffolk Dormouse Group are consulted to advise on habitat suitability although a definition of suitable habitat would clarify the need for precautionary methods. Dormouse have regularly been found to be present in areas of dense brambles and detection in unmanaged, high canopy woodland is low. Research (Essex Naturalist (New Series) 34 (2017) indicates that in the East of England revealed some differences in monthly occupation of dormouse nest tubes compared to an earlier study in the southwest. Therefore, changes to the simple scoring system are now be expected in the revised Dormouse Handbook (pers comm).</p> <p>We therefore advise that pre-construction dormouse surveys post consent but prior to commencement of works may need to follow alternative methodology to inform the need for EPS licensing.</p> <p>Footprint tunnels are satisfactory alternative to nest tubes in the East of England. In high canopy woodland with limited understory, both tubes and tunnels should be used in</p>	Ensure local knowledge informs survey methodology	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		combination to maximise the probability of detection within one full survey season with a minimum of 100 nest tubes. Footprint tunnels to be in situ for a minimum two-week interval before commencing a survey.		
Appendix 7.2 Section 3.12	Comment	Ponds and other waterbodies within the Indicative Alignment should be checked for Australian Swamp Stonecrop (<i>Crassula helmsii</i>) even if dry to avoid spreading the terrestrial form of this invasive plant.		Sue Hooton
Chapter 6 Study Area (6.3)	Comment	The proposed 5km and 10km selected respectively for the Study Area and Zone of Theoretical Visibility mapping for the LVIA are considered appropriate to enable landscape and visual impacts to be appropriately considered.	Note	Ryan Mills
Chapter 6 Existing Baseline (6.4)	Comment	The landscape baseline is discussed in detail within the document, with reference to the national, regional and district Landscape Character Areas (LCAs), as well as designated Dedham Vale AONB, Stour Valley Project Area and the proposed AONB extension area. In	Confirmation of landscape baseline studies used to inform the assessment.	Ryan mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>Suffolk, the primary source of information for the landscape baseline is the Suffolk Landscape Character Assessment, which has informed the district level BMSDC Landscape Guidance (2015) and the Managing a Masterpiece LCA.</p> <p>It is therefore recommended that the Suffolk LCA provides the overarching framework for the baseline study, with further reference to the BMSDC Guidance and Managing a Masterpiece Study for localised details on local character and cultural heritage within the AONB and the Stour Valley project area.</p>		
Chapter 6 Para. 6.4.9	Comment	<p>Although the Landscape Character Assessment of Braintree District (Braintree District Council, 2006) provides a detailed account of the landscape and its key characteristics, this document is now 15 years old, and the landscape has evolved greatly in this time. For this reason, we would recommend that a localised Landscape Character Assessment (1:25000 scale) is undertaken for the Braintree area (Section G: Stour Valley and Butler's GSP Wood Substation). This should build on the findings within the existing Essex LCA and Stour Valley Project Area Valued Landscape Assessment.</p>	Complete a localised landscape character assessment of Braintree area.	Ryan Mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Chapter 6: Para 6.4.78 Chapter 18: Cumulative Effects	Clarification	<p>Potential cumulative effects, particularly at and around the Bramford substation site, with suite of other energy connection and generation projects have been considered within Chapter 18 of the Scoping report.</p> <p>In terms of landscape and visual cumulative effects, we would expect all proposed receptors to be scoped in.</p>	Clarification of receptors to be scoped into cumulative impact assessment.	Ryan Mills
Chapter 6 Para. 6.7.12-6.7 -19	Comment	Viewpoints from key settlements and significant locations should be included, even when significance of effect is not anticipated. It will also be necessary for sequential visual effects to be considered. Given the scale and repetitive nature of this project, combined with varying visibility of pylons, these will need to be identified and assessed.	Sequential visual effects will be assessed.	Ryan Mills
Chapter 6 Para. 6.6.8 & 6.6.14	Comment	The Scoping Report concludes that lighting will be scoped out on the Environmental Statement. Although the Scoping report highlights that there is no anticipation of significant effects from lighting on designated landscapes or Landscape Character at night during the construction or operational phases	Further details of construction compound/laydown areas to be provided so that lighting can be scoped out of assessment.	Ryan Mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>of the project, we are yet to receive information regarding the size and location of any construction laydown/compound areas, and the operating hours of these. Therefore, additional assessment of construction lighting may be required in due course.</p>		
<p>Chapter 6 Para. 6.7.13 – 6.7.15</p>	<p>Comment</p>	<p>We welcome the opportunity to select and agree representative viewpoints to inform the assessment of effects. Though, it would be expected that as well as representative views and receptor groups, that specific viewpoints (vistas/vantage points) are included in the assessment to ensure any concerns regarding impacts can be identified and assessed in isolation to receptor groups.</p> <p>Similarly, illustrative viewpoints will be necessary to help provide a narrative for the characteristics and qualities of the landscape.</p> <p>It is also worth noting that given timescales, any agreed photographs for viewpoints/ photomontages will need to be reshot in winter, to ensure the reasonable worst case is illustrated and assessed in the EIA.</p>	<p>Specific and illustrative viewpoints will be included in the assessment, as well as representative viewpoints.</p>	<p>Ryan Mills</p>

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Chapter 6 Para. 6.7.18	Comment	The visual impacts are to be assessed receptor by receptor (receptor groups). Although this method is supported, receptor groups and their sensitivity will need to be agreed prior to the EIA being undertaken.	As per comment	Ryan Mills
Chapter 6 Table 6.1: Criteria for Determining Landscape Sensitivity	Comment	We would advise that the use of the word 'very' is removed from the following definition of Medium High Landscape Sensitivity – “The key characteristics and qualities of the landscape are very susceptible”.	Revise definition wording for Medium High Sensitivity.	Ryan Mills
Chapter 6 Table 6.5	Comment	The methodology for the LVIA currently scopes out road users However, the road network is used not only by car users, but also cyclists and horse riders. Whilst it is accepted that car users generally have a lower sensitivity than other road users, para 6.8.7 states that “many receptors experiencing views from locations within Dedham Vale AONB may be defined as 'high'”. Therefore, this would suggest that car users within the AONB, will be more sensitive and therefore should be included as a receptor group.	As per comment	Ryan Mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>Furthermore, it hasn't taken into consideration whether parts of the road network are also identified as promoted routes, quiet lanes and/or restricted byways, were sensitivity may be greater. For these reasons, we would recommend that road user receptors are scoped into the assessment.</p>		
<p>Chapter 6 Para. 6.7.20-6.7.21 Appendix 6.4</p>	<p>Comment</p>	<p>As the document suggests, the LI Visual Representation of Development Proposals Technical Guidance Note 06/19 provides best practice for ensuring best practice. We welcome the use of wireframes and photomontages (Type 4 AVR level 3) as visualisation representation.</p> <p>We would advise that an enlargement factor of 150% is used. This is because, for a 50mm FL image printed at A3 and held at comfortable arm's length, the scale of the viewed image is smaller than reality. Whereas, increasing the printed image size by 150% (as if a 75mm FL lens had been used) provides a better impression of scale for most viewers using two eyes (binocular vision).</p>	<p>Enlargement factor of 150% to be used.</p>	<p>Ryan Mills</p>

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Appendix 6.2 Landscape Assessment Methodology Table 5.2	Comment	<p>GLVIA3 recognises that landscape value is not always signified by designation: ‘the fact that an area of landscape is not designated either nationally or locally does not mean that it does not have any value’ (paragraph 5.26).</p> <p>In determining landscape value, TGN 02-21 ‘Assessing the Value of Landscapes Outside National Designations’ has recently been published and builds on the details within GLVIA3 and the assessment of value (GLVIA3 Box 5.1).</p> <p>For instance, Table 1 of the TGN provides a range of factors that can be considered when identifying landscape value. This includes the incorporation of cultural associations (natural heritage and cultural heritage) into consideration of landscape value, which is greatly supported.</p>	Landscape value assessment to revised to accord with TGN 02-21 and the inclusion of cultural associations.	Ryan Mills
Volume 3: Figures Proposed Project Sheet 3 of 5	Comment	The justification for locating the GSP Substation at Butler’s Wood is still unclear. From this plan it’s clear that the substation is disconnected from the rest of the development proposal therefore justification for this location, or alternative options need to be explored.	Justify or relocation GSP Substation.	Ryan Mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Drawing no. AAA_B2B_04_ Proposed_Development				
Appendix 6.5 Arboricultural Survey Methodology	Comment	The arboricultural survey will identify impacts to trees potentially subject to significant arboricultural impacts as a result of the project. In addition to this we would expect to see a comprehensive assessment of important hedgerows under the Hedgerow Regulations 1997. This should identify all hedgerows along the routes that are important under the various historic, ecological and designation related criteria under the regulations. But also include a detailed survey of species mix to help inform planting schemes moving forward.	Hedgerow surveys and impact assessments to be included.	Ryan Mills

Our ref: 21/01334/ODC
Your ref: EN020002
Direct Dial: 01376 552525 ext. 2512
Ask for: Mathew Wilde
Date: 8th June 2021



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PURPOSE OF LETTER: Braintree District Council response to the Scoping consultation on the Bramford to Twinstead Reinforcement Project

Dear Ms Feekins-Bate

Thank you for consulting Braintree District Council as a Host Authority on the Bramford to Twinstead Reinforcement Project Scoping report. This letter constitutes Braintree District Council's response to the Environmental Impact Assessment Scoping Report consultation.

This response is supported by the following appendices:

- Appendix 1 – Built Heritage Advice (Essex Place Services)
- Appendix 2 – Archaeology Advice (Essex Place Services)
- Appendix 3 – Ecology and Landscape Advice (Essex Place Services)
- Appendix 4 – Dedham Vale AONB & Stour Valley Team Response

Please note that Braintree District Council have agreed to append the Dedham Vale AONB & Stour Valley Team's EIA Scoping Response due to them not being a statutory consultee. However, the views expressed in their response are solely that of the AONB Team and are independent of Braintree District Council.

1. Procedural Context

1.1. The Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) Regulations 10 and 11 state inter alia that a person who proposes to make an application for an order granting development consent may ask the Secretary of State to state in writing their opinion as to the scope, and level of detail, of the information to be provided in the environmental statement.

- 1.2. The Secretary of State or the relevant authority must not adopt a scoping opinion in response to a request under paragraph (1) or (2) of Schedule 10 until they have consulted the consultation bodies, but must, subject to paragraph (7), within 42 days beginning with the date of receipt of that request, or where they have notified the person making the request that they require additional information in order to adopt an opinion, within 42 days of receiving that information, adopt a scoping opinion and send a copy to the person who made the request.
- 1.3. In this case, Braintree District Council as a Host Authority are considered as a 'Consultation Body' for the purpose of the regulations. In accordance with the above legislation, Braintree District Council set out its assessment of the Scoping Report for consideration of the Planning Inspector in the below response.

2. EIA Scoping Context

- 2.1. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) are relevant to NSIP applications and set out a number of schedules to determine whether development would require an Environmental Impact Assessment or not.
- 2.2. The development in this case would be within Schedule 1 as it fulfils the following criteria 'Construction of overhead electrical power lines with a voltage of 220 kV or more, and a length of more than 15 km.'
- 2.3. The project comprises a 400kV electricity transmission line over a distance of 27km, of which approximately 19km is overhead line. It therefore falls under Schedule 1 and requires a statutory EIA.
- 2.4. Regulation 5(2) states that the EIA must 'identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors—
 - a) population and human health;
 - b) biodiversity, with particular reference to species and habitats protected under Directive 92/43/EEC and 2009/147/EC;
 - c) land, soil, water, air and climate;
 - d) material assets, cultural heritage and landscape; and,
 - e) the interaction between the factors referred to in sub-paragraphs (a) to (d).'
- 2.5. In addition, Regulation 5(4) states that the EIA should include, where relevant, 'the expected significant effects arising from the vulnerability of the proposed development to major accidents or disasters that are relevant to that development.'

2.6. Schedule 4(5)(e) states that a description should be included, of the significant effects arising from ‘the accumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources’

2.7. In light of the above, the submitted Scoping Report sets out the following key areas of focus for scoping:

- Landscape and Visual
- Biodiversity
- Historic Environment
- Water Environment
- Health and Wellbeing
- Major Accidents and Disasters
- Cumulative Effects
- Environmental Management and Mitigation
- Geology and Hydrogeology
- Agriculture and Soils
- Traffic and Transport
- Air Quality
- Noise and Vibration
- Socio-Economics, Recreation and Tourism

2.8. Braintree District Council considers that the above topics identified for inclusion within the EIA are appropriate. The Applicant should ensure the details of the proposed methods underpinning each EIA topic are agreed prior to the final submission of the ES with the relevant consultees, which would include for example, agreeing baseline survey locations and study areas, agreeing viewpoint locations etc. This should form part of the on-going consultation into the EIA.

2.9. In any case, Braintree District Council have reviewed the submitted Scoping Report and have the following comments.

3. Historic Environment (including archaeology)

3.1. Braintree District Council (BDC) instructed Place Services for built heritage and archaeological advice on the submitted Scoping Report. Their full comments are provided as Appendix 1 & 2 to this response.

3.2. Focusing firstly on above ground heritage impacts, BDC fully endorse the comments made by the Historic Buildings Consultant Laura Johnson and would ask that these are taken as Braintree’s response to the Historic Environment scoping request. This response will not repeat these comments verbatim, but reiterate a number of key points.

3.3. The assessment of heritage assets needs to follow the stepped process set out within GPA3 (The Setting of Heritage Assets). The assessment of setting should also cross-reference with agreed viewpoints within the LVIA.

- 3.4. The EIA will also need to cover other associated heritage impacts from activities such as below ground drilling. Further information regarding the parameters of these studies should be provided.
- 3.5. Information regarding the listed buildings within the study area, including their NHLE number should be provided as an appendix in any subsequent report relating to built heritage.
- 3.6. It is likely that there will be a negative impact on the significance of built heritage assets within the study area and these impacts will need to be mitigated as far as possible in designing the scheme.
- 3.7. Conservation Areas within the wider assessment area should also be considered based on their current appearance opposed to outdated appraisal documents.
- 3.8. Further clarification of how conservation areas are differentiated in terms of value would be beneficial. Clarification must also be provided regarding how the 'Impact Magnitude' relates to the NPPF in a forthcoming Environmental Statement on Cultural Heritage.
- 3.9. A field survey will need to be submitted to ensure that no non-designated heritage assets have been excluded. This should be extended beyond the 250m current radius proposed especially in areas where the ZTV indicates there could be an impact or where the scale (height) of an asset or potential for long ranging vistas contribute to its significance.
- 3.10. Turning to below ground heritage impacts, BDC also fully endorse the comments by the Principle Historic Environmental Consultant Richard Havis and would ask that these are taken as Braintree's response to the Historic Environment scoping request. Again, this response will not repeat these comments verbatim, but reiterate a number of key points.
- 3.11. If the cables are to be undergrounded in certain areas, this would disturb an area of 100m across. This would therefore have potentially significant archaeological implications along the route. As such, a full assessment of the historic environment impact of the scheme is important to be submitted with the Environmental Statement.
- 3.12. Geo-archaeological and palaeo-environmental assessments will need to be undertaken for the whole route by a qualified specialist.
- 3.13. Owing to later difficulties with failing to understand below ground archaeological impacts, it is recommended that a programme of trial trenching is undertaken on the below ground sections of the scheme to facilitate the production of a mitigation strategy to be included with the ES for submission with the DCO.
- 3.14. Hedgerow assessments should be undertaken as part of the ES to identify those important hedges where directional drilling could be considered to minimise impact.
- 3.15. Protected Lanes in Essex need to be considered and impacts assessed.

- 3.16. The present baseline data identified will require updating in some areas as set out in the response.
- 3.17. The potential beneficial effects of the undergrounding will need to be weighed against the potential impact of the below ground archaeology destroyed and the changes in water levels.
- 3.18. Overall, it is considered that the extent of assessment proposed within the scoping report is fairly robust with regard to above and below ground heritage. Further information is however needed (as set out above) and within the appended statements to be able to fully quantify the impacts of this development on the Historic Environment.

4. Landscape and Visual

- 4.1. BDC instructed Place Services to assess landscape and visual impacts in relation to the submitted Scoping Report. Their full comments combined comments on Landscape, Visual and Biodiversity are provided as Appendix 3 and forms part of the Council's substantive response.
- 4.2. In addition, the Council's Tree and Landscape Officer has provided the following comments: *'The scoping report clearly sets out the parameters of their intentions in Appendix 6.5, however no provision is made for individual tree identification in the event of a requirement for removal. I would like to see any areas where tree removal or significant impact is identified, to have trees surveyed and identified individually as opposed to part of the larger group or woodland categorisation.'*
- 4.3. Although Appendix 3 provides BDC's response to Landscape and Visual as a whole, we would like to emphasis a number of key points made in these comments.
- 4.4. Although the Landscape Character Assessment of Braintree District (Braintree District Council, 2006) provides a detailed account of the landscape and its key characteristics, this document is now 15 years old, and the landscape has evolved greatly in this time. The landscape consultant therefore recommends that a localised Landscape Character Assessment (1:25000 scale) is undertaken for the Braintree area (Section G: Stour Valley and Butler's GSP Wood Substation). This should build on the findings within the existing Essex LCA and Stour Valley Project Area Valued Landscape Assessment.
- 4.5. Viewpoints from key settlements and significant locations should be included, even when significance of effect is not anticipated. It will also be necessary for sequential visual effects to be considered. Given the scale and repetitive nature of this project, combined with varying visibility of pylons, these will need to be identified and assessed.

- 4.6. The Scoping Report concludes that lighting will be scoped out on the Environmental Statement. It is recommended that further details of construction compound/laydown areas will need to be provided so that lighting can be scoped out of assessment.
- 4.7. It would be expected that as well as representative views and receptor groups, that specific viewpoints (vistas/vantage points) are included in the assessment to ensure any concerns regarding impacts can be identified and assessed in isolation to receptor groups. Photographs for viewpoints/ photomontages will need to be reshot in winter, to ensure the reasonable worst case is illustrated and assessed in the EIA.
- 4.8. It is also recommended that road users within the AONB should be included as a receptor group because the road network is used not only by car users, but also cyclists and horse riders. Para 6.8.7 of the Scoping Report also states that “many receptors experiencing views from locations within Dedham Vale AONB may be defined as ‘high’”.
- 4.9. GLVIA3 recognises that landscape value is not always signified by designation: ‘the fact that an area of landscape is not designated either nationally or locally does not mean that it does not have any value’ (paragraph 5.26). In determining landscape value, TGN 02-21 ‘Assessing the Value of Landscapes Outside National Designations’ has recently been published and builds on the details within GLVIA3 and the assessment of value (GLVIA3 Box 5.1). The landscape value assessment should therefore be revised to accord with TGN 02-21 and the inclusion of cultural associations.
- 4.10. The arboricultural survey will identify impacts to trees potentially subject to significant arboricultural impacts as a result of the project. In addition to this we would expect to see a comprehensive assessment of important hedgerows under the Hedgerow Regulations 1997. This should identify all hedgerows along the routes that are important under the various historic, ecological and designation related criteria under the regulations. But also include a detailed survey of species mix to help inform planting schemes moving forward.

5. Biodiversity

- 5.1. BDC instructed Place Services to assess biodiversity impacts in relation to the submitted Scoping Report. Their full comments combined comments on Landscape, Visual and Biodiversity are provided as Appendix 3 and form part of the Council’s substantive response.
- 5.2. Although Appendix 3 provides BDC’s response to biodiversity as a whole, we would like to emphasis a number of key points made in these comments.
- 5.3. The proposals within Braintree District (with the exception of the proposed sub-station) are within the Stour Valley Project Area. The proposals fall very close to many statutory and non-statutory sites designated for their importance for wildlife. Any adverse impacts of undergrounding on wildlife should be fully considered.

- 5.4. We welcome the applicant's target to seek 10% biodiversity net gain. Although NSIPs are not required to provide Biodiversity Net Gain, we would encourage the project to seek opportunities for local habitat enhancement and creation including, but not limited to, designated sites and wildlife corridors. The Biodiversity Net Gain Good Practice Principles For Development (CIEEM, CIRIA and IEMA) should be considered and the mitigation hierarchy should still be followed.
- 5.5. In addition to the EIA report, it will be necessary to also provide sufficient information on non-significant impacts to protected and Priority species and habitats – those scoped out of the ES.
- 5.6. We recommend that the inclusion of non-statutory sites would show a greater importance of some areas for wildlife, such as the Stour Valley Project Area.
- 5.7. Local knowledge should be used to inform survey methodology. For example consulting the Essex and Suffolk Dormouse Group.
- 5.8. Surveys of hedgerows in 2021 should include bat activity surveys to identify any passes of Barbastelle bats which as Appendix II species under both Bonn and Berne conventions would trigger Important Hedgerow status under Hedgerow Regulations 1997.

6. Air Quality, Health and Wellbeing, Noise and Vibration and Environmental Management and Mitigation

- 6.1. Braintree District Council (BDC) consulted with our own in house Environmental Health Officer on these scoping areas. Overall the scoping is considered to be reasonably comprehensive on these matters. There are however some additional points that BDC wish to make.
- 6.2. There is an intention to consider environmental impacts due to noise and air pollution and contaminated land and effects on nearest sensitive receptors including private water supplies. This would be necessary to ascertain the likely impacts of the development.
- 6.3. It is noted that no significant contaminated land sites are considered to be present within Braintree District in the immediate area of the project. BDC supports a strategy via condition or otherwise in the event of unforeseen contamination during construction works.
- 6.4. It is further reported that the nearest private water supply at Lamarsh is considered not to be affected by the project either at construction or operational stage.
- 6.5. The consideration of noise will be primarily for the construction phase. A technical note is to be provided to support this conclusion. It is supported by BDC that the noise and vibration assessment should be focussed on the noisier works such as percussive piling and trenchless cabling. However there still will be significant noise associated with the use of the mobile crane and the cutting of old pylons and replacement with new pylons as well as construction traffic. It is noted that there may need to be some night time working (e.g.

when working across transport routes and possibly use of pumps for over pumping). Full noise level details will need to be provided in due course to include maximum noise levels as well as average noise levels and frequency spectrums of the construction plant noise sources.

- 6.6. The scoping report sets out that noise from the GSP (Grid Supply Point) substation near Wickham ST Paul will be mitigated and full details of mitigation and resultant noise levels are to be provided. Braintree District Council would require that no dominant tonal noise is created. In this regard it is noted that sensitive siting will be considered at the design stage.
- 6.7. For air quality then it is agreed that there should be no significant potential for releases to air at the operational stage and the construction phase will be assessed in accordance with IAQM guidance which is appropriate.
- 6.8. The location and design of lighting at the time of construction will also be considered to prevent nuisance to sensitive receptors. Consideration should be given to this at an early stage.
- 6.9. In conclusion the information provided indicates that Environmental Health related impacts will be duly considered during the design process. There is a logical approach and recognition of the high sensitivity of receptors to noise, air quality, and light nuisance. Some further information is however required for submission with the ES (as set out above).

7. Socio-Economics, Recreation and Tourism

- 7.1. Chapter 15 of the Scoping Report considers likely significant effects on socio-economic, recreational and tourism.
- 7.2. As stated within the Scoping Report, the visitor economy in the Dedham Vale AONB and Stour Valley Project Area is worth a combined estimated £117 million and supports over 2,700 jobs. These figures are likely to have increased recently due to more people spending more time and money domestically rather than travelling abroad. Any impacts upon the recreation and tourist industry should be carefully considered.
- 7.3. There is an extensive network of public rights of way (PRoW) within the study area as stated within the Scoping Report. Any impacts upon PRoW, other known footpaths, cycle ways and bridleways should be reduced as far as possible and rerouted for the shortest possible time.
- 7.4. National Grid should use local labour, business and materials as much as possible during the project as well as providing upskilling opportunities for local workers. This will provide benefits to the local economy but also help reduce impacts of the projects. For example, reducing the distance workers equipment and materials need to travel.

7.5. As acknowledged in the Scoping Report, the impacts of the project on Socio-Economics, Recreation and Tourism are unlikely to be significant if mitigated appropriately. However, the Bramford to Twinstead Reinforcement Project is only one of a number of major projects to be taking place in the region. The cumulative impacts of all these projects as a whole must be carefully considered. For example, the requirement on specific skilled labour, materials, equipment and services (including public sector) is likely to be substantial and may impact upon other construction sectors such as the delivery of new homes.

8. Cumulative Effects

- 8.1. Chapter 18 of the Scoping Report considers the possible cumulative effects of the development. These effects are split into Intra-project effects (more than one impact from the same development) and Inter-project effects (more than one impact from other projects).
- 8.2. The scoping report primarily focuses on assessing Inter-project effects, as the construction phase (2024) and operation phase (2028) of the project would not overlap (and thereby reduce intra-project effects). Braintree District Council would agree that inter-project effects should be focused on within the Environmental Statement. However, the cumulative impacts of the development on its own within the relevant subject areas (heritage, environmental etc) still must be considered fully within the Environmental Statement.
- 8.3. In particular, potential cumulative effects around the Bramford substation site should be considered within the Environmental Statement. In terms of landscape and visual cumulative effects, all receptors should be scoped in.
- 8.4. To identify any possible Inter-project effects, Appendix 18.1 lists a number of planning applications and DCO applications within a 10km ZOI (Zone of Influence) of the site, as defined by Figure 18.1. Braintree District Council (BDC) consider however that a 10km ZOI is too small to assess the cumulative effects of the project. In particular, the other NSIP's listed on Appendix 18.1 mainly constitute large engineering projects which could have significant impacts on the highway network (abnormal loads, road closures etc) as well as possible shortages of labour and specialist skills. BDC therefore consider that the ZOI should be stretched further to a minimum of 50km especially for the bigger projects to be able to adequately determine impacts. Paragraph 18.4.6 of the report sets out that the study area for NSIP's was 50km but these projects were not considered as part of the long list. BDC consider they should be. In any case, the scoping report highlights that Professional judgement will be used to determine whether other developments should be scoped into or out of the assessment. BDC have no objection in principle to this approach, providing that it is undertaken by a competent EIA practitioner and that suitable justification

is provided within the ES (or Appendices) as to why some developments were discounted in the ZOI.

- 8.5. Of those developments which do get scoped in, this process is set to include up to four stages to assess impacts. Stages 2 onwards would be completed within the ES. If further information is required about a project in the Braintree area, then clarification can be sought if required. A project should not be discounted in the study zone if insufficient information is available at first glance to make a meaningful cumulative assessment.
- 8.6. In terms of applications within Appendix 18.1, BDC can provide some updates:

Updates on Applications	Notable Major Applications submitted since March in subject area
228 - 17/02291/OUT – confirm appeal dismissed	21/00396/REM – now submitted (related to 17/01157/OUT at earls colne airfield)
262 - 19/01532/OUT – confirm appeal dismissed	21/00929/OUT
312 - 18/01475/REM – been permitted	21/00726/FUL

- 8.7. Overall, BDC do not have an objection in principle to the cumulative effects approach proposed by the scoping report, subject to appropriate justifications and clarifications as described above.

9. Geology and Hydrogeology, Agriculture and Soils, Major Accidents and Disasters & Traffic and Transport

- 9.1. It should be noted that BDC are not the statutory function holders for these topic areas. As such, Braintree District Council would defer to Essex County Councils response on these matters.

Summary

I trust this letter adequately provides Braintree District Council's views on the scoping report. This consultation response is made with regard to the SR in the context provided by the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended) and does not prejudice the Braintree District Council's consideration of the other planning matters relating to the development of this site.

Yours Sincerely,



Mathew Wilde MRTPI (Senior Planner)
for Planning Development Manager

Appendix 1 – Built Heritage Advice
(Essex Place Services)

FAO: Mathew Wilde, Planning Department,
Braintree District Council



Ref: EN020002
Date: 01/06/2021

BUILT HERITAGE ADVICE

Dear Sir / Madam,

RE: Scoping Report, Bramford to Twinsted Tee 400Kv Connection

The following advice concerns the Bramford to Twinstead Scoping Report dated May 2021. This letter identifies areas requiring further work to ensure the impacts of the scheme upon built heritage assets within the Braintree district are understood, prior to the submission of the scheme as a formal application for planning consent.

Chapter Eight of the scoping report refers to the Historic Environment, although it is acknowledged in section 8.1.5 that topics discussed in other chapters (noise, transport and landscape quality) will also affect the significance of heritage assets identified within Chapter Eight. Crucially, section 8.1.3 states: 'The potential for physical impacts on historic buildings is not anticipated but will also be assessed in subsequent stages.' Further information must be provided regarding how the 'potential for physical impacts' will be assessed, and at what stage. Aspects such as below ground drilling and associated vibrations are acknowledged in section 8.6.8 as having the potential to harm historic buildings, yet further information regarding the parameters of any study into these affects should be provided.

The proposals are thus anticipated to impact the setting of built heritage assets only, not their physical fabric; the scoping report refers to appropriate legislation and guidance relating to setting and how this can contribute to the significance of heritage assets. The importance of setting and how this can contribute to the significance of a heritage asset is adequately referenced in the document (section 8.1.4). Appendix 2.1 and 2.2 references the appropriate guidance and policy. The assessment of setting should follow the stepped process set out within GPA3 (The Setting of Heritage Assets) and should fully consider all the attributes of setting and the attributes of the proposal (including environmental considerations as well as visual) which could impact the significance of heritage assets. The assessment of setting should also cross-reference viewpoints within the LVIA discussed in Section 6 of the document to aid in the assessment.

Figure 8.1 identifies designated heritage assets within a defined Study Area: the scoping area plus a 250m area beyond the boundary of the scoping area. The consideration of a further 5km 'wider study area' and the proposed production of ZTV maps up to a 10km distance is positive. The anticipated emphasis on heritage assets 2km away from the scoping boundary should be considered on a seasonal and diurnal basis, as changes in tree cover, for example can greatly affect the setting of a heritage asset.

A desk-based study of the study area has informed the production of Figure 8.1 and the information sources are appropriate. However, no non-designated heritage assets are demarked on Figure 8.1, although they are noted in section 8.4.8 of the report. It is recommended that a field survey is undertaken of the study area to ensure that no non-designated heritage assets have been excluded, particularly as Braintree District Council do not have a formally adopted Local List at present. From section 8.4.18 and 8.5 it is apparent that there is an awareness that additional assets may be recorded as field investigations take place, however it is unclear if this refers to areas of archaeological interest only.

Conservation Areas within the wider assessment area should also be considered based on their current appearance. Pebmarsh Conservation Area, for example, was appraised in 2012. An assessment of any development which has occurred since Pebmarsh Conservation Area's boundary was appraised would be beneficial. Information regarding the 71 Grade II listed building within the study area, including their NHLE number should be provided as an appendix in any subsequent report relating to built heritage.

At this stage it is acknowledged that there is the potential for negative impact upon the significance of built heritage assets within the scoping and study areas. The most notable impact will be to Hintlesham Hall, which is not within Braintree District Council's boundary. Nonetheless, clarification needs to be provided regarding the phrasing of section 8.6.11 which states:

'In particular, there is the potential for effects on the setting of Grade I listed Hintlesham Hall (NHLE 1036917) and the Grade II* listed group of associated designated outbuildings (NHLE 1036918). A site-specific assessment of the interim alignment was produced prior to the project pause (Heritage Collective LLP, 2012), which concluded that an impact to the setting of Hintlesham Hall would occur, but that the effect would be less than significant.'

In reference to the NPPF, harm to heritage assets is identified as either 'less than substantial' (section 196 of the NPPF) or 'substantial' (section 195). However, it is acknowledged this may refer to EIA terminology. It is considered that there is a high likelihood of the proposals resulting in less than substantial harm to the significance of Hintlesham Hall.

The acknowledgment of 'potential for significant adverse effects during construction and significant adverse or beneficial effects during operation, to historic buildings' and conclusion that: 'Therefore effects on the setting of historic buildings are scoped into the ES' in section 8.6.13 is appropriate. Confirmation should be provided regarding whether an integrated approach is being undertaken with historic buildings, archaeology and historic landscapes.

Section 8.7 outlines the methodology to be used in further detail. As stated previously, field surveys must be used to identify non-designated heritage assets, it is unclear if these will feature in the 'targeted cultural walkover survey' described in section 8.7.6. An enlargement of the 250m desk-based study area (section 8.7.5) for non-designated assets would be beneficial. It is assumed that the proposals relate to the ZTV, yet it would be beneficial to understand the rationale behind this decision. Heights of buildings or buildings in wide reaching landscape settings with long vistas may have to be considered differently to those in a townscape setting, for example. In the former case, the wider setting would thus mean that long views would factor into the multitude of determining factors requiring assessment.

The use of the term 'value' in preference to 'significance' in sections 8.7.12 - 8.8 aids in the description; confirmation needs to be provided regarding the use of the term 'non-designated heritage asset' which largely implies archaeological sites, however this differs from the NPPF. Conservation areas are not graded, the inclusion of conservation areas within both the 'high' and 'medium' criterion may prove problematic. Further description of how conservation areas are differentiated in terms of value would be beneficial. Clarification must also be provided regarding how the 'Impact Magnitude' relates to the NPPF in a forthcoming Environmental Statement on Cultural Heritage.

Table 8.4 identifies the scoping of potential impacts to built heritage assets and adequately summarises points raised above. An increase from 250m for the assessment of the impact upon non-designated heritage assets outside the Order Limits is recommended where the ZTV indicates there could be an impact or where the scale (height) of an asset or potential for long ranging vistas contribute to its significance..

Yours sincerely,

Laura Johnson
Historic Environment Team
Place Services

Note: This letter is advisory and should only be considered as the opinion formed by specialist staff in relation to this particular matter

Appendix 2 – Archaeology Advice
(Essex Place Services)



Matthew Wilde
Braintree District Council,
Development Services
Causeway House
Braintree
Essex CM7 9HB

Dear Matthew

RE: Bramford to Twinsted Tee 400Kv Connection

The following response is to the Bramford to Twinstead Project Development Options report dated March 2021, and the Scoping Report dated May 2021 in relation to its archaeological impact. It identifies the further work required to ensure that there is an appropriate understanding of the impacts of the scheme prior to the development being submitted as an application.

In summary the proposed development will have various impacts on the archaeological deposits along its length. Those areas which will be most significantly impacted will be that identified for undergrounding and the areas of the pylon bases and sub stations. Following a recent historic environment meeting it has been confirmed that the area of construction for the undergrounding will require a land take of approximately 100m in width. This can be compared to the land take for a six lane road. Evidence from both the Suffolk and Essex historic environment records and from the Scoping Report indicates this will impact on a landscape occupied from the prehistoric through to the modern period with a significant impact on archaeological deposits from the late Prehistoric through to the medieval period.

The high potential for previously unknown multi-period archaeological sites, is identified in the statement in 8.4.12 of the Scoping Report and therefore it is important that a full assessment of the historic environment impact of the scheme, especially in the undergrounding areas, is presented to the inspector within the Environmental statement.

Section 8.7-8.9 relates to the geo-archaeological work. Geo-archaeological and palaeo-environmental assessment will need to be undertaken for the whole route. geoarchaeological deposits are not necessarily only associated with deeper layers and we would expect to see a geoarchaeological assessment for the project. This should be undertaken by a suitably qualified specialist in this area and they should review the borehole logs to determine the depth of deposits.

Section 8.7.10 of the Scoping Document indicates any intrusive evaluation is only undertaken pre-construction. Considering the sensitivity of the heritage assets, particularly the below ground archaeological deposits, this work needs to be undertaken to support the production of the ES. It is recommended that it is essential to have an understanding of the surviving below ground heritage assets especially within the undergrounding sections at the ES stage so that the full impact on the historic environment can be appropriately considered by the inspector. Experience of linear schemes

undertaken in the East of England has shown the major impacts, both on cost and time delays, that result from a poor understanding of the below ground archaeological impacts, are a frequent occurrence. As such it is recommended that a full programme of archaeological trial trenching is undertaken on the below ground sections of the scheme, to facilitate the production of a mitigation strategy to be included with the ES for submission with the DCO.

It is unclear from the document if there has been an integrated approach to the historic environment, with the archaeology and historic buildings being considered within the historic landscape. Hedgerow assessments should be undertaken as part of the ES to identify those important hedges where directional drilling could be considered to minimise impact.

Under paragraph 8.6.14 protected lanes in Essex are not considered, however these may suffer if realignment occurs to allow access for construction traffic, and should form part of the dataset for consideration as part of this scheme.

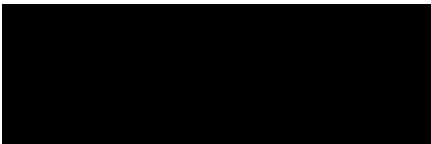
The potential beneficial effects of the undergrounding described under 8.6.17 will need to be weighed against the potential impact of the below ground archaeology destroyed and the changes in water levels in the areas of the cable corridor required, which will have a knock-on effect on neighbouring archaeological sites that may not otherwise be directly impacted.

The 250 metre study area for non-designated heritage assets identified under paragraph 8.7.5 is a concern as it may not allow the applicants to appropriately understand or assess the nature of the historic environment that will be impacted.

The present baseline data identified will require updating in some areas. This includes the aerial photographic report being assessed against new aerial coverage from Google earth in the last decade. Also in this period the use of Lidar has become normal practice and this should be incorporated with the aerial survey update.

If you have any questions, please do not hesitate to contact me.

Yours sincerely



Richard Havis

Principal Historic Environment Consultant

Telephone: [REDACTED]

Email: [REDACTED]@essex.gov.uk

NOTE : This letter is advisory and should only be considered as the opinion formed by specialist staff in relation to this particular matter

Appendix 3 – Ecology and Landscape Advice
(Essex Place Services)

B2T Scoping request response template	Environment response log template
Environment Workstream	Internal Response Deadline 2/6/21

- *We use this to compile the response and we delete shaded comments when the table becomes external document*
- *At the bottom of the table, add a row and enter your comment, please complete all rows in the ECC Response and put your name in the Comment Owners column*
- *If you support an existing comment, please just put your name next to the other comment owner. This way, we can see if more than one person sponsors an issue*

Ref.	Error/Data Issue/Clarification/Form atting /Comment	Comment	Recommended Actions for developer	Comment Owners
<i>Page x Para x</i>	<i>Error</i>	<i>Table 1.2 is dated incorrectly.</i>	<i>Amend date.</i>	<i>JoeB</i>
Chapter 7 Paras 7.1.3 and 7.5.43	Comment	The list of aspects in Para 7.1.3 should include Priority habitats and species so that all the LPAs and SoS can demonstrate their s40 biodiversity duty. Notable has a very specific definition which does not match the status of Priority species so the header (other notable species) is considered to be confusing.	Amend Paras 7.1.3 and 7.5.43	Sue Hooton
Chapter 7 Para 7.2.5	Comment	A large part of the proposals in both Essex and Suffolk are within the Stour Valley Project Area. The proposals fall very close to many statutory and non-statutory sites designated for their importance for wildlife. Whilst undergrounding undoubtedly provides landscape benefits, it may result in greater		Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>adverse effects on wildlife than overgrounding. Underground provision should not disproportionately adversely affect designated sites or other protected and Priority species & habitats. It should be ensured that there is an appropriate balance of underground and overground transmission in this location and this should be thoroughly explored within the assessment</p>		
<p>Chapter 7 Para 7.3.1</p>	<p>Comment</p>	<p>The general approach to ensuring that existing information obtained previously for this project is used in order to inform an up-to-date assessment is welcomed. This should support up to date surveys using standard methodologies.</p> <p>We would welcome sight of the new EIA Scoping Report and Preliminary Environmental Information Report (PEIR), where we may wish to make a more comprehensive response.</p> <p>The ecological assessment should thoroughly explore all reasonable options to enhance the development for protected and Priority species and habitats. Although NSIPs are not required to provide Biodiversity Net Gain, we would encourage the project to seek opportunities for local habitat enhancement and creation including, but not limited to, designated sites and wildlife corridors. The Biodiversity Net</p>		<p>Sue Hooton</p>

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		Gain Good Practice Principles For Development (CIEEM, CIRIA and IEMA) should be considered and the mitigation hierarchy should still be followed. Effective and robust measures, in line with the mitigation hierarchy, must be proposed which have a high degree of certainty for their deliverability in the long term.		
Chapter 7 Para 7.3.2	Comment	In addition to the EIA report, it will be necessary to also provide sufficient information on non-significant impacts to protected and Priority species and habitats – those scoped out of the ES - either in a non-EIA chapter or separate documentation, and appropriate mitigation and compensation measures provided. This is necessary for all the LPAs and SoS to demonstrate their s40 biodiversity duty.	Provide no-EIA chapter or Addendum for non-significant impacts	Sue Hooton
Chapter 7 Para 7.3.8	Comment	We welcome the applicant's target to seek 10% biodiversity net gain and the proposed use of Defra Metric v 2.0 <i>or its successor</i> .		Sue Hooton
Chapter 7 Para 7.5.16	Clarification	As the UK Government is no longer bound by the Habitats Directive (and its Annex II species), we recommend that this reference is amended to Barbastelle being listed as an Appendix II species under both Bonn and Berne conventions. This would trigger	Amend para 7.5.16	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		Important Hedgerow status under Hedgerow Regulations 1997.		
Chapter 7 Para 7.7.13	Comment	We support the production of an Outline LEMP and discussion & agreement with relevant stakeholders. The reference to outline LEMP (commitment GG03) needs to ensure cross referencing for species choice and ecological functionality of new hedgerow planting in order to deliver Biodiversity net gain.	Add reference to Chapter 6 para 6.5.6	Sue Hooton
Appendix A of the Connections Option Report Plans showing emerging proposals	Comment	These plans do not show the location of non-statutory sites which are listed in Table 1.2, e.g. Local Wildlife Sites (LoWS) and Special Roadside Verges in Essex and County Wildlife Sites (CWSs) and Roadside Nature Reserves RNRs in Suffolk.	The inclusion of non-statutory sites would show a greater importance of some areas for wildlife, such as the Stour Valley Project Area.	Sue Hooton
Chapter 7 Para 7.2.1 and 7.5.4, Appendix 7.1 Table 1.2 and Appendix 7.2 Para 3.1.1	Error	Please note that Tiger Hill Meadow CWS should read Tiger Hill Long Meadow CWS which is part of Tiger Hill LNR. The acronym used in Essex is LoWS instead of LWS.	Amend all LWS references to LoWS	Sue Hooton
Appendix 7.1 Table 1.2	Clarification	In line with para 7.5.7 " <i>The value of these Priority habitats is medium because the habitats are of county importance</i> " please	Clarify reasons for assigning high value to CWS/LoWS in Table 1.2	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>clarify why some CWS/LoWS have been valued as high in line with Table 7.3 as all these sites of at least county level value. Where this relates to nationally rare species or irreplaceable habitat (e.g. ancient woodland), this should be referenced.</p> <p>Please list RNRs as Suffolk designations and note that RNRs 195 and 202 are also designated as CWS</p>		
Appendix 7.2 Para 2.1.2	Comment	Reference to Biodiversity Metric should reference either HE or Defra v 2.0 or its successor.	Amend para 2.1.2	Sue Hooton
Appendix 7.2 Para 2.2.1	Comment	Whilst we accept that pre-construction surveys for protected species should enable micro-siting of equipment, we seek clarification of how impacts to GCN terrestrial habitat will be avoided completely and the need for EPS mitigation licence.	Provide clarification in PEIR on issue of avoiding impacts on GCN terrestrial habitat which would trigger EPS mitigation licence.	Sue Hooton
Appendix 7.2 Para 2.3.3/2.6.1	Comment	We accept that the targeted validation surveys for high-risk areas are likely to support a statement in the ES which meets the CIEEM advice note on lifespan of ecological reports and surveys. However, this will require a statement in the ES that no further surveys are needed due to any changes or that in line with Natural England EPS licensing Policy 4, the		Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		likely impacts can be predicted with sufficient confidence to inform the mitigation measures necessary to maintain the conservation status of the local population of European Protected Species.		
Appendix 7.2 Section 3.2	Comment	Despite the statement in para 7.4.1, there is no reference to Priority habitats to allow assessment of impacts under NPS and s40 biodiversity duty for LPAs and SoS.	Amend Section 3.2	Sue Hooton
Appendix 7.2 Paras 3.2.11, 3.5.2, 3.5.25 and Table 4.1	Comment	Surveys of hedgerows in 2021 should include bat activity surveys to identify any passes of Barbastelle bats which as Appendix II species under both Bonn and Berne conventions would trigger Important Hedgerow status under Hedgerow Regulations 1997. We support the use of static bat detectors for 2 weeks at each targeted hedgerow during the season to identify flightlines and foraging routes where crossing within the Indicative Alignment assumed. We therefore support the principle in the outline CoCP measure B07 to use dead hedging – we recommend the use of hazel hurdles is also added - where hedge crossings or removals are necessary to retain connectivity during construction. This temporary measure will be needed to enable	Provide clarification that hedgerow surveys will include bat activity surveys listed in Para 3.5.2 and Table 4.1. Confirm that the results of bat activity transects and static surveys will be assessed for any Barbastelle passes to be mapped as part of the heat maps referenced in Para 3.5.2 Include hazel hurdles as dead hedging in CoCP B07.	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		Barbastelle bats to continue to use their network of hedgerows.		
Appendix 7.2 Para 3.5.18	Comment	We support the use of climbing inspection surveys of trees to confirm the presence of likely absence of bat roosts unless trees are not safe to climb. The results of all bat roost surveys particularly in trees will be required to inform the need for any EPS mitigation licences before the DCO can be made.		Sue Hooton
Appendix 7.2 Para 3.6.3	Comment	Both LBAPS for Suffolk and Essex have been archived so this reference should be removed	Update Para 3.6.3	Sue Hooton
Chapter 7 Table 7.4 and Para 7.7.40, Appendix 7.2 Section 3.6, Paras 3.7.1, 3.9.2 and 3.11.4	Comment	There is no reference to Priority species to allow assessment of impacts under NPS EN-1 and s40 biodiversity duty for LPAs and SoS. Notable has a very specific definition which does not match the status of Priority species so the reference to other notable species is considered to be confusing.	Amend Section 3.6 in line with Para 3.11.4 (species of principal importance)	Sue Hooton
Appendix 7.2 Section 3.7.2 and Chapter 7 para 7.7.8	Comment	As the project has applied to be covered by Natural England's GCN District Level Licensing, we advise that good practice mitigation measures will <u>still</u> be needed during the construction period to minimise killing and injury of other Priority amphibians and reptiles which may be within the habitat affected.	Include mitigation measures in Outline Code of Construction Practice in addition to those listed in Chapter 7 para 7.7.8 as these impacts should be included within the scope of the ES and included in the Biodiversity Legislation Compliance Report. This should include s40 duty of NERC Act 2006 for all the LPAs and SoS.	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Appendix 7.2 Section 3.8	Comment	<p>We recommend that Essex and Suffolk Dormouse Group are consulted to advise on habitat suitability although a definition of suitable habitat would clarify the need for precautionary methods. Dormouse have regularly been found to be present in areas of dense brambles and detection in unmanaged, high canopy woodland is low. Research (Essex Naturalist (New Series) 34 (2017) indicates that in the East of England revealed some differences in monthly occupation of dormouse nest tubes compared to an earlier study in the southwest. Therefore, changes to the simple scoring system are now be expected in the revised Dormouse Handbook (pers comm).</p> <p>We therefore advise that pre-construction dormouse surveys post consent but prior to commencement of works may need to follow alternative methodology to inform the need for EPS licensing.</p> <p>Footprint tunnels are satisfactory alternative to nest tubes in the East of England. In high canopy woodland with limited understory, both tubes and tunnels should be used in</p>	Ensure local knowledge informs survey methodology	Sue Hooton

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		combination to maximise the probability of detection within one full survey season with a minimum of 100 nest tubes. Footprint tunnels to be in situ for a minimum two-week interval before commencing a survey.		
Appendix 7.2 Section 3.12	Comment	Ponds and other waterbodies within the Indicative Alignment should be checked for Australian Swamp Stonecrop (<i>Crassula helmsii</i>) even if dry to avoid spreading the terrestrial form of this invasive plant.		Sue Hooton
Chapter 6 Study Area (6.3)	Comment	The proposed 5km and 10km selected respectively for the Study Area and Zone of Theoretical Visibility mapping for the LVIA are considered appropriate to enable landscape and visual impacts to be appropriately considered.	Note	Ryan Mills
Chapter 6 Existing Baseline (6.4)	Comment	The landscape baseline is discussed in detail within the document, with reference to the national, regional and district Landscape Character Areas (LCAs), as well as designated Dedham Vale AONB, Stour Valley Project Area and the proposed AONB extension area. In	Confirmation of landscape baseline studies used to inform the assessment.	Ryan mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>Suffolk, the primary source of information for the landscape baseline is the Suffolk Landscape Character Assessment, which has informed the district level BMSDC Landscape Guidance (2015) and the Managing a Masterpiece LCA.</p> <p>It is therefore recommended that the Suffolk LCA provides the overarching framework for the baseline study, with further reference to the BMSDC Guidance and Managing a Masterpiece Study for localised details on local character and cultural heritage within the AONB and the Stour Valley project area.</p>		
Chapter 6 Para. 6.4.9	Comment	<p>Although the Landscape Character Assessment of Braintree District (Braintree District Council, 2006) provides a detailed account of the landscape and its key characteristics, this document is now 15 years old, and the landscape has evolved greatly in this time. For this reason, we would recommend that a localised Landscape Character Assessment (1:25000 scale) is undertaken for the Braintree area (Section G: Stour Valley and Butler's GSP Wood Substation). This should build on the findings within the existing Essex LCA and Stour Valley Project Area Valued Landscape Assessment.</p>	Complete a localised landscape character assessment of Braintree area.	Ryan Mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Chapter 6: Para 6.4.78 Chapter 18: Cumulative Effects	Clarification	<p>Potential cumulative effects, particularly at and around the Bramford substation site, with suite of other energy connection and generation projects have been considered within Chapter 18 of the Scoping report.</p> <p>In terms of landscape and visual cumulative effects, we would expect all proposed receptors to be scoped in.</p>	Clarification of receptors to be scoped into cumulative impact assessment.	Ryan Mills
Chapter 6 Para. 6.7.12-6.7 -19	Comment	Viewpoints from key settlements and significant locations should be included, even when significance of effect is not anticipated. It will also be necessary for sequential visual effects to be considered. Given the scale and repetitive nature of this project, combined with varying visibility of pylons, these will need to be identified and assessed.	Sequential visual effects will be assessed.	Ryan Mills
Chapter 6 Para. 6.6.8 & 6.6.14	Comment	The Scoping Report concludes that lighting will be scoped out on the Environmental Statement. Although the Scoping report highlights that there is no anticipation of significant effects from lighting on designated landscapes or Landscape Character at night during the construction or operational phases	Further details of construction compound/laydown areas to be provided so that lighting can be scoped out of assessment.	Ryan Mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>of the project, we are yet to receive information regarding the size and location of any construction laydown/compound areas, and the operating hours of these. Therefore, additional assessment of construction lighting may be required in due course.</p>		
<p>Chapter 6 Para. 6.7.13 – 6.7.15</p>	<p>Comment</p>	<p>We welcome the opportunity to select and agree representative viewpoints to inform the assessment of effects. Though, it would be expected that as well as representative views and receptor groups, that specific viewpoints (vistas/vantage points) are included in the assessment to ensure any concerns regarding impacts can be identified and assessed in isolation to receptor groups.</p> <p>Similarly, illustrative viewpoints will be necessary to help provide a narrative for the characteristics and qualities of the landscape.</p> <p>It is also worth noting that given timescales, any agreed photographs for viewpoints/ photomontages will need to be reshot in winter, to ensure the reasonable worst case is illustrated and assessed in the EIA.</p>	<p>Specific and illustrative viewpoints will be included in the assessment, as well as representative viewpoints.</p>	<p>Ryan Mills</p>

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Chapter 6 Para. 6.7.18	Comment	The visual impacts are to be assessed receptor by receptor (receptor groups). Although this method is supported, receptor groups and their sensitivity will need to be agreed prior to the EIA being undertaken.	As per comment	Ryan Mills
Chapter 6 Table 6.1: Criteria for Determining Landscape Sensitivity	Comment	We would advise that the use of the word 'very' is removed from the following definition of Medium High Landscape Sensitivity – “The key characteristics and qualities of the landscape are very susceptible”.	Revise definition wording for Medium High Sensitivity.	Ryan Mills
Chapter 6 Table 6.5	Comment	The methodology for the LVIA currently scopes out road users However, the road network is used not only by car users, but also cyclists and horse riders. Whilst it is accepted that car users generally have a lower sensitivity than other road users, para 6.8.7 states that “many receptors experiencing views from locations within Dedham Vale AONB may be defined as ‘high’”. Therefore, this would suggest that road users within the AONB, will be more sensitive and therefore should be included as a receptor group.	As per comment	Ryan Mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
		<p>Furthermore, it hasn't taken into consideration whether parts of the road network are also identified as promoted routes, quiet lanes and/or restricted byways, were sensitivity may be greater. For these reasons, we would recommend that road user receptors are scoped into the assessment.</p>		
<p>Chapter 6 Para. 6.7.20-6.7 21 Appendix 6.4</p>	<p>Comment</p>	<p>As the document suggests, the LI Visual Representation of Development Proposals Technical Guidance Note 06/19 provides best practice for ensuring best practice. We welcome the use of wireframes and photomontages (Type 4 AVR level 3) as visualisation representation.</p> <p>We would advise that an enlargement factor of 150% is used. This is because, for a 50mm FL image printed at A3 and held at comfortable arm's length, the scale of the viewed image is smaller than reality. Whereas, increasing the printed image size by 150% (as if a 75mm FL lens had been used) provides a better impression of scale for most viewers using two eyes (binocular vision).</p>	<p>Enlargement factor of 150% to be used.</p>	<p>Ryan Mills</p>

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Appendix 6.2 Landscape Assessment Methodology Table 5.2	Comment	<p>GLVIA3 recognises that landscape value is not always signified by designation: ‘the fact that an area of landscape is not designated either nationally or locally does not mean that it does not have any value’ (paragraph 5.26).</p> <p>In determining landscape value, TGN 02-21 ‘Assessing the Value of Landscapes Outside National Designations’ has recently been published and builds on the details within GLVIA3 and the assessment of value (GLVIA3 Box 5.1).</p> <p>For instance, Table 1 of the TGN provides a range of factors that can be considered when identifying landscape value. This includes the incorporation of cultural associations (natural heritage and cultural heritage) into consideration of landscape value, which is greatly supported.</p>	Landscape value assessment to be revised to accord with TGN 02-21 and the inclusion of cultural associations.	Ryan Mills
Volume 3: Figures Proposed Project Sheet 3 of 5	Comment	The justification for locating the GSP Substation at Butler’s Wood is still unclear. From this plan it’s clear that the substation is disconnected from the rest of the development proposal therefore justification for this location, or alternative options need to be explored.	Justify or relocation GSP Substation.	Ryan Mills

Ref.	Error/Data Issue/Clarification/Formatting/Comment	Comment	Recommended Actions for developer	Comment Owners
Drawing no. AAA_B2B_04_ Proposed_Development				
Appendix 6.5 Arboricultural Survey Methodology	Comment	The arboricultural survey will identify impacts to trees potentially subject to significant arboricultural impacts as a result of the project. In addition to this we would expect to see a comprehensive assessment of important hedgerows under the Hedgerow Regulations 1997. This should identify all hedgerows along the routes that are important under the various historic, ecological and designation related criteria under the regulations. But also include a detailed survey of species mix to help inform planting schemes moving forward.	Hedgerow surveys and impact assessments to be included.	Ryan Mills

Appendix 4 – Dedham Vale AONB & Stour
Valley Team Response
(Independent of Braintree District Council)



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Dedham Vale AONB & Stour Valley Team response: Bramford to Twinstead Scoping Report Consultation (Issue number: BT-JAC-020631-550-0002-EIA) Views endorsed by AONB Chair.

Thank you for consulting the Dedham Vale Area of Outstanding Natural Beauty (AONB) and Stour Valley team on the Environment Impact Assessment (EIA) Scoping Report for the reinforcement of the transmission network between Bramford to Twinstead.

The AONB team response has been prepared jointly by Beverley McClean (AONB Planning Officer) with the support of Simon Amstutz (AONB Manager) and endorsed by the AONB Chair, Cllr Nigel Chapman.

The response focuses mainly on sections 6 (Landscape), 7 (Biodiversity), 8 (Historic Environment), 15 (Socio economics, Recreation and Tourism) and 19 Environmental Management and Mitigation of the Scoping Consultation report. Sections are reviewed below.

This response is summarised as:

- The Scoping report largely describes the project, its access arrangements and associated developments accurately.
- That the scope of the assessment in relation to the historic environment, impacts on local economy and wildlife could be widened, particularly in relation to the Stour Valley project area..
- The proposed methodologies of assessing impacts are broadly acceptable but some further engagement with the AONB would be welcome.
- The evidence base should be widened to include elements suggested in the AONB Partnership's response to the non-statutory consultation.
- That the AONB Partnership, despite not being a statutory consultee, should be further engaged in any future works relating to assess the impacts and development of proposals to minimisation the impacts on the AONB and Stour Valley project area.

The Proposal

The AONB team generally consider the description of the project, as described in the Scoping Report as accurate. It is the AONB teams understanding that the project consists of the elements listed below.

The Development Consent proposal will involve the reinforcement of the network with a new 400 kilovolt (kV) electricity transmission line over a distance of 27km (16.7 miles), the majority of which will follow the general alignment of the existing overhead line network.

The reinforcement will be a combination of overhead line (conductors) and underground cable. It is proposed that approximately 25km of existing overhead line could be removed (25km of existing 132kV overhead line between Burstall Bridge and Twinstead Tee, and 1.5km of the existing Bramford-Braintree-Rayleigh 400kV overhead line to the south of Twinstead). To facilitate the overhead line removal a new grid supply point (GSP) substation is proposed at Butler's Wood, south of Sudbury, in Essex.

The Indicative Alignment runs roughly parallel to the existing Bramford to Pelham 400kV overhead line and follows the existing 132kV line for the majority of the route.

Approximately 25km of the existing 132kV overhead line would be removed as part of the project, including approximately 3km within the Dedham Vale AONB and a further 5.4km within the Stour Valley.

The project comprises the following principal components:

Construction and operation of a 400kV electricity transmission reinforcement between Bramford Substation and Twinstead Tee comprising:

- Installation of c.19km of 400kV overhead line.
- Installation of c.56 new steel lattice pylons (c.50m tall); and
- Installation of c.8km of 400kV underground cables.
- The realignment of the existing 400kV overhead line to the north and west of Hintlesham Woods, to facilitate the use of the existing swathe through the woods by the new 400kV line.
- Construction and operation of four CSE compounds (including permanent access roads), namely CSE Compound Dedham Vale East, CSE Compound Dedham Vale West, CSE Compound Stour Valley East and CSE Compound Stour Valley West.
- The removal of approximately 25km of the existing 132kV overhead line and supporting pylons between Burstall Bridge and Twinstead Tee.
- The removal of approximately 1.5km of the existing 400kV overhead line and supporting pylons between Twinstead Tee and the proposed CSE compound at Stour Valley West.
- Construction and operation of a new 400/132kV GSP substation (including
- Permanent access road) at Butler's Wood, to the west of Twinstead, and associated works (including new underground cables) to tie this into the existing 400kV and 132kV networks.

- Temporary overhead line diversion from 4YLA005 – 4YLA003 to allow the building of the proposed CSE compound at Stour Valley West.
- Temporary land to facilitate construction, which would include construction compounds, haul routes and laydown areas.
- Temporary minor amendments to the existing highway network to facilitate construction vehicles.
- Environmental mitigation and enhancement, including tree planting.

The AONB team acknowledge that the current alignment under consideration is indicative only at this stage and may be subject to change.

Geographical Scope

Paragraph 1.3.4 states

‘The Scoping Boundary includes parts of the Dedham Vale Area of Outstanding Natural Beauty (AONB), which is designated as an exceptional example of a lowland river valley. The landscape comprises a broadly flat plateau dissected by several river valleys. These give rise to lower-lying valley areas surrounded by areas of higher ground. The river valleys run in a broadly northwest–southeast direction and include the Rivers Brett, Box and Stour.’

Paragraph 1.3.4 of the Scoping Report makes no reference to the Stour Valley project area that abuts the Dedham Vale AONB. The Stour Valley project area extends upstream of the AONB, following the River Stour, forming the boundary between Essex and Suffolk. The Stour Valley project area is a well-established recognisable area and has been subject to local authority funding for over 30 years and subject to a management plan agreed by a wide range of partners from around 2001.

The Stour Valley project area covers 302 square kilometres (around 181 square miles) from the AONB boundary at Wormingford, it extends westwards towards Steeple Bumpstead and Haverhill and northwards towards the Great Bradley on the Cambridgeshire border. It extends 3-4 km kilometres either side of the River Stour with extensions along the Bumpstead Brook, Belchamp Brook and River Glem.

The Stour Valley project area does not benefit from the same level of statutory protection as the Dedham Vale AONB, however as recognised in the Dedham Vale AONB and Stour Valley Management Plan 2016-21 (and soon to be published 2021-26 version). Parts of it exhibit many of the similar characteristics as the neighbouring nationally designated landscape.

The AONB Partnership, a grouping of around 25 organisations with the purpose to act as a champion for the area, has had an aspiration to include part of the Stour Valley project area within an extension to the Dedham Vale AONB since 2009. This is discussed further under Section 6 of this response.

The Stour Valley project area is also considered to be a Valued Landscape. Paragraph 170(a) of the National Planning Policy Framework states that planning policies and decisions should contribute to and enhance the natural and local

environment by: 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).

The AONB Partnership commissioned a Valued Landscape Assessment Report for the Stour Valley project area (Farmer 2019) to provide evidence about the special qualities that make it a Valued Landscape.

The Scoping Boundary includes land within the potential AONB extension area and the Stour Valley project area, both of which could be directly or indirectly impacted by the reinforcement of the network between Bramford to Twinstead.

Section 1.3 of the Scoping Report should therefore be amended to reference the Stour Valley project area for accuracy.

2. Regulatory and Planning Policy Context

The AONB team broadly concurs with the Legislation, Policy and Guidance included in section 2.2 of the Scoping Report (paragraphs 2.2.1 - 2.5 2.5.9) but makes the following points.

2.4 Countryside and Rights of Way Act (2000)

The AONB team welcome the reference to the Countryside and Rights of Way Act (2000) in paragraph 2.4 of the Scoping Report.

Section 85 of the Countryside and Rights of Way Act (2000) places an explicit duty on relevant authorities to have regard to the purpose of conserving and enhancing the natural beauty of an AONB when exercising or performing any function in relation to or so as to affect an AONB. The AONB team considers that this includes National Grid as a statutory undertaker.

This Section 85 Duty of Regard applies to all functions, not just those relating to planning and is applicable whether a function is statutory or permissive. It is applicable to land outside as well as within an AONB, where an activity may have an impact on an AONB. The requirement is to 'conserve and enhance' and both aspects are required to be addressed.

In relation to planning, the Duty of Regard applies in respect of both plan making and decision taking. It is good practice to consider the Duty of Regard at several points in the decision-making process.

National Grid should therefore provide written evidence in the Environmental Statement and in any other relevant documents to demonstrate how they have met or will meet their Section 85 obligations.

2.5 National Planning Policy Framework

The National Planning Policy Framework is referenced in paragraph 2.5 9 but there is no reference to the Planning Practice Guidance in section 2 of the Scoping Report.

It is acknowledged that the application for the Bramford to Twinstead project will be determined by the Planning Inspectorate, under the Nationally Significant Infrastructure Projects process, the AONB team consider that the Planning Practice Guidance, should be a material consideration in the Development Consent Order process, and what it has to say about development within the setting of nationally designated landscape.

The national Planning Practice Guidance published by Government provides amplification on the National Planning Policy Framework and explains key issues in implementing the policy Framework. The guidance regarding AONBs was updated in 2019. It recognises that where poorly located or designed, development within the settings of AONBs can do significant harm.

The Planning Practice Guidance (Paragraph: 042 Reference ID: 8-042-20190721) states:

‘Land within the setting of these areas often makes an important contribution to maintaining their natural beauty, and where poorly located or designed development can do significant harm. This is especially the case where long views from or to the designated landscape are identified as important, or where the landscape character of land within and adjoining the designated area is complementary. Development within the settings of these areas will therefore need sensitive handling that takes these potential impacts into account.’

National Grid must consider the full impacts on land within the setting to the AONB when developing proposals for the reinforcement of the power network between Bramford to Twinstead.

Dedham Vale AONB and Stour Valley Management Plan 2016-21

The Scoping Report makes no reference to the Dedham Vale AONB and Stour Valley Management Plan 2016-21, or any subsequent revisions as appropriate in section 2 of the Scoping Report

Section 89 of the Countryside & Rights of Way Act 2000 requires a Management Plan to be produced for each AONB. AONB Management Plans are statutory documents and should be given significant weight in decision making.

The Statement of Significance relating to the AONB in Dedham Vale AONB and Stour Valley Management Plan 2016-21 states:

‘the area retains a rural charm and tranquillity and is largely free of infrastructure associated with modern life’

With regards the Stour Valley project area, the Statement of Significance States

‘Much of the Stour Valley project area shares similar characteristics to the Dedham Vale AONB, particularly the area nearest the existing AONB’

Objective 3.2.6 of the Dedham Vale AONB and Stour Valley Management Plan 2016-2021 seeks to ensure that:

'Infrastructure is fit for purpose and does not detract from the qualities of the area including its relative tranquillity.

The AONB team consider that National Grid should give great weight to all the relevant objectives in the Dedham Vale AONB and Stour Valley Management Plan 2016-21 (and subsequent plans) when developing proposals for the reinforcement of the power network between Bramford to Twinstead.

The AONB team considers that if the above considerations are met then the applicant has considered the required regulatory and planning policy context in respect of the AONB.

Section 6. Landscape and Visual Impact (LVIA)

The AONB team consider that the LVIA should follow good practice as set out in GLVIA version 3.

In addition to assessing effects on the landscape (the landscape effects); and effects on views and visual amenity as experienced by people (the visual effects), the LVIA must also consider impacts on natural beauty, especially where the proposed route passes through the AONB.

Natural Beauty encompasses the following factors - landscape quality, scenic quality, relative wildness relative tranquillity, natural heritage features and cultural Heritage. The Dedham Vale's defined natural beauty and special qualities were assessed by a report commissioned by the AONB Partnership in 2016¹. An assessment of the impact on the proposals on these indicators must be completed as part of the LVIA /EIA.

As poorly located or designed development within the settings of AONBs can do significant harm (PPG 2019), the AONB team consider that National Grid should consider the full impacts on land within the setting to the AONB when developing proposals for the application.

The AONB team has produced a Position Statement on Development within the Setting of the Dedham Vale AONB. It does not define what constitutes setting in terms of physical distance from the AONB boundary.

In this instance the AONB team consider that the proposed 5km and 10km selected respectively for the Study Area and Zone of Theoretical Visibility mapping for the LVIA are appropriate to enable impacts within the AONB and within its setting and within the Stour Valley project area to be properly considered.

Paragraph 6.4.12 references the proposal to extend the Dedham Vale AONB.

¹ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Natural-Beauty-and-Special-Qualities-and-Perceived-and-Anticipated-Risks-Final-Report-July-2016-1.pdf>

The AONB Partnership has a long-held aspiration, communicated to Natural England as body that can recommend a boundary review to the Secretary of State in 2009 to include part of the Stour Valley project area within an extension to the Dedham Vale AONB.

The AONB Partnership commissioned a number of studies to support the extension to the AONB. This included the Special Qualities of the Dedham Vale AONB Evaluation of area between Bures and Sudbury Area² (Alison Farmer Associates, 2016). This study identified an area that in the opinion of the consultant met the criteria for designation as AONB. The organisation with responsibility to develop AONB boundary reviews for consideration by the Secretary of State, Natural England, confirmed in March 2021 that the proposal for boundary variation was registered.

Lord Gardiner of Kimble, Parliamentary Under Secretary of State with responsibility for AONBs wrote to the President of the Dedham Vale Society (4 May 2021) and noted:

...proposals for the extension of the Dedham Vale AONB have not been formally assessed and that an extension has not, therefore, been ruled out for the future. I have also been assured that Natural England will communicate further with local proposers of National Park and AONB designations or variations in due course.

For these reasons, the AONB team urge, National Grid to take a precautionary approach and seek to meet corporate and social responsibility by treating the potential extension area as an AONB. As such, the EIA should assess the impacts of proposals on the natural beauty within the proposed AONB extension area.

The AONB team consider that the factors outlined above need to be considered in the scope of any assessment relating to the Bramford to Twinstead project.

Overview and Environment Baseline

The AONB team concur with the landscape designated information, landscape character descriptions and the information on Existing Environment and Views for the each of the sections defined within the project Section AB: Hintlesham, Section C: Brett Valley, D Polstead, E: Dedham Vale Area of Outstanding Natural Beauty (AONB) F: Leavenheath/Assington and G: Stour Valley.

The AONB team welcome some of the embedded measures set out in paragraph in 6.5.1 of the Scoping Report particularly proposals to underground the overhead cables in both the Dedham Vale AONB and the part of the Stour Valley project area that has been proposed as an extension to the AONB.

² <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Special-Qualities-of-the-Dedham-Vale-AONB-Evaluation-of-Area-Between-Bures-and-Sudbury-Final-Report-July-2016.pdf>

As outlined in the response to the non-statutory consultation (May 2021), the Dedham Vale AONB and Stour Valley Partnership understand current proposals include the following:

Polstead Heath: a new overhead line alignment to the south of the existing line (referred to as sec D)

- Dedham Vale: a new underground cable section from Heath Road, Polstead Heath to Leavenheath (approximately 4km) (referred to as section E).
- Leavenheath and Assington: a new overhead line alignment to the south of the existing line (referred to as section F)
- Stour Valley an underground cable section from west of Dorking Tye to the Bramford-Braintree-Rayleigh overhead line south of Twinstead Tee (approximately 4km) Referred to as section G)

The AONB team supports the proposal to underground the new 400kV line where it crosses or negatively impacts the nationally designated landscape as overhead lines do not contribute to the statutory purpose of AONBs. The AONB team recognise that hidden archaeology as a defined feature of the AONB, namely part of its cultural heritage. Any proposals to underground transmission lines needs minimise any adverse impacts by selecting a route and method to minimise those negative impacts.

As undergrounding in the AONB and Stour Valley project area was already considered as appropriate before the project was paused, the AONB team does not consider there has been any material change to alter that decision, indeed further evidence has emerged for part of the Stour Valley project area meeting the criteria for AONB status.

The AONB team welcomes the ambition to minimise impacts from the transition infrastructure on the defined qualities of the AONB and Stour Valley project area as per the Valued Landscape Assessment Stour Valley project area³ (Farmer, March 2020)

Transitions between underground cable and overhead lines in the setting of the AONB should not negatively impact on the purpose of the AONB.

The AONB team considers that the EIA should include an assessment of the overhead line between Leavenheath and Assington (section F) to determine if the undergrounding of this section would benefit the AONB through lessening visual impacts of lines viewed from the AONB and potential impacts of the Cable Sealing End Compounds.

The team also welcome that further measures will be embedded into the design of the scheme as the proposals for access roads, construction areas and compounds, new above ground infrastructure e.g. pylons, the proposed CSE (4) compounds and GSP substation are progressed.

³ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Final-Report-Stour-Valley-Project-Area-Valued-Landscapes-Assessment.pdf>

To assist this please find a link to the Selection and Use of Colour in Development for the Dedham Vale AONB (Waygood, 2019)⁴ which will be useful when materials and colour finishes are being decided for equipment, security fencing etc.

The AONB team consider that with the addition of points outlined above, and the evidence base included in the AONB Partnership's response to the non statutory consultation in May 2021⁵ the proposed baseline environmental considerations are acceptable.

Landscape-Related Designations

Paragraph 6.5.4 lists some key commitments to good practice in relation to the LVIA.

GG20 states 'Construction lighting will be of the lowest luminosity necessary to safely perform each task. It will be designed, positioned and directed to reduce the intrusion into adjacent properties, protected species and habitats.

The Scoping Report concludes (paragraphs 6.6.8 & 6.6.14) that lighting will be scoped out on the Environmental Statement. There is no anticipation of significant effects from lighting on designated landscapes or Landscape Character at night during the construction or operational phases of the project. This is because good practice measures have been embedded into the scheme design to manage light spill and because operational lighting required at the proposed GSP substation and CSE compounds will only be switched on when needed.

There is an aspiration to secure Dark Sky status for the Dedham Vale AONB. Construction and operational lighting must also be designed, positioned and directed to reduce light spillage negatively impacting the nationally designated landscape.

The proposal to scope in an assessment of both construction and operation landscape effects on the Dedham Vale AONB and its setting (paragraph 6.6.3) is considered appropriate.

Paragraph 6.6.5 proposes assessing the construction and operation landscape effects on the Stour Valley Special Landscape Area, Brett Valley Special Landscape Area, and Gipping Valley Special Landscape Area.

Babergh and Braintree Local Planning Authorities are moving away from Special Landscape Area designations and are relying more on Landscape Character Assessments as evidence. Any assessment of landscape effects on the Special Landscape Areas should draw on evidence from the relevant Landscape Character Assessments that cover each of the Special Landscape Areas.

Paragraph 6.6.4 proposes that the landscape and visual impacts on the Stour Valley project area will be scoped in and assessed under landscape character in the ES.

⁴ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2020/12/Dedham-Vale-Use-of-Colour-Guidance.pdf>

⁵ [AONB-Partnership-Response-Bramford-Twinstead-Non-Statutory-Consultation-May-2021.pdf \(dedhamvalestourvalley.org\)](#)

While it is acknowledged that the Stour Valley project area has no statutory protection, parts of it are considered to be a Valued Landscape and the Dedham Vale AONB and Stour Valley management plan 2021-26. The AONB team recommends that a precautionary approach is taken regards the assessment of the Stour Valley project area within the Scoping Boundary to ensure compliance with paragraph 170(a) of the NPPF.

The Valued Landscape Assessment Report for the Stour Valley project area is a high-level assessment. The study however offers a suitable methodology and the AONB recommend that this is used as a basis for completing a finer grain Valued Landscape Assessment of the project area that fall within the Scoping Boundary.

Table 6.5 summarises the Proposed Scope of the LVIA Assessment. The AONB team broadly concur with the issues identified to be scoped in and out of the Environmental Assessment.

Landscape Character

Paragraph 6.6.9 concludes that the construction and operation of the different elements of the project i.e. proposed 400kV overhead line, underground cables, CSE compounds, and GSP substation have the potential to impact on landscape character along the proposed alignment route.

The assessment of impacts on landscape character during the construction and operation is therefore scoped into the Environmental Statement, which is considered appropriate.

Views

The conclusions in paragraphs 6.6.14- 6.6.17 to scope out visual effects at night, impacts on views for all receptors outside the ZTV and visual effects on private views is considered appropriate.

Paragraph 6.6.18 concluded that the project has the potential to impact on the visual amenity of people living and moving around the area (communities).

One of the special qualities of the AONB is 'the surprisingly long views from higher ground along the valley in an associated with large skies'

Proposals to scope in the construction and operation impacts on views from the community and from recreational receptors is considered appropriate. The proposed approach will need to ensure that impacts on the important long views referenced above are appropriately assessed.

6.7 Proposed Assessment Methodology

Site-Based Assessment Viewpoints

With regards to the selection of viewpoints (paragraphs 6.7.12- 6.7 -19), the AONB team would like the opportunity to review and comment on viewpoints being

considered for use within the LVIA. This would enable the AONB team to ensure it considered the method acceptable.

Wireframes and Photomontages (paragraphs 6.7.20- 6.7 21)

The AONB team fully supports the proposal to include Wireframes and Photomontages in the LVIA. The team request that visualisations are also produced of transition infrastructure and towers to improve understanding around visual impacts. While lighting has been scoped out of the EIA, it would be helpful if a couple of night time images could be included just to evidence that light pollution from the development will not be significant or harmful to the AONB and Stour Valley.

Sections 7 & 8 Biodiversity & Historic Environment

8.2 Regulatory and Planning Policy Context

Para 8.2.1

Paragraphs 5.8.12 and 5.8.14 from Overarching National Policy Statement EN-1 have been considered. We consider that the following are also relevant and should be taken into account:

- Para. 5.8.11: In considering applications, the IPC should seek to identify and assess the particular significance of any heritage asset that may be affected by the proposed development, including by development affecting the setting of a heritage asset.
- Para. 5.8.13: The IPC should take into account the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution of their settings and the positive contribution they can make to sustainable communities and economic vitality. The IPC should take into account the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials and use.
- Para. 5.8.15: Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss.
- Para. 5.8.18: When considering applications for development affecting the setting of a designated heritage asset, the IPC should treat favourably applications that preserve those elements of the setting that make a positive contribution to, or better reveal the significance of, the asset. When considering applications that do not do this, the IPC should weigh any negative effects against the wider benefits of the application. The greater the negative impact on the significance of the designated heritage asset, the greater the benefits that will be needed to justify approval.

NPS EN-5 *Electricity Networks Infrastructure* also makes additional specific references to heritage assets and archaeology, including para 2.2.6 on factors influencing site/route selection by applicants for electricity networks NSIPs:

- Para. 2.2.6: As well as having duties under section 9 of the Electricity Act 1989, (in relation to developing and maintaining an economical and efficient network), developers will be influenced by 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.” Depending on the location of the proposed development, statutory duties under section 85 of the Countryside and Rights of Way Act 2000 and section 11A of the National Parks and Access to the Countryside Act 1949 may be relevant.

8.4 Existing Baselines

Data Sources

Para 8.4.1 The revised Design Manual for Roads and Bridges (2020) [8c51c51b-579b-405b-b583-9b584e996c80 \(standardsforhighways.co.uk\)](https://www.standardsforhighways.co.uk/8c51c51b-579b-405b-b583-9b584e996c80) states under *Baseline scenario*:

3.9 Where desk-based studies suggest that available information is inadequate for the purpose of the assessment, field surveys shall be undertaken to enhance the data CIFA Standards [Ref 1.], CIFA Field evaluation [Ref 3.] and CIFA Geophysics [Ref 4.].

3.9.1 In addition to national registers and local cultural heritage records, historical maps and aerial photographs, relevant books, journals, previous reports, LiDAR and geotechnical data may be consulted.

The NG Scoping Opinion Existing Baseline Data Sources listed at 8.4.1 call for the Suffolk HER and statutory list of listed buildings to be consulted but many of the other documents referred to are only available for Essex (Aerial Photographic Assessment and protected lanes). Babergh District Council does not have a district wide local list or adopted criteria, and therefore a more comprehensive set of documents to include Neighbourhood Plans should be included to ensure that the Suffolk section is not disadvantaged when preparing the baseline data.

The Dedham Vale and Stour Valley AONB Management Plan and the Alison Farmer Associates Valued Landscape Assessment Stour Valley Project Area (March 2020) should also be included as sources of information on cultural heritage.

8.6 Likely significant effects

Effects on the Setting of Historic Buildings during construction and operation

To be consistent with National Planning Policy Framework terminology (NPPF paras 193 – 196) an assessment of any ‘harm’ to the significance of the heritage asset should be recorded as either ‘substantial’ or ‘less than substantial’.

The AONB team does not wish to comment specifically on the detail of the proposed scope of the Ecological Impact Assessment for the project or the detailed methodology for assessing impacts on the Historic Environment.

The Dedham Vale AONB Management Plan 2016-2021 lists the following habitats and features as contributing to the special qualities of the Dedham Vale AONB

- Valley bottom grazing marshes with associated drainage ditches and wildlife
- Naturally functioning River Stour with associated tributaries, meres and historic river management features
- Semi natural ancient woodlands on valley sides with associated wildlife
- Traditional field boundaries intact and well managed

Areas of Outstanding Natural Beauty should be places of rich, diverse and abundant wildlife. Nature recovery is central to the conservation and enhancement of natural beauty.

The AONB team is fully committed to significantly increasing the scale and pace of nature conservation activity within the designated landscape.

In 2019, the 34 English Areas of Outstanding Natural Beauty made a collective Declaration on Nature in Colchester in 2019, known as the Colchester Declaration 2019⁶

The Colchester Declaration is a collective Declaration on Nature across AONBs, that sets out a strategy for change. It includes targets for nature recovery to redress the declines in species and habitats within the context of a wider response to climate change.

Included within the short-term targets are for each AONB to produce a Nature Recovery Plan but also some ambitious longer-term targets to aim for by 2030. These include:

- 200,000 hectares of SSSI’s in AONBs – in favourable condition.
- 100,000 hectares of wildlife-rich habitat outside of protected sites will have been created / restored in AONBs.
- 36,000 hectares of new woodland will have been planted or allowed to regenerate in AONBs.
- Improve the conservation status of at least 30 species relevant to AONBs.

⁶ <https://landscapesforlife.org.uk/projects/colchester-declaration>

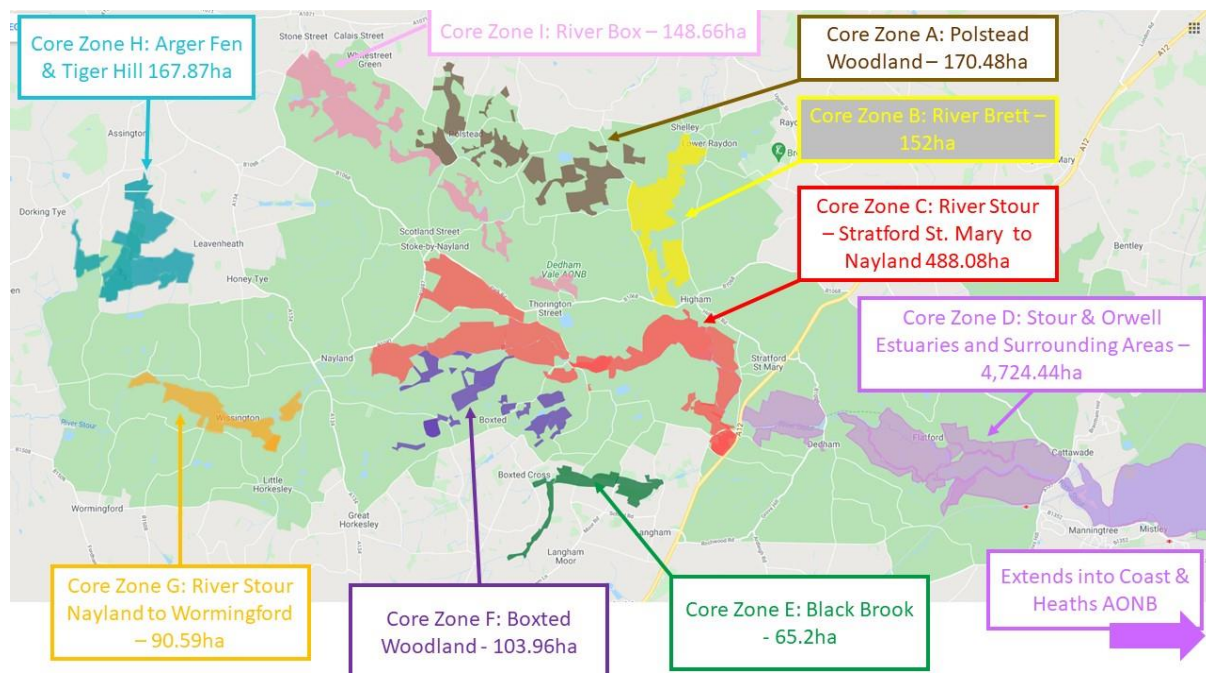
The Dedham Vale AONB Nature Recovery Plan

The developing plan has nine Nature Recovery Core Zones that have been identified. These core zones are made up of the largest connected expanses (in some cases fragmented) of wildlife rich sites and priority habitats within and connected to the AONB.

Four of the Nature Recovery Zones fall within or close to the current Scoping Boundary for the project and include Polstead (Zone A), River Brett (Zone B), Agar Fen and Tyger Hill (Zone 3) and River Box (Zone I).

These are shown in the Figure 1 below

Figure 1 – Nature Recovery Zones



As part of this work, Hazel Dormouse has also been chosen as the flagship recovery species for the Dedham Vale AONB.

Proposals should seek to prioritise avoiding damage to the key habitats and species that help define the character of and underpin the designation as AONB. Where they are impacted measures must be secured to mitigate any damage or loss. The AONB team welcome that National Grid will seek to deliver 10% Biodiversity Net Gain

Biodiversity mitigation measures should seek to support and deliver against the objectives of the Dedham Vale AONB Nature Recovery Plan and contribute to meeting targets in the Colchester Declaration 2019.

The AONB team considers that the impacts of the proposals should consider the impacts on wildlife and in particular the developing AONB nature recovery plan.

Historic Environment

With regards the Historic Environment the special qualities of the AONB are summarised in the Dedham Vale AONB & Stour Valley 2021-26 Management Plan as:

- Historic villages with timber framed housing and prominent churches
- Apparent and buried archaeology indicating millennia of human activity

In terms of Cultural Heritage, the special quality of the AONB is summarised as

- Iconic lowland river valley associated with the artist John Constable RA, the views he painted are still recognisable today

Many other artists are associated with the area. Thomas Gainsborough is particularly associated with areas of the Stour Valley.

Proposals should not adversely impact on these defining qualities and should seek to conserve and enhance them.

The AONB team consider that the scoping report should consider further the impacts on cultural heritage.

Section 15. Socio Economic, Recreation and Tourism

The Scoping Report concludes that the proposed project could cause direct effects to the local economy and local businesses, through severance or disruption to the accesses to businesses or due to traffic congestion caused by construction vehicles and potentially indirect effects due to loss of business.

A standalone socioeconomics, recreation and tourism chapter is not proposed for inclusion within the ES. This is because many of the contributory factors affecting socioeconomics, recreation and tourism during construction (visual, noise, dust and traffic) will already be considered within other chapters within the Scoping Report.

Also, given the type, temporary duration and level of potential construction phase effects, and recognising that any likely significant effects from the various topics will already be reported within separate chapters, it is not considered that additional separate reporting is required in the ES.

The Dedham Vale AONB and Stour Valley is a place to enjoy. The area offers many tourism, leisure, recreational and educational opportunities. The tourism industry relies on these opportunities which are vital to the local economy.

The identified tourism within the Dedham Vale AONB is worth £68M and supports 1,490 jobs (Volume and Value study 2020).

The landscape of the Stour Valley project area is recognised as making a significant contribution to the visitor economy in the area. It is worth £49M and supports 1,283 jobs. These figures are expected to grow substantially in future due to:

- Significant investment in the attractions of the Gainsborough's House Arts Centre in Sudbury.
- Increase in domestic holidays including visitors wishing to visit areas of cultural importance such as visit the Stour Valley which inspired Thomas Gainsborough,
- John Constable and many other artists.
- EU LEADER funding in the Stour Valley to enhance the visitor facilities in the area.
- Recognition of the importance of enhancing personal health and well-being by undertaking informal recreation
- Increasing populations in surrounding towns, leading to larger potential audiences.

There has been a resurgence in interest in the Stour Valley landscape that has seen significant National Lottery Heritage Fund investment in Gainsborough's House museum which will contribute to further interest in the Stour Valley project area in terms of landscape quality and value to tourism. This follows on from LEADER funded work to enhance the Stour Valley for visitors. Both projects will contribute to the value of the Stour Valley for the visitor economy at a time when the domestic visitor economy is recognised as becoming more important.

The AONB team's primary concern is that more National Grid infrastructure within the AONB (Sealing End Compounds) and its setting, and across the Stour Valley project area (overhead 400kv overhead line and substations) will reduce the attraction of the area and the numbers of visitors.

In its response to the non-statutory consultation in May 2021 the Dedham Vale Area of Outstanding Natural Beauty (AONB) and Stour Valley Partnership identified a need for an assessment into what impacts the visitor economy. This need for such an assessment is re-iterated in this team response.

The AONB team considers that further assessment of the impacts on socio economic, recreation and tourism factors of the proposals are required to fully understand the impacts of the proposals.

Section 19. Environmental Management and Mitigation

While the EIA will embed good practice measures and mitigation for the various subjects to be scoped into the EIA, the AONB team wish to inform National Grid about work already being supported within the AONB.

The Landscape Enhancement Initiative (LEI) funding is retrospective mitigation for existing National Grid infrastructure impacting on the AONB. The scheme seeks to support landscape-scale projects which reduce visual impact, improve visual amenity and enhance landscape character, generally within 3km of the National Grid lines. In Dedham Vale, the team is currently working with the Stour Valley Farmer Cluster on a £600k funding application. Projects put forward in the Expression of Interest include enhancements to hedges, woodlands, pollards and orchards – fencing & water provision to support traditional grazing on pasture and grazing marsh – as well as works to some vernacular buildings.

Proposals coming forward through the Bramford - Twinstead should not undermine or compromise the work being implemented through the LEI scheme and should complement the LEI enhancements and enhancements that will be delivered through the Colchester Declaration and Nature Recovery Plan for the Dedham Vale AONB.

Within the Stour Valley project area, mitigations should also be informed by opportunities for enhancements included in the Valued Landscape Assessment Report for the Stour Valley project area.

The AONB team considers that further assessment of impacts in the Stour Valley project area could draw on the findings of this Valued Landscape Assessment.

Bures St Mary Parish Council Response to the Environmental Impact of the proposed National Grid Proposal for Bramford to Twinstead.

We would suggest that the National Grid's EI Scoping Report is incomplete. It does not take into account up-to-date locally provided information and it does not account for the socio-economic impact.

We were one of eleven parish councils who signed a Pre-Application Protocol Letter Before claim for Judicial Review providing ground for an extension to the consultation period. This was refused. The consultation closed on 6th May and on 11th May the Planning Inspectorate issued notification of the Scoping Report. There was clearly no opportunity for the content of the consultation exercise to be taken into account.

The response from Bures St Mary Parish Council to the consultation identified an offshore route as desirable. The neighbouring parish of Assington also holds this view. We believe that greater consideration should be given to an offshore route which would reduce the impact on East Anglia and, if there is an inland route the cable should be undergrounded to mitigate ongoing and cumulative impact. It is important, for transparency, for parishes who are suggesting the undersea option to know whether this has been considered and the costing of such a plan.

National Grid appears to be intending to use the same technology as that proposed by the earlier proposal in 2012. The use of the latest technologies, Superconducting cables, as manufactured by Nexans would be less disruptive to the environment. This technology is in use in Germany, France and other countries. The method of undergrounding this cable is important. Traditional undergrounding approaches such as in the proposal being considered have a significant impact on the countryside. National Grid needs to look carefully for the most appropriate methods to employ and to undertake undergrounding of all cables in the Stour Valley at the same time and we believe this must be an important component of the Scope.

We are also concerned about the proposed construction access to the Sealing End at Sawyers Farm. Whilst this does not form part of our preferred option, it is very important that, if work of this type occurs in this location, the impact on the beauty of the countryside, the flora and fauna and the listed building is minimal.

Visual impact of the proposed pylons

In Bures St Mary there is a considerable visual impact along FP 1 where there are views towards Sawyers Farm and across the valley into Essex. FP2 from the layby on Sudbury Road up to Corn Hall similarly affords beautiful views across the Stour Valley.

As a Parish Council we are fully committed to the extension of the Dedham Vale AONB. In May of this year Environment Minister, Lord Gardiner, stated that National Grid must "do what it reasonably can to mitigate any effect" on the Dedham Vale Area of Natural Beauty (AONB) and the Stour Valley. It is vital that this valley, so important to so many artists, is protected for future generations and not blighted by a cheaper measure in the short run.

Socio-economic impact

Since the time of the previous application tourism and other businesses based in the Bures area have grown considerably. It is no longer the case that most of the tourism is in Dedham and Flatford. NG sees the need to underground the cable in the AONB and the Stour Valley which shows that they see the importance of the tourism industry to the area. It needs to show the commitment asked for by Lord Gardiner to the area of the proposed extension and throughout the Stour Valley. The Suffolk Wildlife Trust Nature Reserve at Arger Fen and Spouse's Vale attracts far greater number than it did ten years ago. The Bures Dragon on the hillside was created in 2012 and has enchanted and fascinated many visitors since this time. The view from St Stephen's Chapel across the hill to the dragon is magnificent. Little Ropers Woodland Camping and the Manse Bed and Breakfast provide accommodation as do the Airbnb options in the area. The monthly markets on Bures Common attract as many visitors from out of the village as from the village itself and the local businesses selling there benefit from the interest. River related activities have also increased; these include fishing, canoeing, paddle boarding and swimming.

The National Grid scheme is of great importance to the power supply in the future. It is of vital importance that the best available technology is used and not the most expedient. If this means a more expensive scheme it is a price worth paying to give future generations a better system and the Stour Valley without the blight of pylons.

Cumulative impact

The Parish Council is aware of the proposed Norwich to Tilbury reinforcement which also uses the Bramford-to-Twinstead corridor, with considerable potential for cumulative impact throughout the corridor. This full impact must be scoped-in to the Environmental Impact Report, and any potential cost-saving that could be achieved by undergrounding all lines together should be taken into account in the economic argument for the overhead line as opposed to undergrounding.

Summary

We expect to see

- The 'evaluation area' for the extension of the Dedham Vale AONB be treated as AONB and therefore any and all cabling be undergrounded there.
- Evidence that recent socio economic impact assessments have been carried out for the whole area which would be affected by the National Grid's proposal.
- Evidence to be shown that information from the consultation process be part of the Scoping Report.
- Evidence that an undersea option has been considered and the reasons for not including this in the proposal

Burstall Parish Council
24 Church Crescent
Sproughton
Suffolk
IP8 3BJ

The Planning Inspectorate
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol, BS1 6PN

Your Ref: EN020002

7 June 2021

Dear Planning Inspectorate

Application by National Grid Electricity Transmission plc (the Applicant) for an Order granting Development Consent for the Bramford to Twinstead overhead line project (the Proposed Development)

Burstall Parish Council is disappointed that National Grid has paid no regard to its informal consultation submission in completing the Scoping Report. Contrary to best practice, we can find no evidence of recent community engagement in this Report and we are aware of adjacent parishes, particularly Flowton Parish Meeting, that have neither been consulted nor invited by the Inspectorate to respond to the Scoping Report.

Burstall and its neighbouring parishes already bear the brunt of the cumulative impact of multiple electricity infrastructure developments at the Bramford sub-station site.

These include the substation itself which will be modified and may be extended in work associated with the proposed new transmission line. Some £14 million has been allocated by National Grid for such work. No such associated work is defined in the Scoping Report.

A list of relevant existing installations, applications and known projects at pre-application stage is provided in Appendix 1.

The significance of cumulative impact has been confirmed by the High Court in the recent case of R (Pearce) v Secretary of State for Business, Energy and Industrial Strategy [2021] EWHC 326 (Admin). As Justice Holgate stated:

"...as a matter of general principle, a decision-maker may not grant a development consent without, firstly, being satisfied that he has sufficient information to enable him to evaluate and weigh the likely significant environmental effects of the proposal (having regard to any constraints on what an applicant could reasonably be required to provide) and secondly, making that evaluation."

This Parish Council therefore proposes that either the Scoping Report be revised and re-submitted for consideration or the SoS makes the necessary requests for additional information.

Assessment of visual impact

The Holford Rules and subsequent iterations of visual amenity principles¹ published by National Grid appear entirely inadequate for the cumulative impact at Burstall.

This impact is not recognized in the Scoping Report and the provision for visual impact assessment is therefore inadequate.

Land to the East of the substation sites is locally designated as a Special Landscape Area and the baseline should be recognized.

Socio-economic impacts

Socio economic impacts cannot be scoped out merely on the grounds that parts of the line would be placed underground (Report ref 15.6.9).

Burstall and the surrounding parishes have developed a successful tourist industry which makes a significant contribution to the livelihoods of residents. Socio economic impacts should be scoped in.

Electric and Magnetic Fields and wellbeing

We note the explanations concerning EMFs provided by National Grid in the context of health and wellbeing (chapter 16).

While this may apply to a single overhead transmission line, the scale of development at Burstall is such that additional detailed evaluation is required. Therefore this matter should not be scoped out.

Neither does National Grid take any account of the potential harm to emotional wellbeing that would be caused by the industrialisation of a valued landscape. The regenerative value of such areas is recognized in many studies and also in recent Government sponsored reviews².

¹ Document 5.4.7B – Holford Rules and Visual Amenity Principles, National Grid (Richborough Connection Project) Order - 2016

² Dasgupta Review – April 2021

Appendix 1

List of existing installations, applications and published plans at or around the Bramford substation site in Burstall

National Grid substation – existing substation including UKPN distribution

EA1 substation – existing substation for offshore wind generation

Multiple transmission and distribution overhead lines - existing

Anesco battery storage – approved

Energypeople Ltd – 49.9 MW gas fired energy reserve generation unit - approved

Anglian Water strategic pipeline – outline plans published

EA3 substation – additional substation for EA3 connection - approved

EA3 – additional underground electricity cables from offshore generation – application pending

ENSO – 242-acre solar park – application submitted*

Greybarn – 144-acre solar park – application submitted

Bramford to Twinstead - additional overhead transmission line - scoping

EDF – 202-acre solar park – application pending

AENC – Norwich Main to Bramford transmission line – NOA 20/21 & National Grid

ATNC – Bramford to Tilbury transmission line – NOA 20/21 & National Grid

*Application includes significant battery energy storage system (BESS). Other solar applications may include BESS.

Dear Madame

Reference
EN020002

Date
21 May 2021

Cadent Gas Limited
Brick Kiln Street, Hinckley
Leicestershire LE10 0NA
cadentgas.com

Laura Feekins-Bate



Cadent Gas have **No Objection** to the above proposal.

To help prevent damage to our assets we request that an Informative Note is added into the Decision Notice as below:

Cadent Gas own and operate the gas infrastructure within the area of your development.

Thank you for consulting Cadent Gas for this application.

We do not object to the proposal in principle.

Please note the presence of a high pressure gas pipeline in close proximity to the proposed development. The pipeline has a 3m building proximity distance (BPD). No buildings including footings and overhangs are permitted within 3m of the pipeline. Landscaping 3m either side of the pipeline is also restricted and must have formal written approval from Cadent Gas before commencing. The developer is to engage with plantprotection@cadentgas.com before commencing any works on site.

The high pressure pipeline is classed as a 'Major Accident Hazard High Pressure Pipeline' therefore the application will need to be put through the HSE LUP process to confirm if the proposal is acceptable.

It is the respective planning authorities responsibility to submit the applications through this review process (To date it doesn't appear that [REDACTED] [REDACTED]@planninginspectorate.gov.uk have carried this out?). The developer should also be aware of the requirements / limitations when considering layouts.

I have attached our guidance booklet for information.



Contact our Plant Protection Team for approval before carrying out any works on site and ensuring requirements are adhered to. Email plantprotection@cadentgas.com. Alternatively, you can register on <https://www.linsearchbeforeudig.co.uk/>. This service is free of charge

If you need any further information or have any questions about the outcome, please contact us at plantprotection@cadentgas.com or on 0800 688 588.

Yours faithfully

Plant Protection Team

Specification for safe working in the vicinity of Cadent assets - requirements for third parties



Cadent contact details



Disclaimer

This document is provided for use by third parties for safe working in the vicinity of Cadent assets. Where this document is used by any other party it is the responsibility of that party to ensure that this document is correctly applied.

Mandatory and non-mandatory requirements

In this document:

shall: indicates a mandatory requirement.

should: indicates best practice and is the preferred option.

If an alternative method is used then a suitable and sufficient risk assessment shall be completed to show that the alternative method delivers the same, or better, level of protection.

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Smell gas? Call the free, 24 hour National Gas Emergency Service:

0800 111 999*

*All calls are recorded and may be monitored

Introduction



Specification for safe working in the vicinity of Cadent assets – requirements for third parties.

This specification is for issue to third parties carrying out work in the vicinity of Cadent gas assets and associated installations. It is provided to ensure that individuals planning and undertaking work take appropriate measures to prevent damage.

Any damage to a gas asset, or its coating can affect its integrity and can result in failure of the asset with potentially serious hazardous consequences for individuals located in the vicinity.

It is therefore essential that the safety advice outlined in this document is complied with when working near to a Cadent asset. If Cadent consider any work to be in breach of the requirements stipulated in this document, then the Cadent responsible person will request that work is suspended until the non-compliances have been rectified.

Keeping you, your workers and the public safe when working near our pipelines.



The Pipelines Safety Regulations 1996 state that 'No person shall cause such damage to a pipeline as may give rise to a danger to persons' (Regulation 15). Failing to comply with these requirements could therefore result in prosecution by the Health and Safety Executive (HSE). The requirements in this document are in line with the requirements of the Institution of Gas Engineers and Managers (IGEM) recommendations *IGEM/SR/18 Edition 3 Safe Working Practices to Ensure the Integrity of Gas Assets and Associated Installations* and the HSE's guidance document *HS(G)47 Avoiding Danger from Underground Services*. It is the responsibility of the third party to ensure that any work carried out also conforms with the requirements of the Construction and Design Management (CDM) Regulations 2015 and all other relevant health and safety legislation.

Always contact Cadent prior to carrying out any work in the vicinity of Cadent assets

Contact Cadent

Contact Cadent on 0800 688588 to obtain formal consent at least 14 days before starting work. See [Section 2](#) for more details.

Consider safety

Consider the safety requirements – [Section 3](#) of this document.

Inform Cadent and request asset location

For asset location please contact Cadent at least 14 days before work starts to request formal asset location. See [Section 4](#) of this document.

Observe restrictions

Observe Cadent restrictions on the allowed proximity of mechanical excavators and other power tools and the measures to protect the asset from construction vehicles when carrying out the work – [Sections 5, 6.1, 6.2, 7.1 and 7.2](#) of this document. **Note: Cadent may wish to monitor the work, consult Cadent to confirm whether or not this is the case.**

Specific activities

- No-dig techniques
- Change in cover
- Piling
- Seismic surveys
- Hot work
- Blasting
- Demolition
- Surface mineral extraction
- Landfilling
- Pressure testing
- Deep mining
- Wind and solar farms
- Crossing with plant and equipment

See [Sections 6.3 & 7.3](#)

Consult Cadent

Consult Cadent prior to any backfilling over, alongside or under the asset and obtain Cadent’s agreement to proceed. Normally Cadent requires 48 hours’ notice prior to backfilling. See [Sections 6.4 & 7.4](#) of this document.

Important: This flowchart should be used in conjunction with the entire SSW22 document and not in isolation. If, at any time during the works, the asset is damaged even slightly then observe the precautions in Section 9 of this document.

If in doubt, contact Cadent.

1 Scope

This specification sets out the safety precautions and other conditions associated with working in the vicinity of all Cadent assets, located in both negotiated easements (see [Section 11](#)) and public highways.

2 Formal consent

Cadent assets are located either, within an easement agreed with the landowner (at the time of installation) or within the highway. As the required arrangements for working within an easement and working within the highway differ, this document highlights the specific requirements for these two types of area.

No work shall be undertaken in the vicinity of the asset without the formal written consent of Cadent.

Any documents handed to contractors, or other individuals undertaking work (e.g. farmer, local authority etc.), on site by Cadent, shall be signed for by the site manager (to be shared with all individuals on site).





2 Formal consent

2.1 Within an easement

The promoter of any works (see Section 11) within an easement (or within 3m of asset location) shall provide Cadent with details of the proposed works including a risk assessment and method statement of how the work is intended to be carried out. Work shall not go ahead until formal written consent has been given by Cadent. This will include details of Cadent's protection requirements, contact telephone numbers and the emergency telephone number. On acceptance of Cadent's requirements, the promoter of the works shall give Cadent at least 14 days' notice before commencing work on site.

In addition to formal written consent, an easement crossing agreement (deed of indemnity) may be required. This shall be discussed with the Cadent responsible person prior to the commencement of the works.

2.2 Within a highway

Work shall be notified to Cadent in accordance with the requirements of The New Roads and Street Works Act (NRSWA) and HS(G)47. The promoter of any works within the highway should provide Cadent with details of the proposed works, including a risk assessment and method statement of how the work is intended to be carried out. This shall be submitted at least 14 days before the planned work is to be carried out. If similar works are being carried out at a number of locations in close proximity, a single risk assessment and method statement should be adequate depending on the nature of the works. Work should not go ahead until formal written consent has been given by Cadent. This will include details of Cadent's protection requirements, contact telephone numbers and the emergency telephone number.

3 Health, safety and environmental considerations

3.1 Safe control of operations

All working practices shall be agreed by Cadent prior to work commencing. All personnel working on site shall be made aware of the potential hazard of the asset and the actions they should follow in case of an emergency.

3.2 Deep excavations

Special consideration should be given to the hazards associated with deep excavations when working within or at a close proximity to the asset.

3.3 Positioning of plant

Unless written authority has been given by Cadent, mechanical excavators and any other powered mechanical plant shall not be sited or moved over an asset location. Mechanical excavators and any other powered mechanical plant shall not dig on one side of the asset when the cab of the excavator positioned on the other side. Mechanical excavators, any other powered mechanical plant, and other traffic shall be positioned far enough away from the asset trench to prevent trench wall collapse.

3.4 Risk assessment

Works in the vicinity of gas assets may have an impact on the safety of the general public, site workers, Cadent staff and contractors, and may affect the local environment. Anyone (e.g. contractors, site workers, farmers, local authorities etc.) working close to the asset, shall carry out suitable and adequate risk assessments. The risk assessment must have acceptance from the Cadent responsible person prior to the commencement of work, to ensure that all such issues are properly considered and risks mitigated.



4 Location of gas assets

Cadent asset records shall be consulted to establish the indicative location of the gas assets in relation to the promoters work area.

Prior to site work commencing the gas assets should be located to verify the indicative location.

This should be carried out through non-intrusive methods utilising pipe locators. Once located the gas assets should be marked out at regular intervals using asset location markers with triangular flags (see [Appendix A](#)) or other suitable methods.

The requirements for trial holes to locate the asset or determine levels at crossing points shall be determined on site by the Cadent responsible person.

For assets exceeding 2 bar, the excavation of all trial holes shall be monitored by Cadent. For assets not exceeding 2 bar, this monitoring will be at the discretion of the Cadent responsible person. Any changes shall be agreed by Cadent.

Safe digging practices, in accordance with HSE publication HS(G)47 should be followed. Direct and consequential damage to gas plant can be dangerous both to employees and to the general public

5 Temporary and permanent protective measures

No temporary or permanent protective measures, including the installation of concrete slab protection, shall be installed over or near to the Cadent asset without the prior permission of Cadent. Cadent will need to approve the material, dimensions and method of installation of the proposed protective measure.

The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to Cadent. Where permanent slab protection is to be applied over the asset, Cadent will normally carry out a coating survey of metallic assets to check that there is no existing damage to the coating prior to the slab protection being put in place.

Cadent shall therefore be given at least 14 days notice prior to the laying of any slab protection to arrange for this survey to be carried out.

Generally, due to the need for future access to below 2 bar gas assets, permanent slabs are not permitted but, can be approved at Cadent's discretion.

The safety precautions detailed in [section 3](#) and either [section 6](#) or [7](#) of this document should also be observed during the installation of the asset protection.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.1 Excavation

6.1.1 In proximity to an asset in an easement

Following location and marking of the asset in agreement with the Cadent responsible person, powered mechanical excavation may be used no closer than 3 meters (see Figure 1). The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.

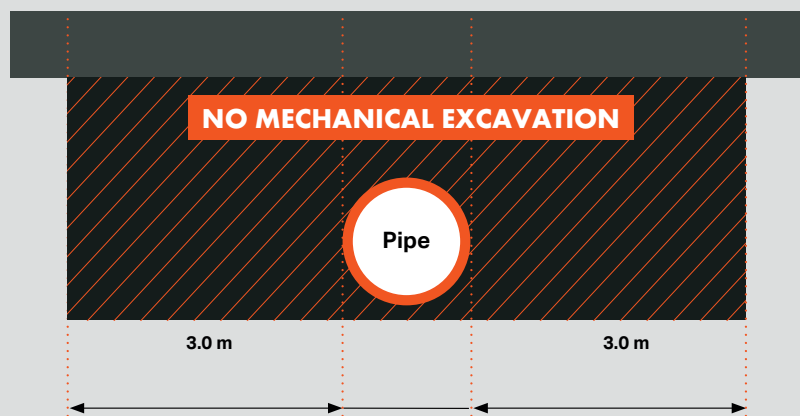
Any fitting, attachment or connecting pipework on the asset shall be exposed by hand. If third parties are using any form of trench support system they shall ensure that none of the components are in contact with the Cadent asset.

Consideration may be given to a relaxation of these limits or lower risk excavation methods by agreement with the Cadent responsible person on site.

Where sufficient depth of cover exists and the absence of attachments and projections has been confirmed (e.g. valve spindles, pressure points etc.) and following evidence from hand dug trial holes, light tracked vehicles may be permitted to strip topsoil to a depth of 0.25 metres, using a toothless bucket.

No topsoil or other materials shall be stored within the easement without the written permission of Cadent. No fires are allowed in the easement strip or close to above ground gas installations.

Figure 1. Excavation restrictions



After the completion of the work, the level of cover over the asset should be the same as that prior to work commencing, unless otherwise agreed by Cadent.

No new service shall be laid parallel to the asset within the easement. In special circumstances, and only with formal written agreement from Cadent, this may be relaxed for short excursions where the service shall be laid no closer than 0.6 metres.

Where work is being carried out parallel to the asset, within or just alongside the easement, suitable barriers shall be erected for protection between the works and the asset to prevent encroachment.

6.1.2 In proximity to an asset in the highway

Following location and marking of the asset in agreement with the Cadent responsible person, powered mechanical excavation may be used no closer than 3 meters (see Figure 1).

The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.

Any fitting, attachment or connecting pipework shall be exposed by hand.

If third parties are using any form of trench support system they shall ensure that none of the components are in contact with the Cadent asset.

Removal of the bituminous or concrete highway surface layer by mechanical means is permitted to a depth of 0.3 metres, unless any attachments or projections are present on the asset (e.g. valve spindles, pressure points etc.). The use of chain trenchers is not permitted within 3 metres of the asset. The Cadent responsible person may need to be present to monitor this work. Where the bituminous or concrete highway surface layer extends below 0.3 metres deep, it shall only be removed by handheld power assisted tools under the observation of Cadent.

In special circumstances, consideration may be given to a relaxation of these rules by agreement with the Cadent responsible person and only whilst they remain on site.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.1.3 Crossing over an asset (Open cut)

Where a new service is to cross over the asset, a clearance distance of 0.6 metres between the crown of the asset and underside of the service should be maintained. If this cannot be achieved, the service shall cross below the asset, (see section 6.1.4).

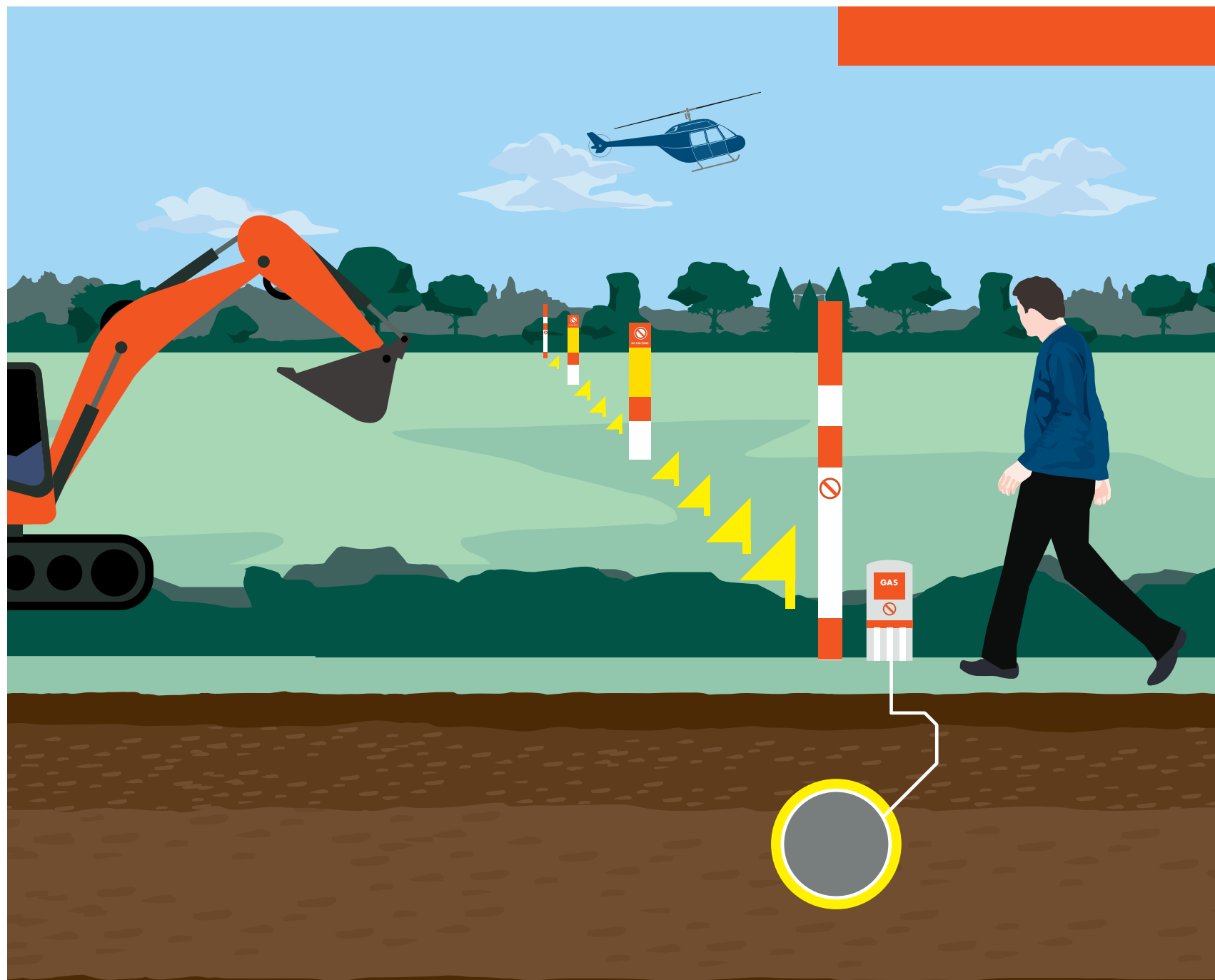
In special circumstances, this distance may be reduced at the discretion of the Cadent responsible person on site.

6.1.4 Crossing below an asset (Open cut)

Where a service is to cross below the asset, a clearance distance of 0.6 metres between the crown of the service and underside of the asset shall be maintained. Where lengths of pipe greater than one metre are to be exposed, the Cadent responsible person shall be consulted.

The exposed asset/s should be suitably supported and protected by matting and timber cladding. Any supports shall be removed prior to backfilling.

In special circumstances, this clearance distance may be reduced at the discretion of the Cadent responsible person on site.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.1.5 Cathodic protection

Cathodic protection (CP) is applied to Cadent's buried steel pipe and is a method of protecting assets from corrosion by maintaining an electrical potential between the pipe and anodes placed at strategic points along the asset.

Where a new service is to be laid and similarly protected, the party installing the CP system will undertake tests to determine whether the new service is interfering with the cathodic protection of the Cadent asset.

Should any cathodic protection posts or associated apparatus need to be moved to facilitate third party works, at least 14 days notice shall be given to Cadent. Cadent will undertake this work and any associated costs will be borne by the third party.

6.1.6 Installation of electrical equipment

Where electrical equipment is being installed close to Cadent's buried steel assets, the effects of a rise of earth potential under fault conditions shall be considered by the third party and a risk assessment and method statement shall be submitted to Cadent for approval, prior to the works.

The installation of electrical cables parallel to Cadent assets may induce currents into the asset. This may interfere with the effective operation of the cathodic protection system. In these instances, Cadent will require the promoter of the works to conduct pre and post energisation potential surveys of Cadent's asset. The costs for any stray current mitigation systems required will be borne by the third party promoter.

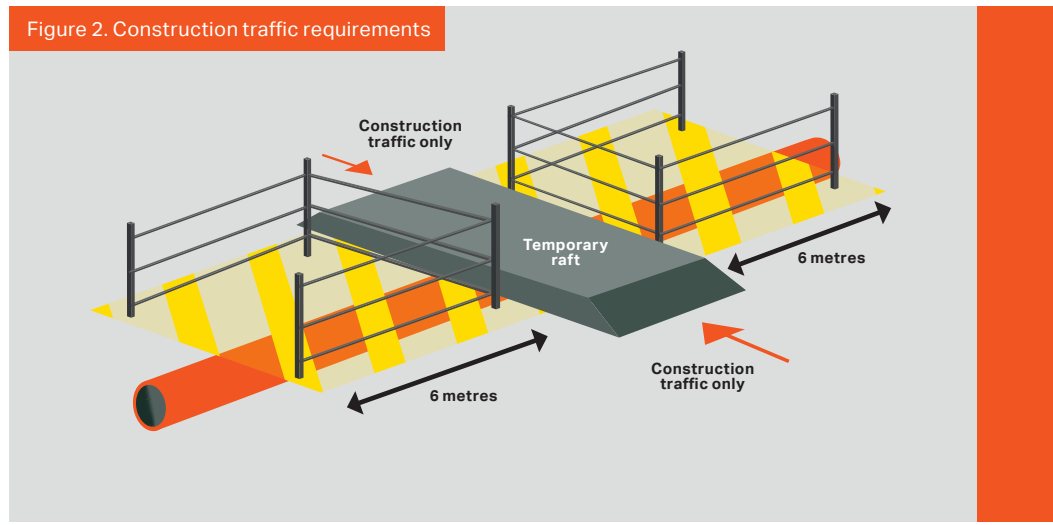


Figure 2. Construction traffic requirements

6.2 Construction traffic

Where existing roads cannot be used, construction traffic should ONLY cross the asset at agreed locations. Notices shall be placed directing traffic to the crossing points. Post and wire fencing shall be erected at all crossing points. The fence should cover the width of the easement and extend a further 6 metres along the length of the easement on both sides. **(See figure 2)**

The asset shall be protected, at the crossing points by a suitable method agreed with the Cadent responsible person prior to installation. The third party shall review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the raft required.

For larger scale projects, or permanent solutions, a protection slab may be required.

6.3 Specific activities

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of the asset. The promoter of works is required to consult Cadent when intending to undertake one of the listed activities and/or further advice is required on whether the work has the potential to affect the asset. The table to the right shows, for some specific activities, the prescribed distances where the advice of Cadent shall be sought **(see sections 6.3.1 to 6.3.13 for further details)**

Activity	Distance within which Cadent advice shall be sought
Piling	15 m
Surface mineral extraction	100m
Landfilling	100 m
Demolition	150 m or 400m for structure mass >10000 tonnes
Blasting	500 m if the MIC is greater than 200 kg 250 m if the MIC is greater than 10 kg but less than 200 kg 100 m if the MIC is 10 kg or less.
Deep mining	1000 m
Wind turbine	Not permitted within 1.5 times the turbine mast height from the nearest edge of a pipeline (please see www.ukopa.co.uk)

6 Working in the vicinity of a gas asset exceeding 2 bar

6.3.1 Trenchless techniques

Where trenchless techniques are being considered, a formal risk assessment and method statement shall be produced. This risk assessment and method statement shall be formally agreed with Cadent prior to the commencement of the work. Please provide Cadent with at least 14 days notice as the Cadent responsible person may wish to be present to monitor this work.

6.3.2 Changes to depth of cover

The depth of cover over Cadent's asset shall not be altered. Cadent shall be consulted for any activity proposed that will lead to a change in cover over the asset. Expert advice may need to be sought, which will be determined by the Cadent responsible person.

6.3.3 Piling

No piling shall be allowed within 15 metres of an asset without an assessment of the vibration levels at the asset. The peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec. The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

6.3.4 Demolition

No demolition should be allowed within 150 metres of an asset, or 400 metres for a structure mass greater than 10,000 tonnes, without an assessment of the vibration levels at the asset. The peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

6.3.5 Blasting

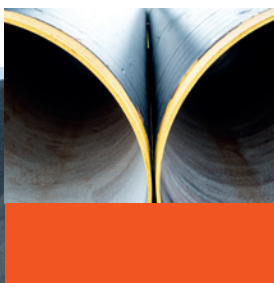
The Maximum Instantaneous Charge (MIC) dictates the distance at which an assessment of the vibration levels (at the located asset) is required. The measured distances are as follows:

- 500 m if the MIC is greater than 200 kg
- 250 m if the MIC is greater than 10 kg but less than 200 kg
- 100 m if the MIC is 10 kg or less.

The peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.3.6 Surface mineral extraction

An assessment shall be carried out on the effect of surface mineral extraction activity within 100 metres of an asset. Consideration should also be given to extraction around other plant and equipment associated with assets (e.g cathodic protection ground beds).

Where the mineral extraction extends up to the asset easement, a stable slope angle and stand-off distance between the asset and slope crest shall be determined by Cadent. The easement strip should be clearly marked by a suitable permanent boundary, such as a post and wire fence. Additionally, where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the third party. The asset easement and slope needs to be inspected periodically to identify any signs of developing instability. This may include any change of slope profile including:

- bulging,
- the development of tension cracks on the slope or easement,
- any changes in drainage around the slope.

The results of each inspection should be recorded.

Where surface mineral extraction activities are planned within 100 metres of the asset but do not extend up to the asset easement boundary, Cadent shall assess

whether this could promote instability in the vicinity of the asset. This may occur where the asset is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives, the provisions of **section 6.3.5 apply**.

6.3.7 Deep Mining

Assets routed within 1 km of active deep mining may be affected by subsidence resulting from mineral extraction. The determination of protective or remedial measures will normally require expert assistance, which can be arranged through Cadent.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.3.8 Landfilling

The creation of slopes outside of the asset easements may promote instability within the vicinity of the asset. Cadent should carry out an assessment to determine the effect of any landfilling activity within 100 metres of an asset. The assessment is particularly important if landfilling operations are taking place on a slope in which the asset is routed.

6.3.9 Pressure testing

Hydrostatic testing of a third party asset should not be permitted within 8 metres either side of a Cadent asset, to provide protection against the effects of a burst. Where this cannot be achieved, typically where the third party asset needs to cross a Cadent asset, one of the following precautions would need to be adopted:

- a) limiting of the design factor of the third party pipeline to 0.3 at the asset's nominated maximum operating pressure (MOP), and the use of pre-tested pipe, or
- b) the use of sleeving, or
- c) Cadent conduct risk analysis of pipe failure

In either case, the third party shall submit their site specific risk assessment and safe system of works for consideration by Cadent.

6.3.10 Seismic surveys

The promoter of works shall advise Cadent of any seismic surveying work in the vicinity of an asset that will result in peak particle velocities in excess of 50 mm/sec at the asset.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

6.3.11 Hot work

Where the Cadent's metallic gas asset has been exposed, welding (or other hot works that may involve naked flames) should not be carried out in proximity of the gas asset. This may be reduced if suitable protection and precautions has been agreed with Cadent.

If the gas asset is PE (or a PE asset is contained within a metallic sleeve) welding, or other hot works that may involve naked flames, should not take place within 0.5 m of the gas asset. This may be reduced if suitable protection and precautions have been agreed with the Cadent responsible person to prevent against the effects of sparks, radiant heat transfer etc.

The Cadent responsible person will be present to monitor all welding, burning or other 'hot work' that takes place.

6.3.12 Wind turbines

Wind turbines shall not be sited any closer than 1.5 times the proposed height of the turbine mast away from the nearest edge of the asset.

6.3.13 Solar farms

Solar farms can be built adjacent to assets but never within the easement. Advice shall be sought from Cadent at the early stages of design to ensure that electrical interference, security, future access and construction methods can be mutually agreed.

6.4 Backfilling

No backfilling should be undertaken without Cadent's agreement to proceed. The Cadent responsible person will stipulate the necessary consolidation requirements. Some equipment may not be suitable for use over or around the asset due to the adverse effects of excessive compaction and vibration levels. The Cadent responsible person will be able to advise on suitable equipment. Third parties undertaking work shall provide Cadent with 48 hours notice, or shorter only if agreed with Cadent, of the intent to backfill over, under or alongside the asset.

This requirement should also apply to any backfilling operations that:

- are within 3 metres of the asset, or
- could influence the ground stability.

Any damage to the asset or coating shall be reported to Cadent in order that damage can be assessed and repairs can be carried out.

Minor damage to pipe coating and test leads will be repaired by Cadent free of charge. If the asset has been backfilled without the knowledge of the Cadent responsible person, the third party will need to re-excavate to enable the condition of the asset coating to be assessed.



7 Working in the vicinity of a gas asset not exceeding 2 bar

7.1 Excavation

7.1.1 Working in vicinity of iron pipework

Where excavation work this is deeper than 1.5 metres is within 8 metres of grey iron mains an integrity assessment will be required by the Cadent responsible person.

Care should be taken to ensure that any cast iron asset is suitably protected and supported during the works. This is due to the susceptibility of the pipe material to fracture and joint leakage.

Precautionary measures should be agreed with the Cadent responsible person before exposing an iron fitting, for example, bend, tee or cap, etc. This is to ensure that fittings that are not self-anchored are adequately protected against failure during excavation.

7.1.2 In proximity to an asset in an easement

Excavation with a powered mechanical excavator should not be carried out until the asset has been located using vacuum or hand excavation. All mechanical excavation should be undertaken whilst utilising a banksman and shall not be permitted within 0.5 metres of the asset.

The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.

Any fitting, attachment or connecting pipework shall be exposed by hand. If third parties are using any form of trench support system they shall ensure that none of the components are in contact with the Cadent asset.

Consideration may be given to a relaxation of these limits or lower risk excavation methods by agreement with the Cadent responsible person on site.

Where sufficient depth of cover exists and the absence of attachment and projections has been confirmed (e.g. valve spindles, pressure points etc.) and following evidence from hand dug trial holes, light tracked vehicles may be permitted to strip topsoil to a depth of 0.25 metres, using a toothless bucket.

No topsoil or other materials shall be stored within the easement without the written permission of Cadent. No fires are allowed in the easement strip or close to above ground gas installations.

After the completion of the work, the level of cover over the asset should be the same as that prior to work commencing, unless otherwise agreed with by Cadent.

No new service shall be laid parallel to the asset within the easement. In special circumstances, and only with formal written agreement from Cadent, this may be relaxed for short excursions where the service shall be laid no closer than 0.6 metres.

Where work is being carried out parallel to the asset, within or just alongside the easement, suitable barriers shall be erected for protection between the works and the asset to prevent encroachment.

7.1.3 In proximity to an asset in the highway

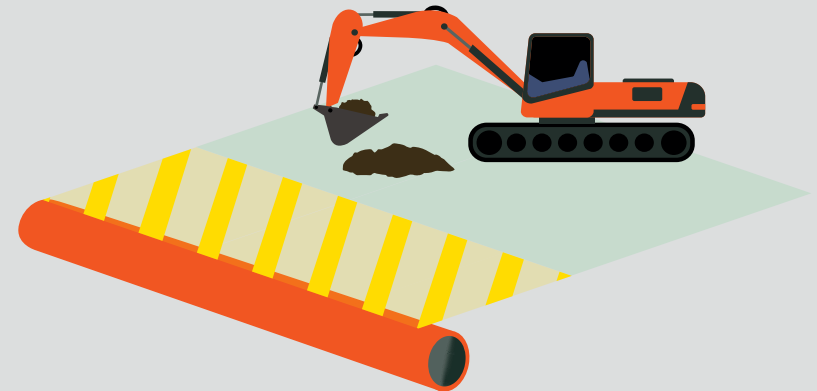
Excavation with a powered mechanical excavator should not be carried out until the asset has been located using vacuum or hand excavation. All mechanical excavation should be undertaken while utilising a banksman and shall not be permitted within 0.5 metres of the asset.

The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.

Any fitting, attachment or connecting pipework on the asset shall be exposed by hand. If third parties are using any form of trench support system they shall ensure that none of its components are in contact with the asset.

Removal of the bituminous or concrete highway surface layer by mechanical means is permitted to a depth of 0.3 metres, unless any attachments or projections are present on the asset (e.g. valve spindles, pressure points etc.). The use of chain trenchers to do this is not permitted within 3 metres of the asset. The Cadent responsible person may need to be present to monitor this work. Where the bituminous or concrete highway surface layer extends below 0.3 metres deep, it shall only be removed by handheld power assisted tools under the observation of Cadent.

In special circumstances, consideration may be given to a relaxation of these rules by agreement with the Cadent responsible person on site and only whilst they remain on site.



7 Working in the vicinity of a gas asset not exceeding 2 bar

7.1.4 Crossing over an asset (Open cut)

Where a new service is to cross over the asset, a minimum clearance distance of 1.5 times the diameter or 0.3 metres, whichever is greater should be maintained. If this cannot be achieved, the service shall cross below the asset, see **Section 7.1.4.**

In special circumstances, this distance may be reduced at the discretion of the Cadent responsible person on site.

7.1.5 Crossing below an asset (Open cut)

Where a service is to cross below the asset, a minimum clearance distance of 1.5 times the diameter or 0.3m, whichever is greater, between the crown of the new service and underside of the asset shall be maintained. The exposed asset/s should be suitably supported and protected by matting and timber cladding. Any supports shall be removed prior to backfilling.

7.1.6 Cathodic protection

Cathodic protection (CP) is applied to some buried steel pipes and is a method of protecting assets from corrosion by maintaining an electrical potential between the asset and anodes placed at strategic points along the asset. Where a new service is to be laid and similarly protected, the party installing the CP system will undertake tests to determine whether the new service is interfering with the cathodic protection of the Cadent asset.

Should any cathodic protection posts or associated apparatus need moving to facilitate third party works, appropriate notice, at least 14 days, shall be given to Cadent. Cadent will undertake this work and any associated costs will be borne by the third party.

7.1.7 Installation of electrical equipment

Where electrical equipment is being installed close to Cadent's buried steel asset, the effects of a rise of earth potential under fault conditions shall be considered by the third party and a risk assessment and method statement shall be submitted to Cadent for approval, prior to the works.

The installation of electrical cables parallel to Cadent assets may induce currents into the asset. This may interfere with the effective operation of the cathodic protection system. In these instances, Cadent will require the promoter of the works to conduct pre and post energisation potential surveys of Cadent's asset. The costs for any stray current mitigation systems required will be borne by the third party promoter.

7.2 Construction traffic

Where existing roads cannot be used, construction traffic should ONLY cross the asset at agreed locations. Notices shall be placed directing traffic to the crossing points. Post and wire fencing shall be erected at all crossing points. The fence should cover the width of the easement and extend a further 6 metres along the length of the easement on both sides. **(See figure 2)**

The asset shall be protected, at the crossing points, by a suitable method agreed with the Cadent responsible person prior to installation. The third party shall review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the raft required.

For larger scale projects, or permanent solutions, a protection slab may be required.

7.3 Specific activities

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of the asset. The promoter of works is required to consult Cadent when intending to undertake one of the listed activities and/or further advice is required on whether the work has the potential to affect the asset. The table to the right shows, for some specific activities, the prescribed distances where the advice of Cadent shall be sought **(see Sections 6.3.1 to 6.3.13 for further details)**

Activity	Distance within which Cadent advice shall be sought
Piling	15 m
Surface mineral extraction	100 m
Landfilling	100 m
Demolition	150 m or 400m for structure mass >10000 tonnes
Blasting	500 m if the MIC is greater than 200 kg 250 m if the MIC is greater than 10 kg but less than 200 kg 100 m if the MIC is 10 kg or less.
Deep mining	1000 m
Wind turbine	Not permitted within 1.5 times the turbine mast height from the nearest edge of a pipeline (please see www.ukopa.co.uk)



7 Working in the vicinity of a gas asset not exceeding 2 bar

7.3.1 Trenchless techniques

Where trenchless techniques are being considered, a formal risk assessment and method statement shall be produced. This risk assessment and method statement shall be formally agreed with Cadent prior to the commencement of the work. Please provide Cadent with at least 14 days notice as the Cadent responsible person may wish to be present to monitor this work.

7.3.2 Changes to depth of cover

The depth of cover over Cadent's asset shall not be altered. Cadent shall be consulted for any activity proposed that will lead to a change in cover over the asset. Expert advice may need to be sought, which will be determined by the Cadent responsible person.

7.3.3 Piling

No piling shall be allowed within 15 metres of an asset without an assessment of the vibration levels at the asset.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

For ductile or cast iron assets, the peak particle velocity shall be limited to a maximum level of 25 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

7.3.4 Demolition

No demolition should be allowed within 150 metres of an asset for 400m for a structure mass greater than 10000 tonnes without an assessment of the vibration levels at the asset.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

For cast iron or ductile iron assets, the peak particle velocity at the asset shall be limited to a maximum level of 25 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

7.3.5 Blasting

The Maximum Instantaneous Charge (MIC) dictates the distance at which an assessment of the vibration levels (at the located asset) is required. The measured distances are as follows:

- 500 m if the MIC is greater than 200 kg
- 250 m if the MIC is greater than 10 kg but less than 200 kg
- 100 m if the MIC is 10 kg or less.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

For ductile or cast iron assets, the peak particle velocity at the asset shall be limited to a maximum level of 25 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.



7 Working in the vicinity of a gas asset not exceeding 2 bar

7.3.6 Surface mineral extraction

An assessment shall be carried out on the effect of surface mineral extraction activity within 100 metres of an asset. Consideration should also be given to extraction around plant and equipment associated with assets (e.g cathodic protection ground beds).

Where the mineral extraction extends up to the asset easement, a stable slope angle and stand-off distance between the asset and slope crest shall be determined by Cadent. Where an easement exists, the easement strip should be clearly marked by a suitable permanent boundary, such as a post and wire fence. Additionally, where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the third party. The asset easement and slope needs to be inspected periodically to identify any signs of developing instability. This may include any change of slope profile including:

- bulging,
- the development of tension cracks on the slope or easement,
- any changes in drainage around the slope.

The results of each inspection should be recorded.

Where surface mineral extraction activities are planned within 100 metres of the asset but do not extend up to the asset easement boundary, Cadent shall assess whether this could promote instability in the vicinity of the asset.

This may occur where the asset is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives, the provisions of **Section 7.3.5** apply.

7.3.7 Deep mining

Assets routed within 1 km of active deep mining may be affected by subsidence resulting from mineral extraction. The determination of protective or remedial measures will normally require expert assistance, which can be arranged through Cadent.

7.3.8 Landfilling

The creation of slopes outside of the asset easements may promote instability within the vicinity of the asset. Cadent should carry out an assessment to determine the effect of any landfilling activity within 100 metres of an asset. The assessment is particularly important if landfilling operations are taking place on a slope in which the asset is routed.

7.3.9 Pressure testing

Pressure testing should not be permitted within 8 m of an asset unless suitable precautions have been taken against the effects of a pipe failure.

7.3.10 Seismic surveys

The promoter of works shall advise Cadent of any seismic surveying work in the vicinity of PE or steel assets that will result in peak particle velocities in excess of 50 mm/sec at the asset or for ductile or cast iron assets that will result in peak particle velocities in excess of 25 mm/sec at the asset.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

7.3.11 Hot work

Where the Cadent's metallic gas asset has been exposed, welding (or other hot works that may involve naked flames) should not be carried out in proximity of the gas asset. This may be reduced if suitable protection and precautions has been agreed with Cadent.

If the gas asset is PE (or a PE asset is contained within a metallic sleeve) welding, or other hot works that may involve naked flames, should not take place within 0.5 metres of the gas asset. This may be reduced if suitable protection and precautions have been agreed with the Cadent responsible person to prevent against the effects of sparks, radiant heat transfer etc.

The Cadent responsible person will determine the need to remain on site to monitor all welding, burning or other 'hot work' that takes place.

7.3.12 Wind turbines

Wind turbines shall not be sited any closer than 1.5 times the proposed height of the turbine mast away from the nearest edge of the asset.

7.3.13 Solar Farms

Solar Farms can be built adjacent to assets but never within the easement. Advice shall be sought from Cadent at the early stages of design to ensure that electrical interference, security, future access and construction methods can be mutually agreed.



7 Working in the vicinity of a gas asset not exceeding 2 bar

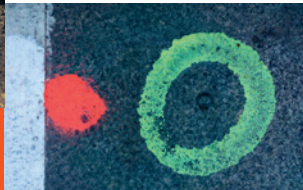
7.4 Backfilling

No backfilling should be undertaken without Cadent's agreement to proceed. The Cadent responsible person will stipulate the necessary consolidation requirements. Some equipment may not be suitable for use over or around the asset due to the adverse effects of excessive compaction and vibration levels. The Cadent responsible person will be able to advise on suitable equipment. Third parties undertaking work shall provide Cadent with 48 hours notice, or shorter notice only if agreed with Cadent, of the intent to backfill over, under or alongside the asset. This requirement should also apply to any backfilling operations that:

- are within 3 metres of the asset, or
- could influence the ground stability.

Any damage to the asset or coating shall be reported to the Cadent responsible person in order that damage can be assessed and repairs can be carried out.

Minor damage to pipe coating and test leads will be repaired by Cadent free of charge. If the asset has been backfilled without the knowledge of the Cadent responsible person, the third party will need to re-excavate to enable the condition of the asset coating to be assessed.



8 Working in the vicinity of an Above Ground Installation (AGI)

Where excavations are to be made within 10 metres of the perimeter of an associated gas installation, appropriate protection methods should be determined and recorded by the Cadent responsible person.

At least 14 days notice is required as Cadent may wish to be on site when specific activities are being undertaken.

In addition to this, the safety advice detailed in either section 6 or 7 shall be observed when working in the proximity of an AGI.

Access to the gas asset should be maintained at all times.

9 Action in the case of damage to the asset

If the Cadent asset is damaged, even slightly, and even if no gas leak has occurred, then the following precautions shall be taken immediately:

- Shut down all plant and machinery and extinguish any potential sources of ignition.
- Evacuate all personnel from the vicinity of the asset
- Notify Cadent using the free 24 hour emergency telephone number 0800 111999
- Notify the Cadent responsible person immediately using the contact telephone number provided.
- Ensure no one approaches the asset.
- Do not try to stop any leaking gas.
- Provide assistance as requested by Cadent, or emergency services to safeguard persons and property.

10 References

NRSWA	New Roads & Street Works Act
HS(G)47	HSE Guidance 'Avoiding Danger from Underground Services'
IGEM/SR/18	Safe Working Practices to Ensure the Integrity of Gas Pipelines and Associated Installations (Institution of Gas Engineers)

11 Glossary of Terms

Easement

Easements are negotiated legal entitlements between Cadent and landowners and allow Cadent to lay, operate and maintain assets within the easement strip. Easement strips may vary in width, typically between 6 and 25 metres depending on the diameter and pressure of the pipeline. Consult Cadent for details of the extent of the easement strip where work is intended.

Liquefaction

Liquefaction is a phenomenon in which the strength and stiffness of the soil is reduced by earthquake shaking or other rapid loading. Liquefaction occurs in saturated soils, that is, soils in which the space between individual particles is completely filled with water. When liquefaction occurs, the strength of the soil decreases and the ability of the soil to support assets are reduced.

Promoter of works

The person or persons, firm, company or authority for whom new services, structures or other works in the vicinity of existing Cadent assets are being undertaken.

Cadent responsible person

The person or persons appointed by Cadent with the competencies required to act as the Cadent representative for the purpose of monitoring the particular activity.

Banksman

Another person who assists the machine operator to drive from a position where they can safely see into the excavation and warn the driver of any services or other obstacles.

This person should remain outside of the operating radius of the excavator arm and bucket.

Appendix A

Asset location markers

Cadent

Your Gas Network

DANGER

GAS ASSET

DIAL BEFORE YOU DIG

CALL 0800 688 588

24hrs GAS ESCAPE NUMBER

0800 111 999*

*CALLS WILL BE RECORDED AND
MAY BE MONITORED



Emergency

If you hit an asset, whether the damage is visible or not, or in the event of an emergency, call the National Gas Emergency Service immediately on

0800 111 999*

*All calls are recorded and may be monitored

If you are planning to do work near or in the vicinity of an asset, please contact the Plant Protection team for free on:

0800 688 588*
plantprotection@cadentgas.com

Cadent Plant Protection
Block 1
Brick Kiln Street
Hinckley
LE10 0NA

Self service for plant enquiries

beforeyoudig.nationalgrid.com

This is a free online enquiry service giving results within minutes from a grid reference, postcode or street name. This site allows you to submit enquiries about activities and work that you are planning, which may have an impact on the Cadent gas distribution and networks.

linesearchbeforeudig.co.uk

This is a free online enquiry service giving instant results from a grid reference, postcode or street name. If your result is within a zone of interest, you can click directly through to **cadentgas.com/digging-safely**.

Note

Line search service is not available for all Cadent assets. Therefore, please click on the Cadent link or call Plant Protection to ensure you have all the available information.

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REF: Bramford to Twinstead Overhead Line Project EIA Scoping Consultation

I refer to your email dated 11th May regarding the above proposed Development Consent Order. Cadent has reviewed the scoping report provided and wishes to make the following comments:

In respect of existing Cadent infrastructure, Cadent has a number of pipelines and associated apparatus located within the Order limits and will require appropriate protection including compliance with relevant standards for works proposed within close proximity of its apparatus.

Cadent Infrastructure within or in close proximity to the development

Cadent has identified at this stage the following apparatus within the vicinity of the proposed works:

- High pressure and intermediate pressure (above 2 bar) gas pipelines and associated apparatus
- Low and medium pressure gas pipelines and associated above and below ground apparatus

Where diversions of apparatus are required to facilitate the scheme, discussions between parties should be started at the earliest opportunity. It is essential that adequate temporary and permanent land take, land rights and consents are included within the Order to enable works to proceed without delay and to provide appropriate rights for Cadent to access, maintain and protect apparatus in future.

If diversions of Cadent apparatus are required, Cadent will require adequate timescales prior to the submission of the DCO to undertake essential feasibility studies to provide the promoter with the necessary information to consider as part of their application.


Please be aware that diversions for high pressure apparatus can take in excess of two years to plan and procure materials

Where the Promoter intends to acquire land, extinguish rights, or interfere with any of Cadent's apparatus, Cadent will require appropriate protection and further discussion on the impact to its apparatus and rights including adequate Protective Provisions.

Plans of affected apparatus have been provided to the Promoter and Cadent welcomes further discussion on the likely impacts.

Key Considerations:

- Cadent has a Deed of Grant of Easement for each pipeline, which prevents the erection of permanent / temporary buildings, or structures, change to existing ground levels, storage of materials etc.
- Please be aware that written permission is required before any works commence within the Cadent easement strip.
- The below guidance is not exhaustive and all works in the vicinity of Cadent's asset shall be subject to review and approval from Cadent's plant protection team in advance of commencement of works on site.



General Notes on Pipeline Safety:

- You should be aware of the Health and Safety Executives guidance document HS(G) 47 "Avoiding Danger from Underground Services", and Cadent's specification for Safe Working in the Vicinity of Cadent High Pressure gas pipelines and associated installations - requirements for third parties GD/SP/SSW22. Digsafe leaflet Excavating Safely - Avoiding injury when working near gas pipes. There will be additional requirements dictated by Cadent's plant protection team.
- Cadent will also need to ensure that our pipelines remain accessible ~~throughout~~~~throughout~~~~throughout~~ and after completion of the ~~works~~~~works~~.
- The actual depth and position must be confirmed on site by trial hole investigation under the supervision of a Cadent representative. Ground cover above our pipelines should not be reduced or increased.
- If any excavations are planned within 3 metres of Cadent High Pressure Pipeline or, within 10 metres of an AGI (Above Ground Installation), or if any embankment or dredging works are proposed then the actual position and depth of the pipeline must be established on site in the presence of a Cadent representative. A safe working method agreed prior to any work taking place in order to minimise the risk of damage and ensure the final depth of cover does not affect the integrity of the pipeline.
- Below are some examples of work types that have specific restrictions when being undertaken in the vicinity of gas assets therefore consultation with Cadent's Plant Protection team is essential:
 - Demolition
 - Blasting
 - Piling and boring
 - Deep mining
 - Surface mineral extraction
 - Landfilling
 - Trenchless Techniques (e.g. HDD, pipe splitting, tunnelling etc.)
 - Wind turbine installation
 - Solar farm installation
 - Tree planting schemes

Pipeline Crossings:

- Where existing roads cannot be used, construction traffic should ONLY cross the pipeline at agreed locations.
- The pipeline shall be protected, at the crossing points, by temporary rafts constructed at ground level. The third party shall review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the raft required.
- The type of raft shall be agreed with Cadent prior to installation.
- No protective measures including the installation of concrete slab protection shall be installed over or near to the Cadent pipeline without the prior permission of Cadent.
- Cadent will need to agree the material, the dimensions and method of installation of the proposed protective measure.

Cadent Gas Limited

Registered Office Ashbrook Court, Prologis Park
Central Boulevard, Coventry CV7 8PE
Registered in England and Wales No.10080864

National Gas Emergency Service

0800 111 999* (24hrs)

*Calls will be recorded and may be monitored

5000419 (01/13)

Page 2 of 4



- The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to Cadent.
- A Cadent representative shall monitor any works within close proximity to the pipeline.

New Service Crossing:

- New services may cross the pipeline at perpendicular angle to the pipeline i.e. 90 degrees.
- Where a new service is to cross over the pipeline a clearance distance of 0.6 metres between the crown of the pipeline and underside of the service should be maintained. If this cannot be achieved the service shall cross below the pipeline with a clearance distance of 0.6 metres.
- A new service should not be laid parallel within an easement strip
- A Cadent representative shall approve and supervise any new service crossing of a pipeline.
- An exposed pipeline should be suitable supported and removed prior to backfilling
- An exposed pipeline should be protected by matting and suitable timber cladding
- For pipe construction involving deep excavation (<1.5m) in the vicinity of grey iron mains, the model consultative procedure will apply therefore an integrity assessment must be conducted to confirm if diversion is required

Yours Faithfully



Dean Hopewell
Land and Consents Officer
Capital Delivery
[Redacted]@cadentgas.com



Guidance

To download a copy of the HSE Guidance HS(G)47, please use the following link:

<http://www.hse.gov.uk/pubns/books/hsg47.htm>

Dial Before You Dig Pipelines Guidance:

<https://cadentgas.com/Digging-safely/Dial-before-you-dig>

Essential Guidance document:

https://cadentgas.com/getattachment/digging-safely/Promo-work-safely-library/Essential_Guidance.pdf

Excavating Safely in the vicinity of gas pipes guidance (Credit card):

https://cadentgas.com/getattachment/digging-safely/Promo-work-safely-library/Excavating_Safely_Leaflet_Gas-1.pdf

Copies of all the Guidance Documents can also be downloaded from the Cadent website:

<https://cadentgas.com/Digging-safely/Work-safely-library>

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5000419 (01/13)

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Laura Feekins-Bate
Planning Inspectorate
The Planning Inspectorate
Room 3C
Temple Quay House
2 The Square
Bristol
BS1 6PN

Plant Protection
Cadent
Block 1; Floor 1
Brick Kiln Street
Hinckley
LE10 0NA
E-mail: plantprotection@cadentgas.com
Telephone: +44 (0)800 688588

National Gas Emergency Number:
0800 111 999*

National Grid Electricity Emergency Number:
0800 40 40 90*

* Available 24 hours, 7 days/week.
Calls may be recorded and monitored.

www.cadentgas.com

Date: 14/05/2021

Our Ref: EA_GE4B_3NWP_029351

Your Ref: EN020002 PT2 (TC)

RE: Formal Planning Application, CO10 0NT Wyatts Lane, Workhouse Green, Little Cornard, Babergh, Suffolk

Thank you for your enquiry which was received on 11/05/2021.
Please note this response and any attached map(s) are valid for 28 days.

An assessment has been carried out with respect to Cadent Gas Limited, National Grid Electricity Transmission plc's and National Grid Gas Transmission plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus. For details of Network areas please see the Cadent website (<http://cadentgas.com/Digging-safely/Dial-before-you-dig>) or the enclosed documentation.

Are My Works Affected?

Searches based on your enquiry have identified that there is apparatus in the vicinity of your enquiry which may be affected by the activities specified.

Can you please inform Plant Protection, as soon as possible, the decision your authority is likely to make regarding this application.

If the application is refused for any other reason than the presence of apparatus, we will not take any further action.

Please let us know whether Plant Protection can provide you with technical or other information that may be of assistance to you in the determination of the application.

As your proposed activity is in close proximity to National Grid's Transmission assets we have referred your enquiry/consultation to our Asset Protection team for further detailed assessment. We request that you do not commence work or take further action with regards to your proposal until you hear from us. We will endeavour to contact you within 21 days from the date of this response. Please contact us at assetprotection@nationalgrid.com if you have not had a response within this time frame.

Due to the presence of Cadent and/or National Grid apparatus in proximity to the specified area, the contractor should contact Plant Protection before any works are carried out to ensure the apparatus is not affected by any of the proposed works.

Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near Cadent and/or National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to Cadent Gas Limited, National Grid Electricity Transmission plc (NGET) and National Grid Gas Transmission plc (NGGT) and apparatus. This assessment does **NOT** include:

- | Cadent and/or National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent and/or National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact Plant Protection.
- | Gas service pipes and related apparatus
- | Recently installed apparatus
- | Apparatus owned by other organisations, e.g. other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities. Further "Essential Guidance" in respect of these items can be found on either the [National Grid](#) or [Cadent](#) website.

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to Cadent and/or National Grid's easements or wayleaves nor any planning or building regulations applications.

Cadent Gas Limited, NGGT and NGET or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the Plant Protection team via e-mail ([click here](#)) or via the contact details at the top of this response.

Yours faithfully

Plant Protection Team

ASSESSMENT

Affected Apparatus

The apparatus that has been identified as being in the vicinity of your proposed works is:

- | Electricity Transmission overhead lines
- | Above ground electricity sites and installations

As your proposal is in proximity to apparatus, we have referred your enquiry / consultation to the following department(s) for further assessment:

- | Land and Development Asset Protection Team (High Pressure Gas Transmission and Electricity Transmission Apparatus)

We request that you take no further action with regards to your proposal until you hear from the above. We will contact you within 28 working days from the date of this response. Please contact us if you have not had a response within this timeframe.

Requirements

BEFORE carrying out any work you must:

- | Carefully read these requirements including the attached guidance documents and maps showing the location of apparatus.
- | Contact the landowner and ensure any proposed works in private land do not infringe Cadent and/or National Grid's legal rights (i.e. easements or wayleaves). If the works are in the road or footpath the relevant local authority should be contacted.
- | Ensure that all persons, including direct labour and contractors, working for you on or near Cadent and/or National Grid's apparatus follow the requirements of the HSE Guidance Notes HSG47 - 'Avoiding Danger from Underground Services' and GS6 – 'Avoidance of danger from overhead electric power lines'. This guidance can be downloaded free of charge at <http://www.hse.gov.uk>
- | In line with the above guidance, verify and establish the actual position of mains, pipes, cables, services and other apparatus on site before any activities are undertaken.

GUIDANCE

Working Near National Grid Electricity Transmission equipment:

If you are carrying out any work in proximity to an overhead line or any excavation that may be near an underground cable then please consult National Grid Technical Guidance Note 287 that can be found at https://www.nationalgrid.com/sites/default/files/documents/8589935533-TGN%20287_Third%20party%20guidance%20for%20working%20near%20NGET%20equipment.pdf Further guidance related to underground cables can also be found at <https://www.nationalgrid.com/sites/default/files/documents/8589936512-Excavating%20Safety%20Leaflet%20Electricity.pdf>

Standard Guidance

Essential Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>

General Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103>

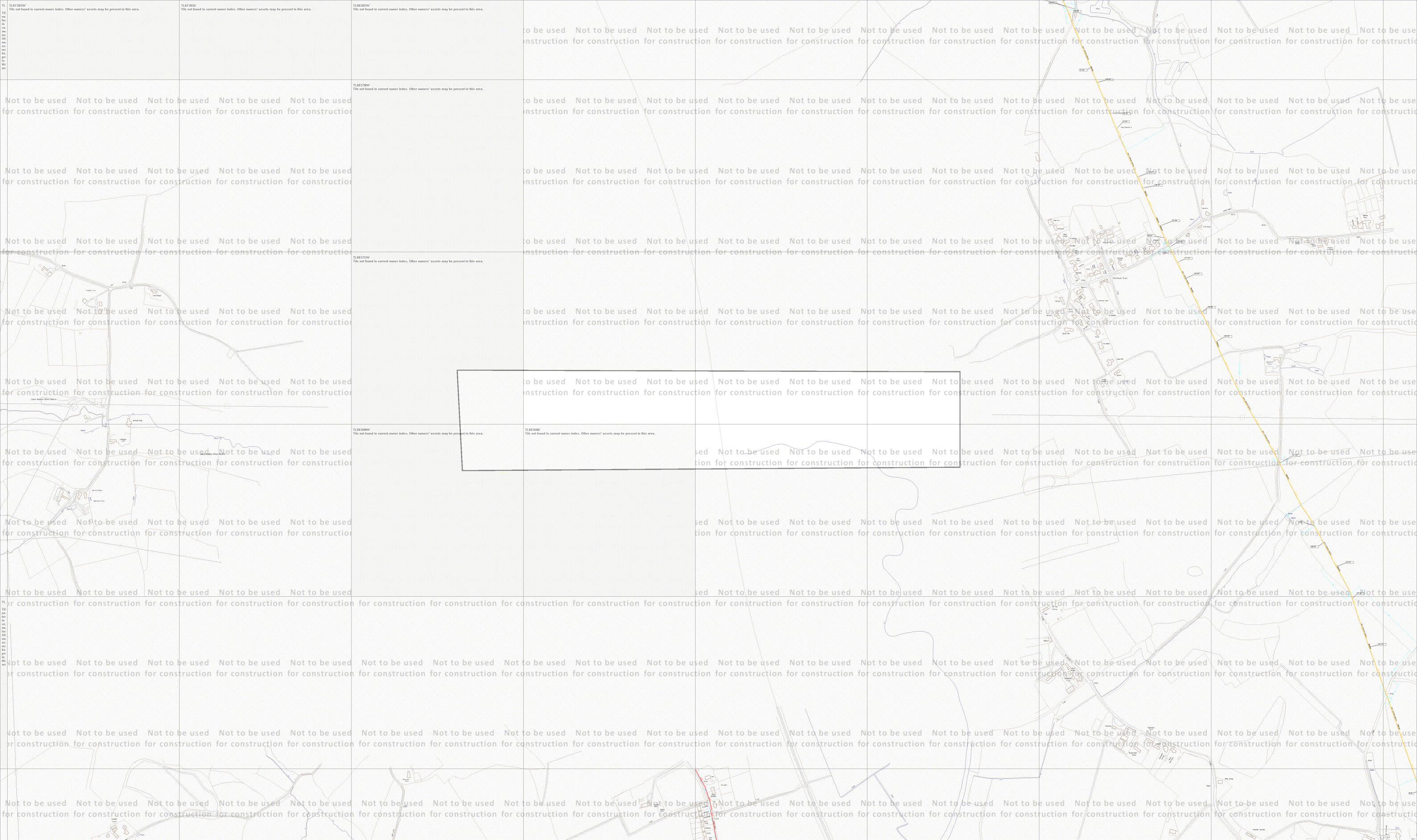
Excavating Safely in the vicinity of gas pipes guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf>






Excavating Safely in the vicinity of electricity cables guidance (Credit card):


<http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf>

Copies of all the Guidance Documents can also be downloaded from the [National Grid](#) and [Cadent](#) websites.



ID: EA_GE4B_3NWP_029351 View extent: 4120m, 2440m

USER: toby.cooper	LP MAINS 
DATE: 14/05/2021	MP MAINS 
DATA DATE: 13/05/2021	IP MAINS 
REF: EN020002 PT2 (TC)	LHP MAINS 
MAP REF: TL8937	NHP MAINS 
CENTRE: 589039, 237011	


0m  200m
Approximate scale 1:10000
on A3 Colour Landscape

Do not proceed without further consultation

This plan shows those pipes owned by Cadent Gas Limited in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Map 2 of 2 (GAS)

MAPS Plot Server Version 1.11.0









Your Gas Network

Requested by: Planning Inspectorate

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Ordnance Survey Licence number 100024886

Some examples of Plant Items:

					
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ID: EA_GE4B_3NWP_029351 View extent: 4120m, 2440m

USER: toby.cooper

DATE: 14/05/2021

DATA DATE: 23/02/2021

REF: EN020002 PT2 (TC)

MAP REF: TL8937

CENTRE: 589039, 237011

Do not proceed without further consultation

This plan shows those cables owned by National Grid Electricity Transmission plc in its role as a Licensed Electricity Transporter (ET). Electricity cables owned by other ETs, or otherwise privately owned, may be present in this area. Information with regard to such cables should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Ancillary equipment such as cooling systems and communication cables are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Electricity Transmission plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of cables and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near electricity apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

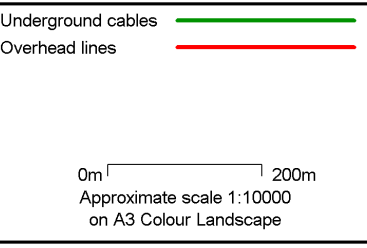
Map 1 of 2 (ELECTRIC)

MAPS Plot Server Version 1.11.0

nationalgrid

Requested by: Planning Inspectorate

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ENQUIRY SUMMARY

Received Date

11/05/2021

Your Reference

EN020002 PT2 (TC)

Location

Centre Point: 589039, 237011

X Extent: 1465

Y Extent: 295

Postcode: CO10 0NT

Location Description: CO10 0NT Wyatts Lane, Workhouse Green, Little Cornard, Babergh, Suffolk

Map Options

Paper Size: A3

Orientation: LANDSCAPE

Requested Scale: 10000

Actual Scale: 1:10000 (ELECTRIC), 1:10000 (GAS)

Real World Extents: 4120m x 2440m (ELECTRIC), 4120m x 2440m (GAS)

Recipients

pprsteam@cadentgas.com

Enquirer Details

Organisation Name: Planning Inspectorate

Contact Name: Laura Feekins-Bate

Email Address: [REDACTED]@planninginspectorate.gov.uk

Telephone: [REDACTED]

Address: The Planning Inspectorate, Room 3C, Temple Quay House, 2 The Square, Bristol, BS1 6PN

Description of Works

proposed Bramford to Twinstead overhead line project

Enquiry Type

Formal Planning Application

Development Types

Development Type: Development for use by General Public

Laura Feekins-Bate
Planning Inspectorate
The Planning Inspectorate
Room 3C
Temple Quay House
2 The Square
Bristol
BS1 6PN

Plant Protection
Cadent
Block 1; Floor 1
Brick Kiln Street
Hinckley
LE10 0NA
E-mail: plantprotection@cadentgas.com
Telephone: +44 (0)800 688588

National Gas Emergency Number:
0800 111 999*

National Grid Electricity Emergency Number:
0800 40 40 90*

* Available 24 hours, 7 days/week.
Calls may be recorded and monitored.

www.cadentgas.com

Date: 14/05/2021

Our Ref: EA_GE4B_3NWP_029349

Your Ref: EN020002 (TC)

RE: Formal Planning Application, IP8 3DS Church Hill, Burstall, Babergh, Suffolk,

Thank you for your enquiry which was received on 11/05/2021.
Please note this response and any attached map(s) are valid for 28 days.

An assessment has been carried out with respect to Cadent Gas Limited, National Grid Electricity Transmission plc's and National Grid Gas Transmission plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus.

For details of Network areas please see the Cadent website (<http://cadentgas.com/Digging-safely/Dial-before-you-dig>) or the enclosed documentation.

Are My Works Affected?

Searches based on your enquiry have identified that there is apparatus in the vicinity of your enquiry which may be affected by the activities specified.

Can you please inform Plant Protection, as soon as possible, the decision your authority is likely to make regarding this application.

If the application is refused for any other reason than the presence of apparatus, we will not take any further action.

Please let us know whether Plant Protection can provide you with technical or other information that may be of assistance to you in the determination of the application.

As your proposed activity is in close proximity to National Grid's Transmission assets we have referred your enquiry/consultation to our Asset Protection team for further detailed assessment. We request that you do not commence work or take further action with regards to your proposal until you hear from us. We will endeavour to contact you within 21 days from the date of this response. Please contact us at assetprotection@nationalgrid.com if you have not had a response within this time frame.

Due to the presence of Cadent and/or National Grid apparatus in proximity to the specified area, the contractor should contact Plant Protection before any works are carried out to ensure the apparatus is not affected by any of the proposed works.

Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near Cadent and/or National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to Cadent Gas Limited, National Grid Electricity Transmission plc (NGET) and National Grid Gas Transmission plc (NGGT) and apparatus. This assessment does **NOT** include:

- | Cadent and/or National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent and/or National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact Plant Protection.
- | Gas service pipes and related apparatus
- | Recently installed apparatus
- | Apparatus owned by other organisations, e.g. other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities. Further "Essential Guidance" in respect of these items can be found on either the [National Grid](#) or [Cadent](#) website.

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to Cadent and/or National Grid's easements or wayleaves nor any planning or building regulations applications.

Cadent Gas Limited, NGGT and NGET or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the Plant Protection team via e-mail ([click here](#)) or via the contact details at the top of this response.

Yours faithfully

Plant Protection Team

ASSESSMENT

Affected Apparatus

The apparatus that has been identified as being in the vicinity of your proposed works is:

- | High or Intermediate pressure (above 2 bar) Gas Pipelines and associated equipment
- | Electricity Transmission overhead lines
- | Above ground electricity sites and installations

As your proposal is in proximity to apparatus, we have referred your enquiry / consultation to the following department(s) for further assessment:

- | Land and Development Asset Protection Team (High Pressure Gas Transmission and Electricity Transmission Apparatus)
- | Cadent Pipelines Team

We request that you take no further action with regards to your proposal until you hear from the above. We will contact you within 28 working days from the date of this response. Please contact us if you have not had a response within this timeframe.

Requirements

BEFORE carrying out any work you must:

- | **Ensure that no works are undertaken in the vicinity of our gas pipelines and that no heavy plant, machinery or vehicles cross the route of the pipeline until detailed consultation has taken place.**
- | Carefully read these requirements including the attached guidance documents and maps showing the location of apparatus.
- | Contact the landowner and ensure any proposed works in private land do not infringe Cadent and/or National Grid's legal rights (i.e. easements or wayleaves). If the works are in the road or footpath the relevant local authority should be contacted.
- | Ensure that all persons, including direct labour and contractors, working for you on or near Cadent and/or National Grid's apparatus follow the requirements of the HSE Guidance Notes HSG47 - 'Avoiding Danger from Underground Services' and GS6 – 'Avoidance of danger from overhead electric power lines'. This guidance can be downloaded free of charge at <http://www.hse.gov.uk>
- | In line with the above guidance, verify and establish the actual position of mains, pipes, cables, services and other apparatus on site before any activities are undertaken.

GUIDANCE

High Pressure Gas Pipelines Guidance:

If working in the vicinity of a high pressure gas pipeline the following document must be followed: 'Specification for Safe Working in the Vicinity of Cadent and/or National Grid High Pressure Gas Pipelines and Associated Installations - Requirements for Third Parties' (SSW22). This can be obtained from: <http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=33968>

Dial Before You Dig Pipelines Guidance:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=33969>

Working Near National Grid Electricity Transmission equipment:

If you are carrying out any work in proximity to an overhead line or any excavation that may be near an underground cable then please consult National Grid Technical Guidance Note 287 that can be found at https://www.nationalgrid.com/sites/default/files/documents/8589935533-TGN%20287_Third%20party%20guidance%20for%20working%20near%20NGET%20equipment.pdf Further guidance related to underground cables can also be found at <https://www.nationalgrid.com/sites/default/files/documents/8589936512-Excavating%20Safety%20Leaflet%20Electricity.pdf>

Standard Guidance

Essential Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>

General Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103>

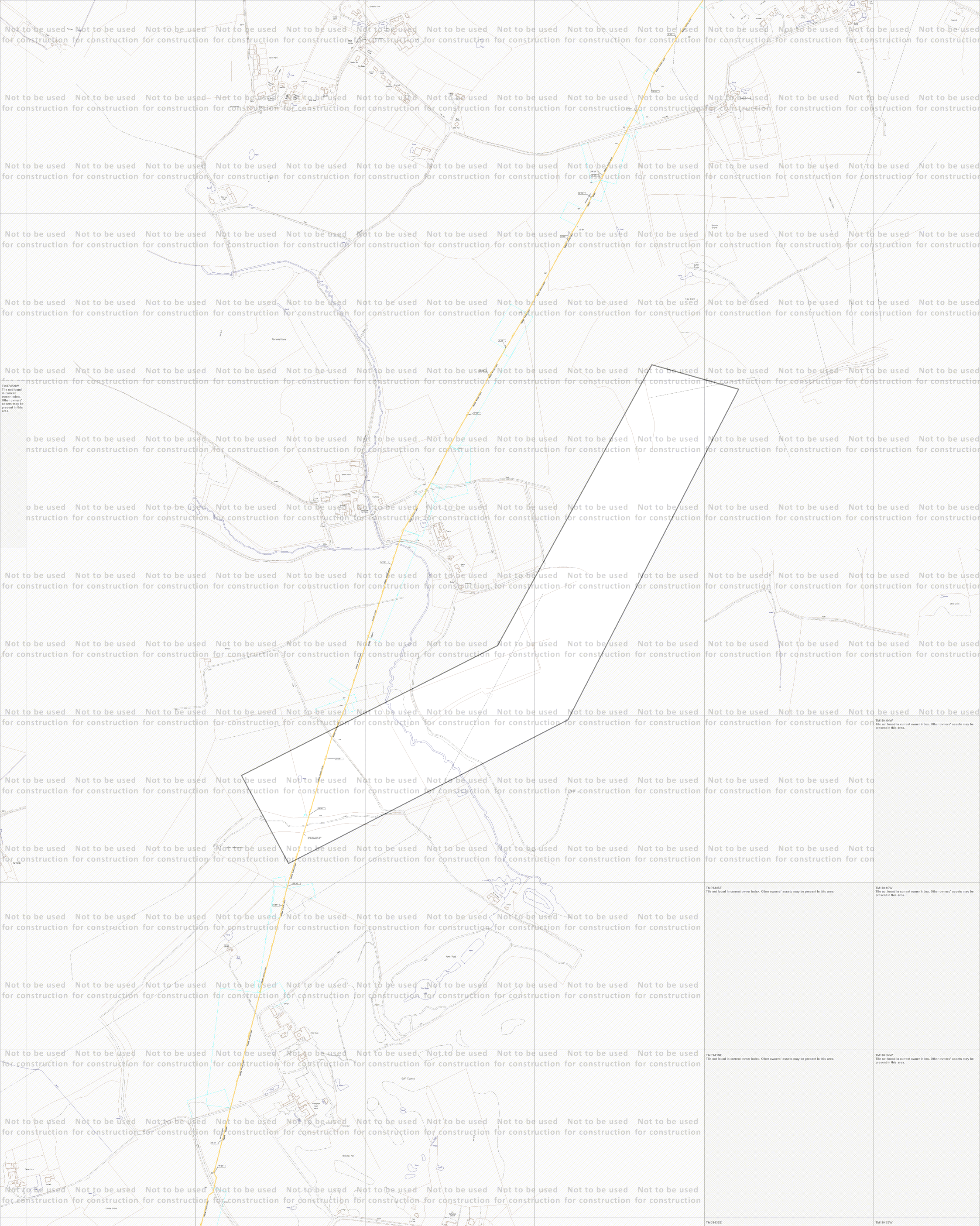
Excavating Safely in the vicinity of gas pipes guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf>

Excavating Safely in the vicinity of electricity cables guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf>

Copies of all the Guidance Documents can also be downloaded from the [National Grid](#) and [Cadent](#) websites.



ID: EA_GE4B_3NWP_029349
 USER: toby.cooper
 DATE: 14/05/2021
 DATA DATE: 13/05/2021
 REF: EN020002 (TC)
 MAP REF: TM0845
 CENTRE: 608868, 245302

View extent: 2890m, 3670m

LP MAINS ————
 MP MAINS ————
 IP MAINS ————
 LHP MAINS ————
 NHP MAINS ————

0m ————— 200m
 Approximate scale 1:10000
 on A3 Colour Portrait

Some examples of Plant Items:
 Valve Depth of Cover Syphon Diameter Change Material Change Out of Standard Service

Do not proceed without further consultation

This plan shows those pipes owned by Cadent Gas Limited in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

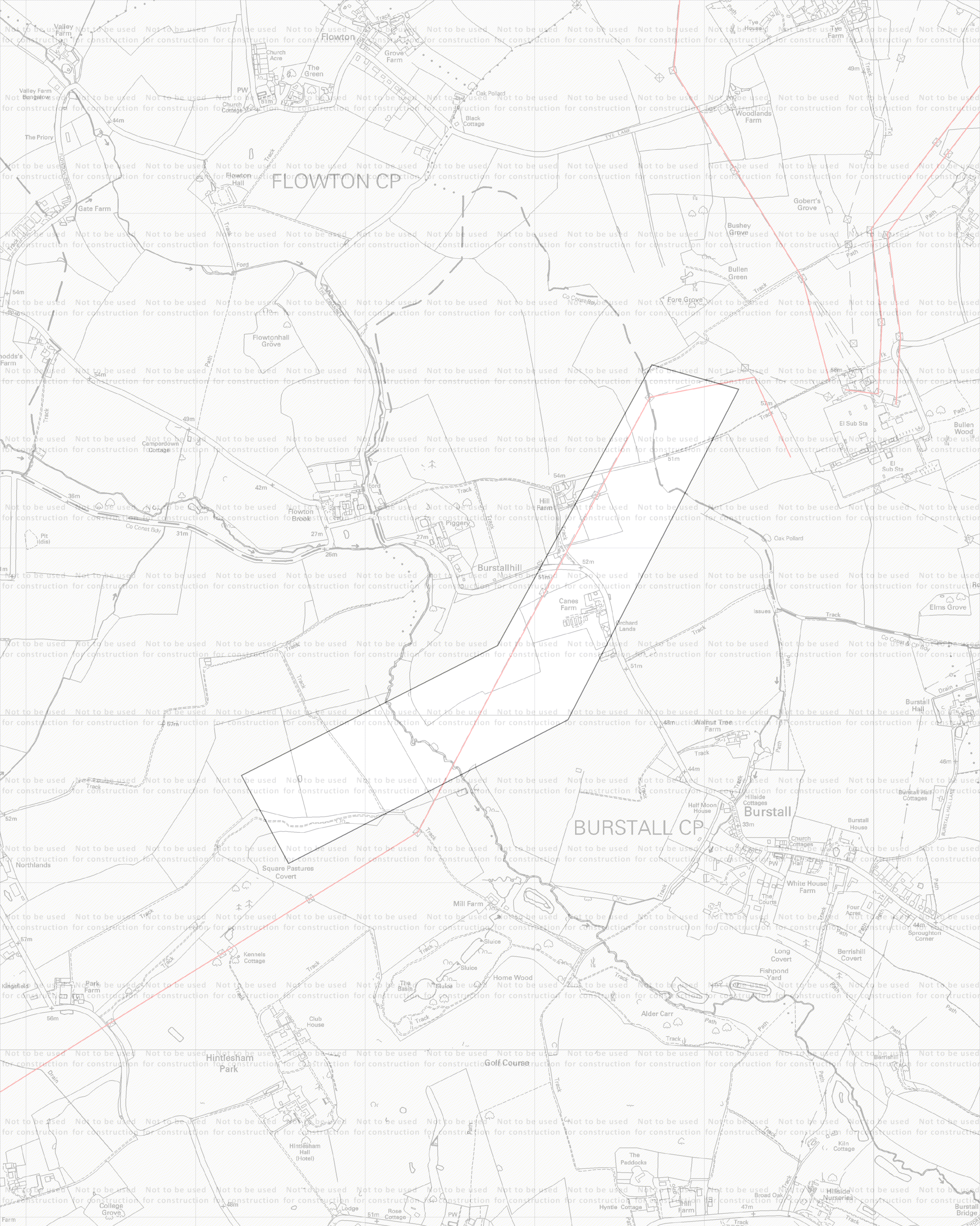
Map 1 of 2 (GAS)

MAPS Plot Server Version 1.11.0

Cadent
 Your Gas Network

Requested by: Planning Inspectorate

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ID: EA_GE4B_3NWP_029349
 USER: toby.cooper
 DATE: 14/05/2021
 DATA DATE: 23/02/2021
 REF: EN020002 (TC)
 MAP REF: TM0845
 CENTRE: 608868, 245302

View extent: 2890m, 3670m
 Underground cables
 Overhead lines
 0m 200m
 Approximate scale 1:10000
 on A3 Colour Portrait

Do not proceed without further consultation

This plan shows those cables owned by National Grid Electricity Transmission plc in its role as a Licensed Electricity Transporter (ET). Electricity cables owned by other ETs, or otherwise privately owned, may be present in this area. Information with regard to such cables should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Ancillary equipment such as cooling systems and communication cables are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Electricity Transmission plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of cables and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near electricity apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Map 2 of 2 (ELECTRIC)
 MAPS Plot Server Version 1.11.0
nationalgrid
 Requested by: Planning Inspectorate
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ENQUIRY SUMMARY

Received Date

11/05/2021

Your Reference

EN020002 (TC)

Location

Centre Point: 608868, 245302

X Extent: 1470

Y Extent: 1493

Postcode: IP8 3DS

Location Description: IP8 3DS Church Hill, Burstall, Babergh, Suffolk,

Map Options

Paper Size: A3

Orientation: PORTRAIT

Requested Scale: 10000

Actual Scale: 1:10000 (GAS), 1:10000 (ELECTRIC)

Real World Extents: 2890m x 3670m (GAS), 2890m x 3670m (ELECTRIC)

Recipients

pprsteam@cadentgas.com

Enquirer Details

Organisation Name: Planning Inspectorate

Contact Name: Laura Feekins-Bate

Email Address: [REDACTED]@planninginspectorate.gov.uk

Telephone: [REDACTED]

Address: The Planning Inspectorate, Room 3C, Temple Quay House, 2 The Square, Bristol, BS1 6PN

Description of Works

proposed Bramford to Twinstead overhead line project

Enquiry Type

Formal Planning Application

Development Types

Development Type: Development for use by General Public

National Grid's EI Scoping Report is incomplete.

In the following scoping matters it fails:

- To take account of up-to-date locally provided information
- To account for significant recent changes that add to cumulative impact
- To account for its own announcements of future development that increase cumulative impact
- To account for socio-economic impacts
- To compare environmental impacts of alternative, plausible connection options

History

National Grid conducted a lengthy public consultation relating to the proposed Bramford to Twinstead transmission line between 2009 and 2013. In 2012 it published a Connection Options Report followed by an EI Scoping Report. The Planning Inspectorate published a Scoping Opinion in March 2013.

Later that year National Grid conceded its application was premature and suspended the process.

National Grid restarted the consultation early in 2021, offering parish councils an on-line meeting due to Covid-19 restrictions. A newsletter was sent to a selection of households close to the proposed transmission corridor along with a questionnaire.

The consultation coincided with council elections and there were limited opportunities for engagement. Eleven parish councils signed a Pre-Application Protocol Letter Before claim for Judicial Review providing ground for an extension to the consultation period. This was refused.

The consultation period closed on 6th May and on 11th May the Planning Inspectorate issued notification of the Scoping Report.

The report therefore takes no account of initial consultation responses from statutory consultees or other representative bodies and individuals. In some locations entire communities were omitted from the consultation. A survey of residents in Flowton indicates they did not receive the newsletter or questionnaire, despite being close to the substation and with many sites where sensitive visual receptors are likely to be found. Various properties in Hintlesham received these documents too late to take part in briefing meetings.

Although the consultation was informal, National Grid has failed in its duty to consult the local community and contravened the spirit if not the letter of s47. Nor does it follow advice¹ set out by the Planning Inspectorate and thus shows scant regard for the views of local residents and statutory consultees.

Absence of up-to-date local information means the report is also incomplete.

¹ Advice Note 14 paras 3.14 et al

Connection Options

National Grid published its initial Connection Options Report in May 2012.

Details are provided in Para 3 on subsequent evaluation.

Connection decisions have a significant bearing on environmental impact and additional information is required.

It is not the purpose of this submission to evaluate the potential use of new technology. In the context of EI scoping the applicant should demonstrate why new technologies that could significantly reduce environmental impact have been excluded. In this Report potentially disruptive technologies such as superconductors which have been in use in Germany for several years and also in the USA are not mentioned. Independent evidence needs to be provided if they are to be scoped out.

The construction and post construction environmental impacts of some sections are unclear.

The working area of underground cable sections would be 100m (4.5.19) and topsoil clearance would be carried out for this width, except for shorter sections where directional drilling (trenchless cables) would be used. In these sections the surface soil is unaffected.

Further information on the residual 'exclusion' zone is required.

With regard to the necessity for sealing end compounds if the entire line is not placed underground, the following should be scoped in:

Additional transport for materials and plant to the compounds during construction

Environmental impacts that could be avoided if locations proposed by local communities are used instead

Assessment of visual impact

In para 6 National Grid applies a Zone of Theoretical Visibility (ZTV) of 10 km and a study area of 5 km for the LVIA.

It is notable that it did not seek consultation from communities 10 km from the proposed line and thus does not have the benefit of local experience on which to base its assumptions.

It also states that screening diminishes the impact (6.3.3)

In practice, visual impact depends on a number of factors. For example, from popular vantage points between Burstall and Hadleigh the existing line defines the horizon for a great distance with minimal screening in either the near or far distance.

Between Hintlesham and Hadleigh the proposed line does not replace a smaller distribution line as in other sectors, but would create a 6km length of double 440 kV pylons where the cumulative impact is far greater than at present. At Hintlesham Woods, a SSSI, the proposed completely new line could be seen from various properties adjacent to the A1071 including Park Farm and College Farm which are Grade II listed.

National Grid also pre-judges the difference in impact of the existing 132kV line and the proposed 400 kV line (6.3.6). The difference in theoretical visibility should not be based merely on comparisons between the height of the towers. The cumulative impact of two lines of equal height is quite different to that of one tall and one shorter line. The interaction of larger lines is significantly greater as perspective dictates than towers and cables are rarely in alignment. A high 'steel fence' is thus created. Ample evidence is provided by the transmission lines from Sizewell to Bramford. Only by accepting these impacts can the LVIA be assessed adequately.

Socio-economic impacts

In para 15 the Report states that socio-economic impacts can be scoped out as tourism primarily benefits the Dedham Vale where the line will be placed underground.

By implication National Grid thus accepts that overhead lines may have an impact on visual amenity to the detriment of the tourist industry.

Significantly it also shows a lack of awareness or research into the local tourist industries. In recent years numerous tourist attractions have been created, supplementing those that already existed. Some – such as glamping sites – rely on the landscape and tranquility of their setting. Others provide 'out of town' leisure amenities which again benefit to some extent from their rural setting.

Examples in the Hintlesham area include:

Suffolk Escape <http://www.suffolkescape.co.uk/>

The Lost Garden Glamping <http://thelostgardenretreat.com/>

College Farm – Grade II listed BnB <https://www.collegefarm.net/>

Hintlesham Hall – Grad 1 listed hotel

Hintlesham Golf Course and golf driving range

Socio-economic impacts should therefore be scoped in along the entire length of the project. (15.6.9)

Cumulative impacts

National Grid considers cumulative impacts in chapter 18 and provides initial lists of sites that may be relevant in the Appendix.

Cumulative impacts relate to '*other existing and or approved development*'. Despite attempts at clarification, this terminology from the EIA Regulations 2017 is ambiguous.²

² *Demystifying Cumulative Effects*, IEMA Impact Assessment Outlook Journal Volume 7: July 2020

PINS Advice Note Nine: Rochdale Envelope identifies 'other developments' and more specifically 'major developments' as those that are:

- under construction
- permitted application(s), but not yet determined;
- submitted application(s) not yet determined;
- projects on the Planning Inspectorate's Programme of Projects; and,
- identified in the relevant Development Plan
- Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward.

PINS Advice Note 17: Cumulative Effects Assessment provides a methodology for CEA comprising a staged process.

1. Establishing the Zone of Influence (ZOI) and identify a list of 'other developments' which could potentially interact with the proposed development;
2. Analysing the list obtained in stage 1 and identify the sites that may have a significant effect on the environment, economy or community when assessed cumulatively with the proposed site. Providing a justification as to why the sites that will result in no cumulative effects can be scoped out of the assessment and develop a new list of sites that can progress to stage 3;
3. Gathering all required information for the sites on the new list; and,
4. Assessing the likely residual effects as a result of the interrelationship between the proposed and cumulative sites.

National Grid accepts the list will continue to be updated. However, at the time of publication the list was already incomplete. As a result, National Grid underestimates the significant of cumulative impacts, especially in the area of the Bramford substation and encompassing the surrounding villages.

The list is also inadequate because in table 18.1 the Zone of Influence for Environmental Topics is set at 1 km for biodiversity, socio economics, recreation and tourism.

It is self-evident that tourists travel and thus appreciate the environmental benefits of the countryside at scale. An hour's walk in the countryside could easily cover 5 km. It is quite likely visitors have come into the countryside to escape the confines or industrialisation of towns and built landscapes. The Suffolk countryside is not a walled garden and an artificial division of 1 km is wholly inadequate. The ZOI should therefore depend on topography, geography and significance of amenities. The locally designated Special Landscape Areas are thus a good starting point for considering cumulative impacts. They include the Brett Valley and the SLA to the north and south of the Bramford substation.

The importance of dealing with cumulative impacts appropriately has been demonstrated in the recent 'Vanguard Judgement'.

The High Court has confirmed in the recent case of R (Pearce) v Secretary of State for Business, Energy and Industrial Strategy [2021] EWHC 326 (Admin) that the cumulative impact of the proposal must be fully considered. Justice Holgate articulated the essential principle as follows (at para.120 of the judgment):

“The effect of Directive 2011/92/EU, the 2009 Regulations and the case law is that, as a matter of general principle, a decision-maker may not grant a development consent without, firstly, being satisfied that he has sufficient information to enable him to evaluate and weigh the likely significant environmental effects of the proposal (having regard to any constraints on what an applicant could reasonably be required to provide) and secondly, making that evaluation.”

It is the first decision of the High Court after the end of the UK's post-Brexit transition period to consider EIA legislation as retained EU law, and the issue of discretion in judicial review proceedings relating to breaches of retained EU law. It confirms the duty to properly consider and weigh the cumulative impact. The Court took the opportunity to highlight the principles previously set out by the Court of Appeal in R (Larkfleet Limited) v South Kesteven District Council [2016] Env. L.R. 76, which includes:

“But the mere fact that two sets of proposed works may have a cumulative effect on the environment does not make them a single project for the purposes of EIA. They may instead constitute two projects the cumulative effects of which must be assessed ([36]).”

As such it is clear the Court's approach is the cumulative impact must be fully considered. We are concerned the approach of National Grid to date is to not fully set out the full list of projects because the cumulative impact is obviously substantial.

A provisional list of inter-project cumulative effects is provided in Appendix 18.1 (page 153)

In addition to the existing and proposed transmission lines and existing (baselines) distribution lines significant projects very close to the Bramford sub station now in the planning system include:

Anesco battery storage

Anglian Water strategic pipeline

EA3 – additional underground electricity cables from offshore generation

EDF – 202-acre solar park

ENSO – 242-acre solar park

Greybarn – 144-acre solar park

Energypeople Ltd – gas fired energy reserve generation unit

National Grid also omits any reference to work on its substation for which £14 million has been allowed and to the certain expansion of the large 'sub-stations' for offshore wind, adjacent to the original sub-station.

It has also presented provisional plans for further transmission lines in the Bramford area. Although the need case and connection options for these remain opaque and confused, having presented them during the information consultation they cannot be scoped out unless they are withdrawn.

National Grid applies the caveat “It is expected that a future developer.... would carry out their own assessment of cumulative impacts” to numerous projects.

This ‘opt-out’ appears subjectively applied and should be reconsidered.

Feekins-Bate, Laura

From: Naomi Goold [REDACTED]@eastsuffolk.gov.uk>
Sent: 08 June 2021 22:14
To: BramfordtoTwinstead
Cc: Lisa Chandler
Subject: ESC Response to Bramford to Twinstead Scoping Report

Dear Laura,

Thank you for consulting East Suffolk Council (ESC) on the Scoping Report submitted by National Grid in relation to the Bramford to Twinstead project.

ESC is a neighbouring authority in relation to the proposed electricity reinforcement between Bramford and Twinstead Tee. For this reason, ESC will confine its comments to the matter of cumulative effects and specifically inter-project cumulative effects. The Council considers that the host authorities and County Councils are best placed to provide detailed comments on the individual topic matters and intra-project cumulative effects.

ESC notes that the Bramford to Twinstead project is expected to start construction in 2024 and be completed by 2028. There are several nationally significant infrastructure projects (NSIPs) within a similar geographical area whose construction phases have the potential to overlap with the construction phase of the Bramford to Twinstead project and result in cumulative effects. ESC therefore supports the scoping in of inter-project cumulative effects as identified in Table 18.4.

In relation to paragraph 18.6.17, ESC understands that there is a need for a cut off to allow the Applicant to finalise the cumulative effects assessment for submission, it is however considered that during the examination process, given its typical length, consideration should be given to any significant changes in relation to the project list after this date also.

Paragraph 18.6.19 identifies that all Tier 3 development will be excluded from the short list, it is considered that a more considered and project specific approach should be taken in relation to NSIPs. Although full information may not be available to enable a full cumulative effects assessment to be undertaken, there may be sufficient information available for a partial assessment for example.

Paragraph 18.6.16 states that Zones of Influence (ZOI) were used to identify topic areas which could have cumulative effects with the other developments identified. Appendix 18.1 identifies 'Cumulative Effects Assessment Long List Table'. ESC supports the inclusion of all NSIP projects within 50km of the project. ESC however notes that most of these projects have been screened out of the cumulative effects assessment, except for East Anglia Three Offshore Wind Farm. All the other NSIPs identified have been screened out because they are located outside the ZOI set at 10km or less dependent on the topic matter. ESC has also noted that one of the Multi-Purpose Interconnectors being promoted by National Grid Ventures 'Eurolink' has not been included on the long list which is considered an omission.

ESC would caution against the exclusion of these projects on this basis of such a narrowly defined ZOI figure. Table 18.1 identifies only a 10km ZOI for the traffic and transport topic, although this is to be later defined by the Affected Road Network (ARN), and a 1km ZOI for the socio-economics, recreation and tourism topic. It is not considered that such a narrowly defined ZOI has been sufficiently justified by the Applicant.

The new nuclear power station proposed at Sizewell (Sizewell C) for example, has been screened out of the cumulative effects assessment. Sizewell C is a NSIP of significant size and scale, the construction phase will take between 9-12 years and commence, if consented, at the earliest in 2022. The construction phase of the Bramford to Twinstead project would therefore overlap with the anticipated construction phase of Sizewell C. The construction workforce (at peak) in relation to the main development site and associated development sites is 8500 workers who are expected to travel from a 90-minute radius of the site. Materials are expected to travel to the site by various means including road, from all over the country. It is clear there would not only be a temporal overlap but also a spatial overlap between the extent of the potential effects of the Bramford to Twinstead construction phase with the Sizewell C construction phase. The cumulative traffic and transport and socio-economic effects of this needs to be fully considered. Sizewell C has been utilised as an example, but ESC considers that the cumulative effects of the Bramford to Twinstead project with the other identified NSIPs in relation to traffic and transport and socio-economics needs to be fully and appropriately considered.

The tourism industry is an important and substantial part of the area's overall economy. It is vital that appropriate consideration is given to the potential impact on visitor perceptions as a result of the Bramford to Twinstead project being construction simultaneously with other identified infrastructure projects. This is currently a matter which has not been given consideration within the Scoping Report.

ESC therefore does not agree within the conclusions of paragraph 18.4.6 which states that '*a 50km study area was used for NSIPs, in order to establish context within the region. However, these were not considered as part of the long list, where they lay outside of the defined study area, as they were unlikely to result in cumulative effects with the project given the defined ZOI*'. ESC considers NSIPs beyond the ZOI identified have the potential to have cumulative effects in terms of traffic and transport, socio-economics and tourism and these should be fully considered within the Cumulative Effects section of the Bramford to Twinstead Environmental Statement.

If you have any questions regarding the above submission, please do not hesitate to contact me.

Yours sincerely,

Naomi Goold



Naomi Goold BSc (Hons) MA MRTPI
Senior Energy Projects Officer
East Suffolk Council

www.eastsuffolk.gov.uk

East Suffolk Council will continue to review and prioritise the delivery of its services during this unprecedented time. The COVID-19 outbreak will severely impact what we are able to do, however we will continue to support and protect our communities, delivering the critical services you need.

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Our Ref: 21_04217_P_2

June 7th 2021

RE: Bramford to Twinstead Overhead Line Project: EIA Scoping Notification and Consultation

Following the Board's comments submitted on May 5th 2021, thank you again for the opportunity to comment on the proposed project at this stage. I hope the following summary proves useful.

- The proposed 400KV overhead line route and proposed overhead line removal – 132KV route, appears to be partially within the Internal Drainage District (IDD) of the East Suffolk Internal Drainage Board (IDB) and therefore the Board's Byelaws apply. A copy of the Board's Byelaws can be accessed on our website (https://www.wlma.org.uk/uploads/ESIDB_Byelaws.pdf), along with maps of the IDD (https://www.wlma.org.uk/uploads/ESIDB_Index_plan.pdf) and specifically the IDD map which best shows where the proposed 400KV overhead line is to be built and the 132KV overhead line removed, can be accessed here: https://www.wlma.org.uk/uploads/ESIDB_185G_BelsteadBrook.pdf. These maps also show which watercourses have been designated as 'Adopted Watercourses' by the Board. The adoption of a watercourse is an acknowledgement by the Board that the watercourse is of arterial importance to the IDD and as such will normally receive maintenance from the IDB on a recurrence deemed necessary to meet water level management requirements.
- Depending on the exact location of the overhead line build/ line removal within the Board's IDD, your route may take you close to a Board Adopted Watercourse. Please be aware that any works proposed within 9 metres of an Adopted Watercourse (the maintenance strip) will normally require consent to relax Byelaw 10 (no works within 9 metres of the edge of drainage or flood risk management infrastructure).
- Please be aware that if your proposals require works to alter a watercourse (adopted or riparian) consent from the Board may be required under Section 23 of the Land Drainage Act 1991 (and Byelaw 4).

I hope the Board's amended comments above are useful and I once again look forward to reviewing any additional information when it becomes available. If you have any questions or desire clarification on any of the above points, please do not hesitate to contact me.



Jane Marson (Chairman) Michael Paul (Vice-Chairman)

Phil Camamile (Chief Executive)



Cert No. GB11990

Cert No. GB11991

Kind Regards,

Charlotte Orr

Sustainable Development Officer
Water Management Alliance



Laura Feekins-Bate
Temple Quay House 2 (The Square)
Temple Quay
BRISTOL
BS1 6PN

Our ref: AE/2021/126162/01-L01
Your ref: EN020002
Date: 07 June 2021

Dear Ms Feekins-Bate

(ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017(THE EIA REGULATIONS) – REGULATIONS 10 AND 11 APPLICATION BY NATIONAL GRID ELECTRICITY TRANSMISSION PLC (THE APPLICANT) FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE BRAMFORD TO TWINSTEAD OVERHEAD LINE PROJECT (THE PROPOSED DEVELOPMENT) SCOPING CONSULTATION

Thank you for your EIA Scoping consultation letter of 11 May 2021 received in this office by email on the same date.

Environment Agency position

We have reviewed the submitted scoping report and have further comments to make in respect of chapters 4, 9, 10, 20 as well as appendix 7.3 to ensure that the Environmental Statement (ES) will appropriately address the environmental issues we consider are of most importance for this proposal.

Our technical comments detailing the information we consider should be provided in the Environmental Statement are provided below.

4.5 Description of Project Components and Construction Methods

Sections 4.5.7 and 4.5.35 should refer to our '[Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination](#)' National Groundwater & Contaminated Land Centre Project NC/99/73. The selected method, including environmental mitigation measures, should be presented in a 'Foundation Works Risk Assessment Report', guidance on producing this can be found in Table 3 of '[Piling Into Contaminated Sites](#)';

4.5.18 Underground Cables (Open Cut and Ducted Method)

The shallow depth of these excavations mean that they are unlikely to have a significant impact on the shallow aquifer, where present at the ground surface. However, there is the potential for changes to flow that could impact shallow wells proximal to the

excavations. All groundwater abstractions along the cable excavations should therefore be identified; a Hydrogeological Impact Assessment (HIA) and potentially mitigation may be required for any shallow abstraction identified within close proximity to the cable excavations.

4.5.27 Underground Cables (Trenchless Methods) and S.10 Geology and Hydrogeology

The trenchless crossing of the Stour will run through an environmentally sensitive area, proximal to the SPZ1 of a local public water supply, as noted in the EIA Scoping document. The geology in this area of the Stour valley broadly comprises sand & gravel over chalk, with some alluvium under the river channel, along with exposures of the Thanet Sands in the valley sides. Trenchless crossing will only be acceptable if it can be undertaken without adverse impact on groundwater quality or flow. In particular:

1. It must not alter the hydraulic continuity between the river and the underlying aquifer, or between sediments in the layered aquifer system
2. No significant preferential pathways may be created
3. It must not adversely impact groundwater quality – all drilling fluids and additives must be environmentally-friendly
4. Any drilling must have an adequate monitoring system and mitigation plan in place to deal with drilling fluid breakouts
5. Should there be a requirement for horizontal drilling to extend into the chalk aquifer, this will only be acceptable if drilling can be done without significant loss of drilling fluids and additives into aquifer fractures. Such flow routes within the chalk aquifer must not be blocked and an assessment must be done of whether drilling can be undertaken in these circumstances. The Stour valley is an area of the chalk aquifer with elevated fracture density and therefore high transmissivity.
6. All local abstractions must be identified and HIAs prepared in discussion with the EA.
7. The potential for mobilisation of contamination around the railway line must be assessed.

Chapter 9 – Water Environment

It is good to see that the Water Framework Directive (WFD) is referenced, and acknowledgement that the scheme has the potential to have adverse effects on the water environment. The majority of the risks are at the construction phase as detailed in the documents provided.

Section 9.5.3 mentions that the Outline CoCP (Code of Construction Practice) will be followed. This code contains the concerns and risks for water quality, and provides details of the mitigation measures that will be put in place. It contains a list of relevant good practice measures relating to the water environment which will be carried out during construction of the project, such as measures to ensure that 'Fuels, oils and chemicals will be stored responsibly, away from sensitive water receptors' and that 'Runoff across the site will be controlled'. It also has a commitment of producing a Construction Environmental Management Plan prior to construction and checks that work is proceeding with these Management Plans. All of the above is supported.

Good practice measures within the Outline CoCP will reduce the risk of pollution to the water environment during construction by removing the pathway between the source and the receptors for most of the working environment. The most sensitive sites with regard to pollution risk are where underground cables cross watercourses using open cut methods (such as the River Box) and locations where temporary crossings are

required for access across watercourses. These works will need to be undertaken with the conditions set out within the consents and permits from the Environment Agency and LLFA.

There is however the potential for adverse effects from drilling mud break out onto bed of watercourse and we would expect the effects of this to be considered. We'd like to see more consideration given to the horizontal directional drilling.

We are pleased to see that a Flood Risk Assessment of the fluvial flood risk during construction, as a result of potential working within the floodplain will be produced as part of this proposal. It is positive to see that stockpiles of soils leading to a loss of flood storage or deflection of flood flows during construction will be avoided and appropriately assessed.

Chapter 10 – Geology and Hydrogeology

We re-iterate the comments we raised in our response above in relation to section 4.5.27. We have concerns regarding the trenchless undergrounding due to the potential harm caused to wet habitats and also drier ones which can rely on a certain hydrological regime for their bio-diverse microhabitats. Such areas include The Dollops LWS in the Polstead area and the valley bottom and sides of the River Stour.

We also have concerns regarding the use of bentonite or similar substances - we have seen serious damage to important East Anglian habitats done by bentonite leakage from direct drilling for cable laying. To be used beneath rivers and vulnerable habitats the drilling will have to be deep enough in impermeable layers to avoid creating preferential pathways and potential long term harm to habitats and flow volumes. Both the River Brett and Stour already have annual problems with algal blooms and low dissolved oxygen in the summer which are partly to do with low flow and any further leakage caused by such drilling could cause permanent harm to the river ecosystems.

Where trenched crossings are made to watercourses we would expect significant river corridor enhancements to be carried out to leave the section of river in a better state after the cable laying. This could include appropriate tree and shrub planting, gravel enrichment, other sympathetic geomorphological enhancement and possibly redundant structure removal.

10.6 Effects of Dewatering and Discharge

Dewatering will require an abstraction licence unless the abstraction rate and time frame of dewatering (under the entire scheme) are such that the activity will be exempt; if a transfer licence is required, the Environment Agency will set out the assessment requirements. A discharge consent may be required for the dewatering discharge. The Environment Agency must be consulted once dewatering details have been finalised to determine whether or not permits will be required. If any proximal abstractions are identified, an HIA will be required; the level of assessment can be discussed with the Environment Agency.

Water Environment Conclusions

We see that effects on surface water quality are currently scoped out. We feel these should be should be scoped in due to past problems elsewhere with drilling using bentonite. Similarly it is possible that there could be detriment to surface water interests if a preferential pathway is created and water flow or wet habitat is impacted.

Chapter 20 - Conclusion

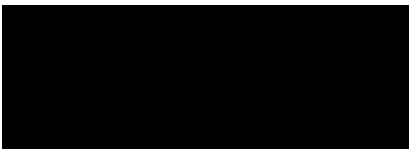
Conclusion table 9.3 – there is the potential for adverse effects from drilling mud break out onto bed of watercourse – effects of this should be considered. We would like to see more consideration given to the horizontal directional drilling here.

Appendix 7.3

Paragraph 5.6.6 – drilling mud losses to the environment need a remediation plan and methods considered to minimise breakouts – i.e. pump pressure reduction. The mud may be inert but it still has an adverse environmental impact on the bed of the watercourse and will potentially smother any life found there.

We trust this advice is useful.

Yours sincerely



Mr Liam Robson
Sustainable Places - Planning Advisor

Direct dial [REDACTED]

Direct e-mail [REDACTED]@environment-agency.gov.uk

Feekins-Bate, Laura

From: ESP Utilities Group Ltd <donotreply@espug.com>
Sent: 27 May 2021 09:56
To: BramfordtoTwinstead
Subject: Your Reference: EN020002 Our Reference: PE158356. Plant Not Affected Notice from ES Pipelines

BramfordtoTwinstead
Planning Inspectorate

27 May 2021

Reference: EN020002

Dear Sir/Madam,

Thank you for your recent plant enquiry at: Bramford to Twinstead overhead line project

I can confirm that ESP Utilities Group Ltd has no gas or electricity apparatus in the vicinity of this site address and will not be affected by your proposed works.

ESP Utilities Group Ltd are continually laying new gas and electricity networks and this notification is valid for 90 days from the date of this letter. If your proposed works start after this period of time, please re-submit your enquiry.

Important Notice

Please be advised that any enquiries for ESP Connections Ltd, formerly known as British Gas Connections Ltd, should be sent directly to us at the address shown above or alternatively you can email us at: PlantResponses@espug.com

ESP have provided you with all the information we have to date however, there may be inaccuracies or delays in data collection and digitisation caused by a range of practical and unforeseeable reasons and as such, we recommend the following steps are taken as a minimum before work is commenced that involves the opening of any ground and reference made to HSG47 (Avoiding danger from underground services).

A. Plans are consulted and marked up on site

B. The use of a suitable and sufficient device to locate underground utilities before digging (for example the C.A.T and Genny)

C. Trial holes are dug to expose any marked up or traced utilities in the ground

D. If no utilities are shown on any plans and no trace is received using a suitable and sufficient device, trial holes are dug nonetheless using hand tools at the location or at regular intervals along the location that the work is being carried out depending on the length of excavation work being undertaken

E. All location work is carried out by individuals with sufficient experience and technical knowledge who may choose to control this activity under a Safe System Of Work

Yours faithfully,

Plant Protection Team
ESP Utilities Group Ltd



Bluebird House
Mole Business Park
Leatherhead
KT22 7BA



<http://www.espug.com>

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Laura Feekins-Bate
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8th June 2021

BramfordtoTwinstead@planninginspectorate.gov.uk
[REDACTED]@planninginspectorate.gov.uk

Dear Laura Feekins-Bate

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11 Application by National Grid Electricity Transmission plc (the Applicant) for an Order granting Development Consent for the Bramford to Twinstead (B2T) overhead line project (the Proposed Development)

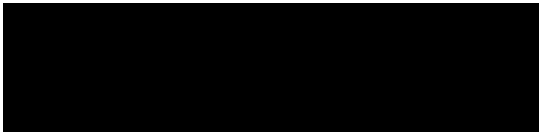
Thank you for consulting Essex County Council (ECC) on National Grid Electricity Transmission PLC (The Applicant) request for a Scoping Opinion on this proposal. The Council is happy to be given the opportunity to respond. This response is predicated by the fact that the Council are at this time continuing to deal with the current national pandemic which is resulting in stretched resources and time pressures which makes providing a response within the 4 weeks very challenging indeed.

Due to this, the response is as comprehensive as possible at this point in time, but it hasn't been possible to secure engagement with some internal stakeholders, most notably our Health and Wellbeing Team who have other pressing priorities at this time. In future, engagement with the applicants on such topics relating to health will need to be discussed and taken into account as the scheme develops prior to formal DCO submission.

In addition, in May the local elections were held which resulted in a number changes to elected councillors and a different Cabinet structure. You are therefore asked to note that this response is submitted under the Council's delegated powers as normal Member engagement has not been possible within the limited time available for the response to be submitted.

ECC notes that this DCO was initially considered and a Scoping Opinion provided back in 2013 and a copy of this is on the Planning Inspectorates (PINS) web site. It is correct that due to the time since this original decision, and changes to the EIA Regulations in 2017, this is now needs to be re-done. It is also noted that since the scheme went into abeyance in 2013 it has undergone little change. There have been a number of engagement meetings between the applicants, ECC and other Councils' along the proposed NSIP route in the last few months. Going forward, stakeholder engagement is proposed on a variety of topics, and the Council looks forward to future engagement on this complex and challenging project.

Yours sincerely



Graham Thomas
Head of Planning and Sustainable Development

ECC Response the to the scoping opinion request for the Bramford to Twinstead (B2T) overhead line project (the Proposed Development)

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1. Overview

1.1 The overview of the proposal is set out within the Scoping Report. National Grid’s preferred option to secure system security for UKPN is to build a new substation west of Twinstead Tee and route a new power connection westwards across to Bamford in Suffolk in both underground and overground links. It is acknowledged that this is currently the subject of re-commenced consultation in 2021, but a preferred route of the same is set out in the submission document.

1.2 The approach set out in the Environmental Statement is generally satisfactory and we are pleased that it reflects the nature of, and progress in, discussions the Councils have had with B2T on the undertaking of assessments to date. It is noted however that a number of key topics, not least as they relate to the statutory function of ECC including Highways and Transportation, Climate Change, Economy and Skills. This has meant it is difficult to consider the true impacts of the scheme across the board and to consider matters which have to be implemented to ensure the scheme can be delivered affectively, and any adverse impact can be mediated.

1.3 In addition, and at this time, we draw particular attention to the following matters:

- Further discussions are required with B2T to better understand the magnitude of impacts, in particular the spatial extent and duration of effect that are used to derive the corresponding magnitude. As currently described, the Environmental Statement (ES) is likely to underreport and underestimate potential localised impacts of significant duration. A better acknowledgement of the longevity of the temporary construction period is required.

- ECC is concerned that alternatives are being scoped out of the process at an early stage, without a full appreciation of the effects of B2T's preferred option which is underdeveloped at this time. Particular reference is here made to the decision not to underground the entire link, the reason for this being purely cost as undergrounding clearly is possible from an engineering perspective. Alternatives should be appraised having regard to the respective socio-economic, transport and environmental effects alongside consideration of operational requirements. The ES should clearly articulate how alternatives have been evaluated in a balanced way.
- The ES should clearly articulate the cumulative effects of all individual elements of the project as many receptors will be impacted by the development. This needs to be fully acknowledged.
- As the submitted SR indicates additional studies and data collection remain necessary from a wide variety of topics to inform and supplement the eventual EIA submission and it is anticipated that the development proposals will be refined and change as a result. For example, there is scant detail on the highways implications of this development, both on its own and in combination with other proposals which will be taking place at the same time. ECC look forward to engaging with other Authority partners and the applicants on this.
- It is noted in particular that it is proposed to limit the consideration of associated developments to a 10km radius to assess cumulative impacts with the same. Due to the increase in major developments and NSIPs within the region it is considered that this should be extended to 50km to correctly assess the development as here proposed on the wider area.

1.4 It is with some concern we note that National Grid are misapplying paragraph 2.8.9 of National Policy Statement EN-5. That paragraph sets out the circumstances in which PINS may refuse an overhead line in favour of an underground solution. It does not state that National Grid should only propose an underground solution in these circumstances, which is the way the paragraph has been applied by National Grid to date. Neither does EN-5 state that undergrounding should *only* be proposed in "particularly sensitive areas" (paragraph 2.8.2), which again National Grid appears to treat as a prerequisite criteria. It is noted that PINS should consider the "additional cost of any undergrounding" (paragraph 2.8.9), but the National Policy Statement does not identify this is an overriding argument to be afforded any particular weight.

1.5 It is clear from National Grid's interpretation that it is seeking to deliver the absolute minimum of undergrounding to satisfy the policy tests, without having regard to the actual impacts of the scheme which, ECC would suggest, provides compelling evidence that the scheme should be underground for its entire length. This would secure maximum landscape and visual improvement benefits in the most sensitive locations

along the route. What National Grid are suggesting is that the cost of this is prohibitive, however the costs of the scheme are not a prerequisite of NPS EN5.

- 1.6** Essex County Council has ongoing concerns that judgements on alternative options are being made with primary reference to cost. The EIA should primarily be concerned with the relative environmental merits of different options, without making comment on National Grid's statutory duties. This is the requirement of the EIA regulations.
- 1.7** It is also noted that whilst some of the current overhead power connection will be removed, effectively removing part of this from the landscape so the overhead lines will be reduced in length, but the new proposals are, as far as ECC had been made aware, 40% taller than the existing and hence increasing their real potential for significant material harm in this landscape.
- 1.8** It is noted that the proposals show undergrounding two sections of a line as part of an application (Dedham Vale AONB and the Stour Valley), one of which is entirely within Essex which is welcomed, but more significant improvements to the landscape could be achieved. ECC considers that National Grid should also consider undergrounding the existing 400kV overhead line in Dedham Vale AONB, and the Stour Valley, whilst undergrounding the new line. The Stour Valley is subject to the aim of securing AONB status, on which news is anticipated in Q3 2021 ahead of the eventual DCO submission in Q3 2022 and possesses many of the characteristics of an AONB. This would secure maximum landscape and visual improvement benefits in the most sensitive locations along the route.
- 1.9** The County Council is also concerned that since the development was held in abeyance, the affected communities and parish councils have undergone change. It is correct that the B2T scheme is currently out to consultation, nevertheless, the timing of this Scoping Report is such that the responses to the same cannot, and have not, been taken into account in this Scoping submission.
- 1.10** Furthermore, there will be minimal time for PINS to consider any representations by those parishes and other responders, prior to providing National Grid with their opinion. Consequently, there is some concern that National Grid may not be able to respond to the requirements of Section 37 of the Planning Act – specifically to produce a Consultation Report that shows how it has had regard to any relevant responses by those 'directly' affected by its development.
- 1.11** Specific comment is raised on the following topics which are material planning considerations.

2. Climate Change

- 2.1** It is noted that this was Scoped out of the original submission by PINS. Since this date, changes to the EIA Regs in 2017 says this this requires additional consideration, within Schedule 4 of the same, it states at para 5 that: *A description of the likely significant effects of the development on the environment resulting from, inter alia (f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change.* It is also backed up by case law which states this is now a consideration for NSIPs.
- 2.2** It is correct that the development of the magnitude as proposed, would be subject to a number of factors in relation to climate change going forward. It is also considered necessary that the development itself must show how it can achieve zero carbon during its lifetime from construction to implementation and contribute to net carbon gain.
- 2.3** Measures to avoid, prevent, mitigate and to seek to offset significant carbon impact must be ensured, including the adaption to its effects, such as protecting communities from water shortages, flooding and heatwaves. The Essex Climate Action Commission has been set up and a series of Special Interest Groups (SIG) advise the Council about tackling climate change.
- 2.4** The commission has over 30 members over a wide range of senior professionals, local councillors, academics, businesses, people and 2 members of the Young Essex Assembly. The commission will run for 2 years initially and make recommendations about how we can improve the environment and the economy of Essex.
- 2.5** The findings of the commission will not be published until Q3 2021, but the applicant should have knowledge of this initiative, their values and objectives and the implications for the future aspirations of the development.
- 2.6** The climate change impacts of the development will be brought about by a wide range of topics and in a variety of chapters in the eventual EIA including, but not limited to, transportation (electric vehicles and charging points, use of public transport, car sharing, sustainable low carbon traffic modes etc) the built environment, green infrastructure (planting, Sustainable Urban Drainage, greenhouse gas emissions, air quality etc).
- 2.7** The submitted ES should include a description and assessment (where relevant) of the likely significant effects the proposed development will have on climate (for example having regard to the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project in its construction phase, to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development. This may include, for example, alternative measures such as changes in the use of materials or construction and design techniques, that will be more resilient to risks from climate change.

3. Minerals and Waste

- 3.1** ECC is the host Minerals and Waste Planning Authority in the two tier administrative area of Essex. The [Essex Minerals Local Plan - Adopted July 2014](#) concerns the administrative area of Essex, and seeks to ensure that a local supply of aggregates for the County is retained for as planned growth.
- 3.2** The [Essex and Southend on Sea Waste Local Plan - Adopted October 2017](#) concerns the administrative area of Essex and Southend on Sea only.
- 3.3** Both the above are Adopted material planning considerations.
- 3.4** ECC would expect greater clarification and assessment of the wider mineral and waste planning implications of the as proposed development, which is entirely silent in the as consulted Scoping Report within the subsequent Environmental Statement. The issues to be addressed are outlined below.
- 3.5 Minerals** – The Scope of the minerals study areas should include Essex, and Suffolk as the joint Authorities for this NSIP.
- 3.6** ECC would expect the scope to include a materials balance (including minerals) and an understanding and assessment of the likely market areas to supply the necessary aggregates and fill materials. This should also have regard to the potential use of Borrow Pits and the need to source potential mineral reserves close to the site.
- 3.7** Whilst there is no assessment of the impact of the “off-site” primary extraction materials, ECC would expect the Scope to quantify the amount of material and minerals required and to explore the likely sources. This will provide a better understanding of the mineral supply and demand factors, which will be relevant to all the potentially affected Mineral Planning Authorities and their Minerals Local Plans.
- 3.8 Waste** - ECC supports the application of the Waste Hierarchy and the use of Sustainable Management of the excavated materials and waste arising, including recycling and potential re-use/after-uses. ECC would expect this information to be included within a Materials Balance.
- 3.9** It appears that the matter of Waste Management has not been progressed in any meaningful detail at this stage of the process and largely leaves the method of waste disposal undecided. There could be significant local impact depending on mode of transport and if disposal sites are in Essex and /or Essex network used for transport of waste. ECC would expect the scope of the waste study area to include a wide area. Further clarification is required on the use and interpretation of ECC on Essex and Southend on Sea Waste Local Plan capacity data.

3.10 Waste Management - It is not know at this time if an amount of worker accomodation is proposed within the compounds on or around the proposal site which would, if present, have an impact on waste collection.

3.11 Minimising waste is a key environmental objective of sustainable development, as highlighted in the National Planning Policy Framework. The National Planning Policy for Waste is also clear that preparing for recycling and recycling materials are important elements of the waste hierarchy to make the most efficient use of resources, minimise waste disposal and deliver sustainable communities.

3.12 ECC as the Waste Disposal Authority (WDA) has a statutory obligation under the Environmental Protection Act 1990 to provide facilities for residents of Essex to dispose of their waste, including the waste generated by the accommodation as is proposed and the operation of the station throughout its proposed lifetime. This obligation is discharged through the provision of a network of Recycling Centres for Household Waste (RCHW) in Essex. It is acknowledged that households are not proposed within the application proposals, however living accommodation more akin to providing flats or workers are included. The current documentation does not make reference to workers living on site, but given the rural location of the proposal where rented and holiday accommodation is scarce, this is considered likely.

3.13 ECC can seek contributions, as set out in its Essex County Council Developers’ Guide to Infrastructure Contributions towards improvements at Essex RCHWs or municipal waste treatment sites. Such should be incorporated into any Section 106 Agreement should the eventual DCO gain consent.

3.14 Specific detailed comments are as set out below, however these are brief as the comments within the Scoping Report are similarly brief:

Reference	Issue	Comment	Recommended actions
Page 129, para 10.4.1	Error	The list of data sources for the baseline assessment includes the Suffolk Minerals Local Plan but omits any reference to the Essex Minerals Local Plan (MLP) despite the area encompassed by the Scoping Boundary being partly within Essex. Where land within the Scoping Boundary falls within the administrative area of Essex, the Essex MLP applies	It is requested that the planning context is redrafted to recognise the Essex Minerals Local Plan, and consideration given to whether any other aspects of Chapter 10 requires updating

		It is noted that Appendix 2 appropriately recognises both the Essex minerals and waste local plans.	
Page 131, para 10.4.13	Clarification	<p>Para 10.4.13 states “Mineral deposits for sand and gravel are plentiful in Essex, however the Scoping Boundary crosses only one specific reserve (Minerals Safeguarding Area) identified in the Minerals and Waste Local Plan (Suffolk County Council, 2020), where it is denoted M5.”</p> <p>This comment is not understood. Almost the entirety of the land that falls within the Scoping Boundary that lies within Essex is within a Mineral Safeguarding Area and therefore subject to Policy S8 of the Essex Minerals Local Plan. Please see the Mineral Matters set out in the <i>‘ECC Response to B2T National grid connection consultation, May 2021’</i></p>	Paragraph needs to be redrafted to correct or clarify the current text
Page 134, para 10.6.15 Page 138, Table 10.4	Error	<p>Almost the entirety of the land that falls within the Scoping Boundary that lies within Essex is within a Mineral Safeguarding Area. Where non-mineral developments are proposed in Mineral Safeguarding Areas, Policy S8 of the Essex MLP is engaged.</p>	<p>There is a need to re-consider the assessment in light of the policies set out in the Essex MLP.</p> <p>There will be the need to address the requirements of Policy S8 of the MLP as part of any future planning application. Please see the Mineral Matters set out in the <i>‘ECC Response to B2T</i></p>

		<p>The 'Effects on Mineral Deposits' paragraph does not recognise this and therefore the effects have not been correctly assessed/ set out.</p> <p>It then follows that the subsequent sections concluding on effects, their significance and appropriate assessment methodologies are not suitably informed. This includes Table 10.4.</p>	<p><i>National grid connection consultation, May 2021'.</i></p>
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4. Highways and Transportation

- 4.1** ECC welcomes the pre application discussion with National Grid regarding the drafting of the Scoping Report and the Abnormal Indivisible Load Access Study. It is noted that the current SR makes reference to *“qualitative professional judgements on the potential significant traffic and transport effects of the project, based on the assessment that was undertaken before the project was paused in 2013 and benchmarks from other similar projects developed more recently para 12.1.1)”*. Such judgement is however considered to be based on out of date information which needs to be updated due to the time which has elapsed since. Up to date information is predicated in the current Covid pandemic due to reduced traffic on the road network.
- 4.2** At this time ECC has requested, but has not received information in terms of the routes to be taken to site including vehicle numbers, vehicle management, journey frequency, the impacts on the rural highway network, public rights of way and non-motorised users. It is understood that it is not available at this time. Hence it is impossible to consider the implications of the development on the highway network in any meaningful way, such information is needed to be included in future discussions with ECC prior to the DCO’s submission for full consideration.
- 4.3** Whilst it is correct that the majority of the impact of this development will occur in the construction phase, and the majority of those impacts will be within Suffolk, nevertheless impacts on Essex could well be significant as these will be the routes taken to access Suffolk.
- 4.4** ECC considers that a balance is required between the relatively short-term impacts on the highway network, which can in the whole be managed and mitigated, against the lifetime impact of new major electricity transmission infrastructure in a highly sensitive landscape and culturally significant location.

4.5 Given this area of Essex is extensively rural from a highways viewpoint, we need to understand and plan for where the final routing to the development site will be and manage the rural road network safely and efficiently during the construction phase. Hence our previous comments, which are summarised below, apply. It is important that this engagement is detailed and constructive to ensure that highways matters for both Essex and Suffolk are addressed prior to the formal DCO submission.

4.6 ECC would seek ongoing discussion in progressing the scheme, and would like to raise the following points:

- ECC would need to be involved in the preparation of the Transport Assessment to support the Development Consent Order, and which should be informed by up-to-date data. Additional surveys may be required, and key junctions assessed to consider potential impacts once a substation site has been finalised
- The Scoping Opinion implies that delivery of the transformer and heavy goods will be made at night – any potential impacts on residents and their amenity along the route will need to be considered in any assessment
- Continued assessment of roads, and their suitability, in relation to the delivery of any potential transformer and heavy loads during construction (bridges, culverts etc)
- Preparation of detailed traffic management plans, where necessary
- Access requirements to specific sites regarding Sealing End Compounds and any potential substation
- Provision of up-to-date traffic flow data on specified routes and consideration of planned movements on existing flows and the wider road network
- Need for temporary road closures, diversions, widening and their impact on road safety and amenity
- Temporary closures to PROW will need to be identified, and an effective communication strategy of closures considered to the benefit of non-motorised users
- Consultation regarding the potential impact on hedgerows, trees, protected lanes etc along construction traffic routes, their mitigation and enhancement
- Detailed discussion regarding identified 'negotiability' issues (e.g. Halstead) and at locations where necessary works have been confirmed
- ECC agrees that the cumulative impacts of other developments along the proposed ALL routes for the substation and other access routes need to be considered. This will need to be re assessed as they will be materially different from when the project was stalled in 2013. In particular it is noted that the Sizewell C development relies heavily on the highway network for implementation during construction
- A condition survey should be undertaken for roads and PROW should be undertaken prior to commencement of development to ensure any deterioration can be mitigated appropriately
- There are many roads in the project area which have weight restrictions, as these will impact upon access as part of the Transport Assessment
- Reference should be made to residential properties/areas in relation to on street parking, business deliveries

- Reference should also refer to buildings, especially since the proposed ALL route for the preferred substation site passes through Halstead
- The significance of effect on the highway network should be considered on a site by site basis, as the DMRB guidance refers to the trunk road network and may be too strategic

4.7 The construction phase of a substation requires the movement of a 169te transformer from source to any preferred site. The relevant section should also refer to any potential impacts on bridges and culverts as identified in the Abnormal Loads Survey.

4.8 A consistent approach is required regarding referencing the road network, namely the Highways Agency for the strategic network, and the County Councils for the rest of the network.

4.9 Our detailed comment on the submission is set out below:

Reference	Issue	Comment	Recommended Action
12.4.1	Comment	Essex has a PRoW Interactive Map that may be useful.	A copy of the same can be found here: https://www.essexhighways.org/getting-around/public-rights-of-way/prow-interactive-map It is noted that since submission of the Scoping Report the B2T Team have made contact with the ECC rights of way team.
12.4.1	Clarification	Since the Essex Structure Plan fell away several years ago Protected Lane policy now falls to Local Plans.	Check Local Plans for Protected Lane identification.
12.7.6	Data issue	Essex County Councils current position is to allow traffic surveys to recommence in mid-September 2021 if the Covid measures are relaxed as anticipated on 21 June 2021.	Please liaise with Essex County Council before embarking on additional traffic surveys,
12 7.19	Clarification	Cannot assimilate magnitude of impacts with withdrawn DMRB Volume 11 Section 3 Part 8	Please clarify source of magnitude of impacts.

5. Ecology

5.1 ECC welcomes the applicant’s engagement in the project, which will have a significant and lasting impact on ecology and biodiversity. We welcome the commitment within the proposal to ecological enhancement measures and recommend that the proposals should address fully the needs of protecting biodiversity, in particular the potential impact of the development on biodiversity associated with Braintree District Council’s designated protected lanes and the impacts on trees, vegetation and protected hedgerows as the development progresses.

5.2 We also note the applicant’s own commitment to biodiversity enhancement, and it is also welcomed that it is recognised that the impacts of the development on a variety of subjects will impact ecology and biodiversity, such as transport, noise, dust etc.

5.3 Our detailed comments are as follows.

Reference	Issue	Comment	Recommended actions
Chapter 7 Paras 7.1.3 and 7.5.43	Comment	The list of aspects in Para 7.1.3 should include Priority habitats and species so that all the LPAs and SoS can demonstrate their s40 biodiversity duty. Notable has a very specific definition which does not match the status of Priority species so the header (other notable species) is considered to be confusing	Amend Paras 7.1.3 and 7.5.43
Chapter 7 Para 7.2.5	Comment	A large part of the proposals in both Essex and Suffolk are within the Stour Valley Project Area. The proposals fall very close to many statutory and non-statutory sites designated for their importance for wildlife. Whilst undergrounding undoubtedly provides landscape benefits, it may result in greater adverse effects on wildlife than overgrounding. Underground provision should not	

		<p>disproportionately adversely affect designated sites or other protected and Priority species & habitats. It should be ensured that there is an appropriate balance of underground and overground transmission in this location and this should be thoroughly explored within the assessment</p>	
<p>Chapter 7 Para 7.3.1</p>	<p>Comment</p>	<p>The general approach to ensuring that existing information obtained previously for this project is used in order to inform an up-to-date assessment is welcomed. This should support up to date surveys using standard methodologies. We would welcome sight of the new EIA Scoping Report and Preliminary Environmental Information Report (PEIR), where we may wish to make a more comprehensive response. The ecological assessment should thoroughly explore all reasonable options to enhance the development for protected and Priority species and habitats. Although NSIPs are not required to provide Biodiversity Net Gain, we would encourage the project to seek opportunities for local habitat enhancement</p>	

		and creation including, but not limited to, designated sites and wildlife corridors. The Biodiversity Net Gain Good Practice Principles For Development (CIEEM, CIRIA and IEMA) should be considered and the mitigation hierarchy should still be followed. Effective and robust measures, in line with the mitigation hierarchy, must be proposed which have a high degree of certainty for their deliverability in the long term	
Chapter 7 Para 7.3.8	Comment	In addition to the EIA report, it will be necessary to also provide sufficient information on non-significant impacts to protected and Priority species and habitats – those scoped out of the ES - either in a non-EIA chapter or separate documentation, and appropriate mitigation and compensation measures provided. This is necessary for all the LPAs and SoS to demonstrate their s40 biodiversity duty.	Provide no-EIA chapter or Addendum for non-significant impacts
Chapter 7 Para 7.3.8	Comment	We welcome the applicant's target to seek 10% biodiversity net gain and the proposed use of Defra Metric v 2.0 or its successor.	
Chapter 7 Para 7.5.16	Clarification	As the UK Government is no longer bound by the Habitats	Amend para 7.5.16

		Directive (and its Annex II species), we recommend that this reference is amended to Barbastelle being listed as an Appendix II species under both Bonn and Berne conventions. This would trigger Important Hedgerow status under Hedgerow Regulations 1997.	
Chapter 7 Para 7.7.13	Comment	We support the production of an Outline LEMP and discussion & agreement with relevant stakeholders. The reference to outline LEMP (commitment GG03) needs to ensure cross referencing for species choice and ecological functionality of new hedgerow planting in order to deliver Biodiversity net gain.	Add reference to Chapter 6 para 6.5.6
Appendix A of the Connections Option Report Plans showing emerging proposals	Comment	These plans do not show the location of non-statutory sites which are listed in Table 1.2, e.g. Local Wildlife Sites (LoWS) and Special Roadside Verges in Essex and County Wildlife Sites (CWSs) and Roadside Nature Reserves RNRs in Suffolk.	The inclusion of non-statutory sites would show a greater importance of some areas for wildlife, such as the Stour Valley Project Area.
Chapter 7 Para 7.2.1 and 7.5.4, Appendix 7.1 Table 1.2 and Appendix 7.2 Para 3.1.1	Error	Please note that Tiger Hill Meadow CWS should read Tiger Hill Long Meadow CWS which is part of Tiger Hill LNR. The acronym used in Essex is LoWS instead of LWS.	Amend all LWS references to LoWS
Appendix 7.1 Table 1.2	Clarification	In line with para 7.5.7 <i>"The value of these Priority habitats is</i>	Clarify reasons for assigning high value to CWS/LoWS in Table 1.2

		<p><i>medium because the habitats are of county importance” please clarify why some CWS/LOWS have been valued as high in line with Table 7.3 as all these sites of at least county level value. Where this relates to nationally rare species or irreplaceable habitat (e.g. ancient woodland), this should be referenced.</i></p> <p>Please list RNRs as Suffolk designations and note that RNRs 195 and 202 are also designated as CWS</p>	
Appendix 7.2 Para 2.2.1	Comment	<p>Whilst we accept that pre-construction surveys for protected species should enable micro-siting of equipment, we seek clarification of how impacts to GCN terrestrial habitat will be avoided completely and the need for EPS mitigation licence.</p>	<p>Provide clarification in PEIR on issue of avoiding impacts on GCN terrestrial habitat which would trigger EPS mitigation licence.</p>
Appendix 7.2 Para 2.3.3/2.6.1	Comment	<p>We accept that the targeted validation surveys for high-risk areas are likely to support a statement in the ES which meets the CIEEM advice note on lifespan of ecological reports and surveys. However, this will require a statement in the ES that no further surveys are needed due to any changes or that in line with Natural England EPS licensing Policy 4, the likely impacts can be</p>	

		predicted with sufficient confidence to inform the mitigation measures necessary to maintain the conservation status of the local population of European Protected Species.	
Appendix 7.2 Section 3.2	Comment	Despite the statement in para 7.4.1, there is no reference to Priority habitats to allow assessment of impacts under NPS and s40 biodiversity duty for LPAs and SoS.	Amend Section 3.2
Appendix 7.2 Paras 3.2.11, 3.5.2, 3.5.25 and Table 4.1	Comment	Surveys of hedgerows in 2021 should include bat activity surveys to identify any passes of Barbastelle bats which as Appendix II species under both Bonn and Berne conventions would trigger Important Hedgerow status under Hedgerow Regulations 1997. We support the use of static bat detectors for 2 weeks at each targeted hedgerow during the season to identify flightlines and foraging routes where crossing within the Indicative Alignment assumed. We therefore support the principle in the outline CoCP measure B07 to use dead hedging – we recommend the use of hazel hurdles is also added - where hedge crossings or removals are necessary to retain connectivity during	Provide clarification that hedgerow surveys will include bat activity surveys listed in Para 3.5.2 and Table 4.1. Confirm that the results of bat activity transects and static surveys will be assessed for any Barbastelle passes to be mapped as part of the heat maps referenced in Para 3.5.2 Include hazel hurdles as dead hedging in CoCP B07.

		<p>construction.</p> <p>This temporary measure will be needed to enable Barbastelle bats to continue to use their network of hedgerows.</p>	
<p>Appendix 7.2 Para 3.5.18</p>	<p>Comment</p>	<p>We support the use of climbing inspection surveys of trees to confirm the presence of likely absence of bat roosts unless trees are not safe to climb. The results of all bat roost surveys particularly in trees will be required to inform the need for any EPS mitigation licences before the DCO can be made.</p>	
<p>Appendix 7.2 Para 3.6.3</p>	<p>Comment</p>	<p>Both LBAPS for Suffolk and Essex have been archived, so this reference should be removed</p>	<p>Update Para 3.6.3</p>
<p>Chapter 7 Table 7.4 and Para 7.7.40, Appendix 7.2 Section 3.6, Paras 3.7.1, 3.9.2 and 3.11.4</p>	<p>Comment</p>	<p>There is no reference to Priority species to allow assessment of impacts under NPS EN-1 and s40 biodiversity duty for LPAs and SoS. Notable has a very specific definition which does not match the status of Priority species so the reference to other notable species is considered to be confusing.</p>	<p>Amend Section 3.6 in line with Para 3.11.4 (species of principal importance)</p>
<p>Appendix 7.2 Section 3.7.2 and Chapter 7 para 7.7.8</p>	<p>Comment</p>	<p>As the project has applied to be covered by Natural England's GCN District Level Licensing, we advise that good practice mitigation measures will <u>still</u> be</p>	<p>Include mitigation measures in Outline Code of Construction Practice in addition to those listed in Chapter 7 para 7.7.8 as these impacts should be included within the scope of the ES and included in the Biodiversity Legislation</p>

		<p>needed during the construction period to minimise killing and injury of other priority amphibians and reptiles which may be within the habitat affected</p>	<p>Compliance Report. This should include s40 duty of NERC Act 2006 for all the LPAs and SoS.</p>
<p>Appendix 7.2 Section 3.8</p>	<p>Comment</p>	<p>We recommend that Essex and Suffolk Dormouse Group are consulted to advise on habitat suitability although a definition of suitable habitat would clarify the need for precautionary methods. Dormice have regularly been found to be present in areas of dense brambles and detection in unmanaged, high canopy woodland is low. Research (Essex Naturalist (New Series) 34 (2017) indicates that in the East of England revealed some differences in monthly occupation of dormouse nest tubes compared to an earlier study in the southwest. Therefore, changes to the simple scoring system are now expected in the revised Dormouse Handbook (pers comm).</p> <p>We therefore advise that pre-construction dormouse surveys post consent but prior to commencement of works may need to follow alternative methodology to inform</p>	<p>Ensure local knowledge informs survey methodology</p>

		<p>the need for EPS licensing.</p> <p>Footprint tunnels are satisfactory alternative to nest tubes in the East of England. In high canopy woodland with limited understory, both tubes and tunnels should be used in combination to maximise the probability of detection within one full survey season with a minimum of 100 nest tubes. Footprint tunnels to be in situ for a minimum two-week interval before commencing a survey.</p>	
Appendix 7.2 Section 3.12	Comment	<p>Ponds and other waterbodies within the Indicative Alignment should be checked for Australian Swamp Stonecrop (<i>Crassula helmsii</i>) even if dry to avoid spreading the terrestrial form of this invasive plant</p>	

6. Archaeology

6.1 ECC welcomes prior engagement with the B2T promoters to set out the impacts as far as they relate to archaeological impact. Limited discussions having taken place so far, and it is noted that despite the size of this NSIP and the potential impact on significant archaeological deposits, no trial trenching has taken place, nor is planned, at this time. Detailed comments on the as submitted Scoping Opinion are as follows.

6.2 In summary the proposed development will have various impacts on the archaeological deposits along its length. Those areas which will be most significantly impacted will be that identified for undergrounding and the areas of the pylon bases and sub stations. Following a recent historic environment meeting it has been confirmed that the area of construction for the undergrounding will require a land take of approximately 100m in width. This can be compared to the land take for a six-lane road. Evidence from both the Suffolk and Essex historic environment records and from the Scoping Report indicates this will impact on a landscape occupied from the prehistoric through to the modern

period with a significant impact on archaeological deposits from the late Prehistoric through to the medieval period.

6.3 Detailed comments on the relevant sections within the Scoping Report are as set out below:

6.4 The high potential for previously unknown multi-period archaeological sites, is identified in the statement in 8.4.12 of the Scoping Report and therefore it is important that a full assessment of the historic environment impact of the scheme, especially in the undergrounding areas, is presented to the inspector within the Environmental Statement.

Reference	Issue	Comment	Recommended Actions
Section 8.2 Regulatory and Planning context	Comment	Would recommend the addition of paragraph 5.8.10 within the document.	Addition of other EN-1 overarching policies
	General comment	In summary the proposed development will have various impacts on the archaeological deposits along its length. Those areas which will be most significantly impacted will be that identified for undergrounding and the areas of the pylon bases and sub stations. Following a recent historic environment meeting it has been confirmed that the area of construction for the undergrounding will require a land take of approximately 100m in width. This can be compared to the land take for a six-lane road. Evidence from both the Suffolk and Essex historic environment records and from the Scoping Report indicates this will impact on a landscape occupied from the prehistoric through to the modern period with a significant impact on archaeological deposits	

		from the late Prehistoric through to the medieval period	
8.4.12	Comment	It is important that a full assessment of the historic environment impact of the scheme, especially in the undergrounding areas, is presented to the inspector within the Environmental statement.	Trial trenching needs to be undertaken in advance of the submission to allow an understanding of the archaeological impact of the proposals.
8.4.4-8.4.16	Comment	It is unclear from the document if there has been an integrated approach to the historic environment, with the archaeology and historic buildings being considered within the historic landscape. Hedgerow assessments should be undertaken as part of the ES to identify those important hedges where directional drilling could be considered to minimise impact.	Need to integrate the various elements of the historic environment to have a full understanding of the likely impacts. Historic Hedgerow assessments should be undertaken to see if directional drilling can be used to preserve them.
8.6.14	Comment	Protected lanes in Essex are not considered, however these may suffer if realignment occurs to allow access for construction traffic	Protected lanes should form part of the dataset for consideration as part of this scheme
8.7.5	Comment	The 250 metre study area for non-designated heritage assets is a concern as it may not allow the applicants to appropriately understand or assess the nature of the historic environment that will be impacted.	The normal width considered is 1km, however, it may be worth seeing the present assessment to understand if 250m is adequate.
8.7.7	Comment	The aerial photographic assessment is now a decade out of date with many new google earth layers available for assessment. Also, since 2012 there has been	Update aerial survey and complete assessment of Lidar data

		a significant use of Lidar data in assessments, especially useful in areas of woodland	
8.7.8-9	Comment	Geo-archaeological and palaeo-environmental assessment needs to be undertaken for the whole route. geoarchaeological deposits are not necessarily only associated with deeper layers and we would expect to see a geoarchaeological assessment for the project. This should be undertaken by a suitably qualified specialist in this area and they should review the borehole logs to determine the depth of deposits.	A geo-archaeological and palaeo-environmental assessment should be undertaken for the whole route with specific
8.7.10	Comment	This section indicates any intrusive evaluation is only undertaken pre-construction. Considering the sensitivity of the heritage assets, particularly the below ground archaeological deposits, this work needs to be undertaken to support the production of the ES. It is recommended that it is essential to have an understanding of the surviving below ground heritage assets especially within the undergrounding sections at the ES stage so that the full impact on the historic environment can be appropriately considered by the inspector. Experience of linear schemes undertaken in the East of England has shown the major impacts,	Trial trenching needs to be undertaken in advance of the submission to allow an understanding of the impact of the proposals. This can concentrate on the undergrounding section where impact will be on a 100m wide corridor.

		<p>both on cost and time delays, that result from a poor understanding of the below ground archaeological impacts, are a frequent occurrence. As such it is recommended that a full programme of archaeological trial trenching is undertaken on the below ground sections of the scheme, to facilitate the production of a mitigation strategy to be included with the ES for submission with the DCO.</p>	
8.7.11	Comment	<p>Experience of linear schemes undertaken in the East of England has shown the major impacts, both on cost and time delays, that result from a poor understanding of the below ground archaeological impacts, are a frequent occurrence. As such it is recommended that a full programme of archaeological trial trenching is undertaken on the below ground sections of the scheme, to facilitate the production of a mitigation strategy to be included with the ES for submission with the DCO.</p>	<p>Recommend the completion of the trial trenching to inform both the written scheme of investigation and more importantly the mitigation strategy for the scheme.</p>
8.8.3	Comment	<p>This meeting took place in May and comments above were discussed. Trial trenching was recommended for late summer early Autumn to complete post-harvest. The next meeting is due in</p>	<p>As above</p>

		September which will miss this potential important period to obtain the data for the assessment of the below ground archaeological assets.	
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7. Built Heritage

- 7.1** For this important topic it is considered that additional work is necessary to ensure the impacts of the scheme upon built heritage assets within the Braintree district are understood, prior to the submission of the DCO.
- 7.2** Chapter Eight of the scoping report refers to the Historic Environment, although it is acknowledged in section 8.1.5 that topics discussed in other chapters (noise, transport and landscape quality) will also affect the significance of heritage assets. Crucially, section 8.1.3 states: *‘The potential for physical impacts on historic buildings is not anticipated but will also be assessed in subsequent stages.’* Further information must be provided regarding how the *‘potential for physical impacts’* will be assessed, and at what stage, as these are absent at this time. Aspects such as below ground drilling and associated vibrations are acknowledged in section 8.6.8 as having the potential to harm historic buildings, yet further information regarding the parameters of any study into these affects should be provided.
- 7.3** The proposals are thus anticipated to impact the setting of built heritage assets only, not their physical fabric; the scoping report refers to appropriate legislation and guidance relating to setting and how this can contribute to the significance of heritage assets. The importance of setting and how this can contribute to the significance of a heritage asset is adequately referenced in the document (section 8.1.4). Appendix 2.1 and 2.2 references the appropriate guidance and policy. The assessment of setting should follow the stepped process set out within GPA3 (The Setting of Heritage Assets) and should fully consider all the attributes of setting and the attributes of the proposal (including environmental considerations as well as visual) which could impact the significance of heritage assets. The assessment of setting should also cross-reference viewpoints within the LVIA discussed in Section 6 of the document to aid in the assessment.
- 7.4** Figure 8.1 identifies designated heritage assets within a defined Study Area: the scoping area plus a 250m area beyond the boundary of the scoping area. The consideration of a further 5km ‘wider study area’ and the proposed production of ZTV maps up to a 10km distance is positive. The anticipated emphasis on heritage assets 2km away from the scoping boundary should be considered on a seasonal and diurnal basis, as changes in tree cover, for example can greatly affect the setting of a heritage asset.

8. Flooding, Water Management

- 8.1** ECC is the Lead Local Flood Authority (LLFA) for the part of the development which would sit within Essex. As such the relevant chapters of the scoping report have been reviewed.

The report has addressed the provision of good practices to mitigate significant impacts on land drainage, surface water flood risk, and water quality. The comment as set out below should be addressed within the site Flood Risk Assessment.

- Drainage strategy to manage surface runoff from larger storm events.
- Prevent larger volumes to discharge into watercourse.
- Appropriate measure to prevent flooding from site including dewatering/overflow channels due to which the water speeds up and can increase downstream flooding.

8.2 All information associated with surface water drainage should be included as part of the forthcoming DCO submission. However, there isn't a need for additional information to be supplied as part of an EIA.

9. Water, Geology and Soils

9.1 The following comments are made:

Reference	Comment	Issue	Recommended Action
9.6.5	Effects on Discharges	Runoff volumes to be managed during critical storm event.	<p>Drainage strategy to manage surface runoff from larger storm events. Prevent larger fluxes to discharge into watercourse.</p> <p>Appropriate measure to prevent flooding from site including dewatering/overflow channels due to which the water speeds up and can increase downstream flooding.</p> <p>The above comment and all other information associated with surface water drainage should be included as part of major planning application. However, there isn't a need for additional information to be supplied as part of an EIA.</p>

10. Socio-economic issues

10.1 ECC would seek opportunities to be maximised for securing local job opportunities and materials during the construction phase of the project. ECC expects a commitment to its Employment and Skills principles for all developments, to maximise benefits and opportunities for our residents. We would wish to agree an Employment and Skills Plan, and/or a Memorandum of Understanding to include:

- Construction phase: approach to providing training and apprenticeships, outreach and work placement opportunities

- Lifetime of development: approach to supporting pre-employment opportunities
- Financial contribution and commitment to help support local skills provision, and supporting new entrants into the construction and energy sectors
- Financial contribution towards improving skills levels for those further from the jobs market or hard to reach.

10.2 General Approach: Construction Phase - Measures should be put in place to ensure local residents benefit from the opportunities arising from the construction phase. Interaction and collaboration with local colleges and training providers would be welcomed by ECC, as a way of increasing skills, employability and apprenticeship opportunities resulting from the scale of the developments.

10.3 General Approach: Lifetime of Development - CC's refreshed Developer's Guide sets out our expectations creating supported opportunities into employment. It would be helpful for the approach to addressing the above considerations to be set out as part of a submission under Section 106, for example as part of Employment and Skills Plans. This should support both Essex and Suffolk residents.

10.4 Skills levels are a key determinant of a sustainable local economy, but they also have an impact on employment opportunities and thus an individual's economic prosperity. Securing obligations and contributions for skills and employment training of local people will help to ensure that residents are given access to the right skills training so they can take advantage of opportunities created by new developments.

10.5 We therefore suggest that a financial contribution is sought to support skills and employability interventions helping those furthest away from the jobs market, with a particular focus on the skills and roles required over the lifetime of the project.

10.6 The use of this funding would be considered, working in partnership with SCC and other partners, and taking into account the most appropriate approach to delivering the relevant provision between Essex and Suffolk.

10.7 For example, as part of the critical skills development requirements to support Essex residents and businesses, Colchester Institute, in partnership with ECC, seeks further investment in the development of the Energy Skills Centre in Harwich, as well as expansion at the Colchester Campus. This would support the growth requirements of the logistics and construction sectors, alongside the development and ongoing operations of the planned Freeport at Harwich.

10.8 The continued approach by National Grid in relation to socio-economic matters is considered insufficient at this time. It has to date constrained its approach to considering the economic impacts of the proposal on existing tourist related facilities and businesses, or the proximity of the overhead line to such facilities. National Grid has not considered or factored in the appreciation of the natural and historic beauty of the area into any of their assessment. There is clearly links between the visual quality of the environment and the potential for tourism. The presence of tourist related facilities is considered more incidental than the actual quality of the landscape. EN – 1,

paragraph 2.2.27 states that energy infrastructure should contribute to the Government’s wider objectives including sustainable development including the way energy infrastructure affects the wellbeing of society and individuals.

10.9 National Grid has placed a great emphasis on cost in determining its alternative means of network reinforcement. It has relied on ‘judgement’ to determine whether the social, environmental and economic impacts, measured ‘qualitatively’, of overhead lines warrant the use of undergrounding. ECC considers that more work is required by NG to actually ‘quantify’ the disbenefits of their scheme, and whether these exceed the additional cost of undergrounding.

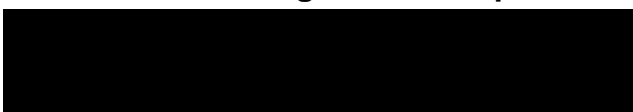
10.10 The County Council would wish to see National Grid maximise potential benefits to the local community in terms of potential jobs in the construction and operation phases of the project. Every effort should be made to secure local contractors and suppliers wherever possible. A document detailing expected demand for various types of work at each stage of the project would be a helpful tool to ensure local companies are able to provide services and expertise as required.

10.11 Our detailed comments on specific areas of the submission follow:

Reference	Issue	Comment	Recommended Actions
15.3.1 & 15.2.2	Comment	The study area is not wide enough to consider both impacts and potential opportunities for local individuals, companies and training providers in relation to skills and employment.	Make explicit reference to a wider study area (e.g. county-wide) in relation to ‘the creation of jobs and training opportunities’, as per the reference from paragraphs 5.12.2 and 5.12.3 of NPS EN-1.
15.6.13	Comment	A clear understanding of employment activities at each stage of the project would be useful, as would a commitment to apprenticeships and other training opportunities.	Establish documentation that details workforce requirements, allowing benefit to local employment.
15.6.13	Clarification	What are the key specialist skills required that might limit local employment?	Data to show expected 10% local workforce, and if this could be higher.

Graham Thomas

Head of Planning and Development



Enquiries to: Mark Woodger (Principal Planner)

Email: 

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HSE email: NSIP.applications@hse.gov.uk

FAO Ms Laura Feekins-Bate

The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN
By email only

Dear Ms Feekins-Bate,

19 May 2021

**PROPOSED Bramford to Twinstead Overhead Line Project (the project)
PROPOSAL BY National Grid Electricity Transmission plc (the applicant)
INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (as
amended) REGULATIONS 10 and 11**

Thank you for your letter of the 11 May 2021 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

According to HSE's records parts of the proposed DCO boundary area is within the consultation zones of two major accident hazard pipelines; these are

- 1) HSE reference 7424 operated by Cadent Gas known as Bramford / Langham
- 2) HSE reference 7429 operated by Cadent Gas known as Great Carnard / Fordham

This is based on the current configuration as illustrated in, for example, Figure 1.1: Location Plan of the Issue number: BT-JAC-020631-550-0004-EIA Bramford to Twinstead Scoping Report: Volume 3: Figures May 2021

HSE's Land Use Planning advice would be dependent on the location of areas where people may be present. When we are consulted by the Applicant with further information under Section 42 of the Planning Act 2008, we can provide full advice

Hazardous Substance Consent

The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) will probably require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone or when aggregated with others for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 2015 as amended.

HSC would be required to store or use any of the Named Hazardous Substances or Categories of Substances at or above the controlled quantities set out in Schedule 1 of these Regulations.

Further information on HSC should be sought from the relevant Hazardous Substances Authority.

Consideration of risk assessments

Regulation 5(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires the assessment of significant effects to include, where relevant, the expected significant effects arising from the proposed development's vulnerability to major accidents. HSE's role on NSIPs is summarised in the following Advice Note 11 Annex on the Planning Inspectorate's website - [Annex G – The Health and Safety Executive](#). This document includes consideration of risk assessments on page 3.

Explosives sites

HSE has no comment to make as there are no licensed explosives sites in the vicinity.

Electrical Safety

No comment from a planning perspective.

During lockdown, please send any further communication on this project directly to the HSE's designated e-mail account for NSIP applications at nsip.applications@hse.gov.uk. We are currently unable to accept hard copies, as our offices have limited access.

Yours sincerely,

Monica

Monica Langton
CEMHD4 NSIP Consultation Team

Feekins-Bate, Laura

From: David Holland <[REDACTED]@hennysmiddletontwinstead-pc.gov.uk>
Sent: 08 June 2021 23:57
To: Feekins-Bate, Laura
Cc: parish Clerk
Subject: Response to N020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

Hennys, Middleton and Twinstead Parish Council (HMTPC)

Response to N020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

National Grid's Environmental Impact Scoping proposal is a complex document and HMTPC like many along the Bramford to Twinstead Connection Corridor, is a very small rural body. In responding to this consultation we are therefore stretched in the extreme and we trust the Planning Inspectorate will bear this in mind in interpreting responses from respondents of a similar nature to our council.

This Parish Council is well aware of the responses of other Councils and we recognise that an argument needs making only once to the Planning Authority overseeing any application. We will therefore confine our response to specific issues that pertain to our locality and the economic geographical area in which our parishes are located.

That said there is a national perspective that affects us and it is only right that we highlight it.

HMTPC has been active in responding to National Grid's Bramford to Twinstead proposals since 2009. In 2010, Stour Valley Underground, the local campaign group which HMTPC helped found and has supported throughout proposed an undersea grid as the appropriate solution to transmitting bulk green energy from our predominantly coastal generators to the major user hubs around the country. Today, in 2021, both National Grid and Government Ministers have stated that an undersea solution is the cost effective way forward that will reduce dramatically, the need for onshore electricity transmission capacity. An undersea solution should therefore be being fully explored before proposing the blighting of high value landscapes that host significant cultural heritage assets as is the case here.

In all the time HMTPC have been looking at these issues, National Grid appear to have failed to embrace any of the new technologies that offer vastly reduced amenity impacts compared to overhead transmission lines. Indeed, National Grid's approach to transmission grid reinforcement is the same now as it was half a century and more ago. HMTPC call on the Planning Inspectorate to press National Grid to adopt a new technology approach to grid reinforcement with the first preference being to keep the energy offshore and only bringing it ashore at points where it supplies the immediate area served by the landing point. Where onshore transmission is necessary, it should be accomplished by new technological solutions that are future proof and have much lower amenity impacts. Such a solution might reasonably be high temperature superconducting cable systems which the industry advise us can deliver future proof capacity above that predicted by National Grid in this years NOA report, and in an installation with a footprint no wider than a single line of pylons.

Clearly, such new technology solutions provide the potential for solutions of an amenity impact vastly lower than that proposed by National Grid and should therefore be scoped into the current process. Such new solutions also have the potential to greatly reduce cumulative impact, particularly compared to repeated stepwise doubling up OHL solutions such as that we are seeing with the current proposal.

Our communities have not been asked to update their input into environmental surveying since 2012 and in the long period since then, there have been significant changes which will alter cumulative impact of National Grid's proposals. Residents have moved both into and out of the area and so many are neither informed about or critically aware of the potential impact of the current proposals.

We are also aware of new proposals from National Grid including their ATNC OHL proposal - Bramford to Tilbury which if National Grid use the same rationale as that used to select the current Bramford to Twinstead route, will result in an ATNC routing proposal parallel to the current one Bramford to Twinstead then turning south at the Twinstead Tee to run parallel to the existing line (4YLA) running to Braintree and Rayleigh etc. We see no sign that this is at all adequately informed or appropriately included in National Grid's scoping proposals.

Neither is the proposed Substation at Butler Wood, Twinstead at all adequately covered in either specification detail around what further connections it could facilitate and therefore its cumulative impact. Indeed HMTPC are astonished at National Grid's determination to avoid detailed specification of this aspect of their project or consideration of the cumulative impact of this development combined with that of the pylons National Grid now say might be forced on the Stour Valley rather than the agreed undergrounding.

The Stour Valley contains some enormously important landscape related cultural heritage assets that link in turn to visitor attractions in our local town of Sudbury, Suffolk with its Gainsborough's House museum and gallery. This facility is currently the subject of a £10m scheme to produce a nationally significant visitor attraction. Landscape assets in the surrounding countryside inspired internationally important art from the mid 17th century uptown today and these landscapes are threatened by National Grid's proposals. HMTPC are alarmed that at a time when the retail based economy that used to support the town centre economy has been decimated by the combined impacts of the pandemic and the move to online retail, and the plan for recovery is based on regeneration through growing the visitor appeal of the town, National Grid propose to scope out economic impact assessments during the build phase of their project despite this occurring across half a decade at the most important time in delivering this much needed recovery.

HMTPC understand that with normal planning proposals, disruptive impacts during build phases are not planning relevant. But we would like to point out that this proposal is so wide in its impact in this area and so long in the duration of its build process that at a time when economic recovery is almost the highest priority for the entire country and certainly here within the economic geography of the Sudbury area of the Essex/Suffolk border.

Indeed, we believe that socio economics is being wholly inappropriately scoped out by National Grid when it is in fact of the highest order of significance. To scope out socio-economic impacts is naive and partial, benefiting National Grid's economic business case but to the enormous detriment of the wider community.

Cllr David Holland
Chairman
Hennys, Middleton and Twinstead Parish Council.



Our ref: A14-PINS-6890
Your ref: EN020002

Highways England
Woodlands
Manton Lane
Bedford MK41 7LW

Laura Feekins-Bate
EIA Advisor
Environmental Services
Central Operations
The Planning Inspectorate
National Infrastructure Planning
Temple Quay House
2 The Square, Bristol, BS1 6PN

Mobile Number [REDACTED]

01 June 2021

Dear Laura,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

EIA Scoping Opinion on the Application by National Grid Electricity Transmission plc (the Applicant) for an Order Granting Development Consent for the Bramford to Twinstead overhead line project (the Proposed Development).

Thank you for your email dated 11 March 2021 consulting Highways England on a formal request for a EIA scoping opinion on the above proposed development.

As you may be aware Highways England is a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). As such, we have responsibilities for managing the SRN in accordance with the requirements of its licence and in general conformity with the requirements of the Highways Act 1980, and to satisfy the reasonable requirements of road safety.

Highways England has considered the proposed development as defined in the Scoping Report and agrees that an Environmental Statement (ES) will be required to support any Development Consent Order (DCO) application supported by an appropriate Transport Assessment (TA).

Highways England's interest relates to the potential impact of the proposed development on the SRN, which, in the vicinity of this proposal includes the A14, A12 and A120 trunk roads. At this stage it is not clear of the extent of the impact of the proposals on the SRN and the need for any specific assessment. If there is a need for assessment, it should be undertaken in accordance with the Department for Transport DfT's Circular 02/2013, 'The Strategic Road Network and the Delivery of Sustainable Development'. Reference should also be made to 'The strategic road network: Planning for the future (A guide to working with Highways England on planning matters)' and the Planning Practice Guidance (which accompanies the NPPF).

In accordance with DfT's Circular 02/2013, Highways England would wish a TA to include an assessment of the numbers of development trips likely to impact on the junctions at which the construction access routes interface with the SRN. This should also include the A12/A14 Copdock Interchange and the A12/ A120 Marks Tey junction, even if individual construction access routes do not interface with the SRN at those locations. If the impact is significant then further assessment of traffic capacity or road safety impacts may be required.

Any road traffic collision hotspots as identified at the SRN junctions forming part of the study area, may require detailed analysis and, potentially, mitigation

With respect to the TA scoping note, specific comments are set out below:

- 1 Para 12.8.1 of the Scoping Report (Volume 1) states that the Traffic and Transport chapter has been informed by initial consultation with the two local highway authorities (Essex and Suffolk County Councils). Highways England does not appear to have been consulted to date, but we will welcome a greater involvement in the consultation process as the application proceeds.
- 2 The construction access routes themselves have not yet been defined and therefore the exact locations where they will interface with the SRN are therefore not currently known. As part of the TA, it will be necessary to take account of the impact of traffic generated by the construction phase of this proposal at junctions and other locations on the SRN, especially, where the existing road standards are poor, and identify any measures that may need mitigation.
- 3 Para 12.7.8 of the Scoping Report sets out the criteria for the selection of construction access routes. These are to be the most direct reasonably practicable route between the (works site) access points and the nearest junction on the SRN. Highways England note that the most direct route may not always be the most suitable and may lead to construction traffic accessing the SRN at a location that is unsuitable. The criteria adopted should seek to avoid potentially sensitive/unsuitable locations where applicable on the SRN such as the A12 north of Colchester and the A120 west of the A12

- 4 The construction access routes to be selected are to be developed in consultation with 'relevant highway authorities', which should include Highways England.
- 5 Para 12.7.9 of the Scoping Report refers to swept path analysis to be undertaken for heavy vehicles and for Abnormal Indivisible Loads (AILs). This analysis should include at least the first point of access to the SRN for each construction access route identified.
- 6 Para 12.7.13 of the Scoping Report refers to access routes to be used by construction workers. It is unclear from the text, when the distribution of such trips is assessed, how the home locations of construction workers are to be distinguished from those of the general working population. This should be clarified.
- 7 Para 12.7.19 of the Scoping Report sets out the magnitude of impacts to be assessed and states that an increase in traffic flows of less than 30% is to be regarded as negligible. In terms of the traffic capacity or road safety performance of an SRN junction, traffic flow increases of less than 30% can be significant, particularly on the minor arm of a problem junction which is operating close to its design capacity. Highways England therefore requests that once the first point of access to the SRN for each construction access route have been identified, discussions should be held on the need for any further assessment.
- 8 Paras 12.5.1 and 12.5.2 of the Scoping Report refer to the development of a Construction Traffic Management Plan (CTMP), which is to be developed through engagement with the statutory consultees. Further detail on the CTMP is contained in Appendix 4.1. The CTMP should show how the construction traffic is going to access the SRN and Highways England should therefore be included as a consultee in its development. Amongst other things, it may be necessary to manage the construction traffic so as to avoid generating additional peak hour movements at specific sensitive junctions. Such junctions can be identified once the construction access routes are defined.
- 9 Para 12.6.3 of the Scoping Report refers to a study of access for Abnormal Indivisible Loads (AILs) being undertaken. Highways England should be consulted on this study, as the AIL routes will pass along sections of the SRN and through SRN junctions, some of which may have very limited geometry, on route to their destinations. Where necessary an Abnormal Load Assessment should be submitted.
- 10 Para 12.4.12 identifies Wolsey Grange and the former SnOasis site as potential development sites for inclusion in the future year baseline. This is to be welcomed.
- 11 Para 12.4.13 acknowledges the A12 Chelmsford to Marks Tey Road Investment Strategy (RIS) scheme. It is to be noted that the construction periods for the two schemes overlap and therefore a cumulative impact assessment may be required.

12 Appendix 18.1 of the Scoping Report contains a long list of potential schemes to include in the cumulative impact assessment. Highways England note that item 2 (the A12 Chelmsford to Marks Tey RIS scheme) and item 9 (Sizewell C) are to be scoped out of the assessment because they are located more than 10km from the route and therefore not in its 'zone of influence'. The Bramford to Twinstead scheme, the A12 Chelmsford to Marks Tey RIS scheme and Sizewell C are all significant construction schemes whose timescales will overlap and whose construction may require a workforce and construction material to be obtained from a wide area. Highways England therefore requests that the inclusion of these is considered once and consideration of any cumulative impact assessment undertaken once a clearer understanding has been reached on the reach of these proposals

Please contact us PlanningEE@highwaysengland.co.uk if you require any further information, meeting or would like a draft Transport Assessment reviewed.

I have no other comments to make.

Yours sincerely,

S. H.

Shamsul Hoque (Dr), Assistant Spatial Planner
Spatial Planning Team
Operations (East), Highways England
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Laura Feekins-Bate
Environmental Services
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BS1 6PN

Direct Dial: [REDACTED]

Our Ref: PL00741042

8th June 2021

Dear Laura Feekins-Bate

**Bramford Suffolk to Twinstead Essex Project
Application No. EN020002**

Thank you for your letter consulting Historic England about the above EIA Scoping Report. This relates to a proposed new power line between Bramford in Suffolk and Twinstead in Essex.

This development could, potentially, have an impact on designated heritage assets and their settings in the area around the site. We would expect the Environmental Statement to contain a thorough assessment of the likely effects which the proposed development might have upon those elements which contribute to the significance of these assets.

Historic England Advice

Our initial assessment shows there are a number of designated heritage assets within the vicinity of the proposed development. We would draw your attention, in particular, to the following which could be affected by the development:

- Hintlesham Hall – Grade I Listed Building
- Service ranges, stables, former coach house and brewhouse attached to Hintlesham Hall – Grade II* Listed Building
- Sawyers Farm – Grade II* Listed Building
- Polstead Conservation Area

The Dedham Vale AONB and the Stour Valley AONB are not within our remit however we are aware they should also be robustly considered as part of this process.

This consultation represents a restart to this project and much of the information remains the same as in 2013. We note that corridor 2b (southern) remains the preferred route for the new line. This proposal would see the removal of a large section of 132v power line and associated pylons leaving the new 400v line to run parallel with the existing 400v line around Hintlesham Hall. Historic England expressed concerns in 2013 relating to this proposed route and its impact upon the setting of the grade I listed building however, we accepted that undergrounding the cable in this



area could cause damage to potentially important nature habitats. We stated that should the pylons be placed adjacent to the existing line, and key views from Hintlesham Hall respected then corridor 2b (southern) would be the most appropriate route for the new power cable.

The proposed line would be dominating in the view to the north from Hintlesham Hall and we suggest that key views from the hall should be reconsidered as part of the LVIA. This would aid in the best placement of the second line of pylons to minimise the visual harm. Landscape mitigation measures to screen the pylons from view, should be considered alongside the owners of the hall which should work with elements of the known historic landscape and aim to restore these elements where possible. We would not support the artificial placement of hedges and hard screening where they would themselves cause harm to the setting of the building.

It is heartening to note that the cable in the area of the Dedham Vale AONB still meets the National Grid test for undergrounding and that the existing 132v cable line would be removed from this area. The location of the eastern Cable Sealing Ends has still to be agreed. It should be noted that Polstead is designated as a Conservation Area by Babergh Mid Suffolk Council and one of the locations for the CSE would be on the edge of Dollops Wood which borders the conservation area at its southern end. Dollops Wood and the surrounding farmland to the north of Polstead contributes to its rural character and the final position of the CSE should respect this. Consideration should be given to the placement of the CSE further away from Polstead Conservation Area and with this in mind, further consideration should be given to the northern placement of the CSE.

The western CSE is proposed to the west of Boxford Fruit Farms. This landscape is undulating and although placed on a piece of flat land it has the potential to be visible within a wider area. The exact location of the compound is not able to be ascertained from the plans but we consider that mitigation could be necessary to screen the compound in long views to the north and to the south.

The Stour Valley eastern CSE has undergone some further assessment and we would like to see some of the appraisals for the other options available. Option 5 and option 4 in particular would seem to represent the schemes that cause less harm to this historic environment and lie outside of the Stour Project Area. The impact upon the grade II* listed Sawyers Farm would also be reduced through the undergrounding of cable and the removal of the existing 132v line. It would also remove the CSE from what, from historic maps, would seem to indicate, of been one of the main routes to the farmyard from the agricultural lands it farmed.

In reviewing the options for the Stour Valley area, National Grid should pay robust regard to assessing the landscape quality and character. We continue to advise that the Stour Valley is a sensitive landscape as laid out in the Dedham Vale AONB and Stour Valley Project Management Plan



Archaeology

An archaeology report has been submitted. The report presented the results of the geophysical survey work, where magnetometry had been used to investigate the study area. It was noted that the survey identified a number of anomalies, particularly in the areas of river terrace gravels, but that it may have been less successful on the areas of alluvium. It is therefore possible that the survey has not identified the archaeological remains that may be present in these areas. Alternative geophysical survey techniques, such as resistivity or electromagnetism may be able to identify remains within alluvium and so should be considered as part of the ongoing evaluation work.

General Matters

We would also expect the Environmental Statement to consider the potential impacts on any grade II listed buildings and non-designated features of historic, architectural, archaeological or artistic interest, since these can also be of national importance and make an important contribution to the character and local distinctiveness of an area and its sense of place.

Given the nature of the structures associated with the proposed development and the surrounding landscape character, this development has the potential to be visible across a large area and could, as a result, affect the significance of heritage assets at some distance from this site itself. We would therefore expect the assessment to clearly demonstrate that the extent of the proposed study area is of the appropriate size to ensure that all heritage assets likely to be affected by this development have been included. We would also expect these assets to be properly assessed.

It is important that the assessment is designed to ensure that all impacts are fully understood. Section drawings, wire diagrams and techniques such as photomontages are a useful part of this, and we would expect these to be provided for specific heritage assets as required and consultation with Historic England and the LPA heritage advisors.

The assessment should also take account of the potential impact which associated activities (such as construction, servicing and maintenance, and associated traffic) might have upon perceptions, understanding and appreciation of the heritage assets in the area. The assessment should also consider, where appropriate, the likelihood of alterations to drainage patterns that might lead to in situ decomposition or destruction of below ground archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.

We would expect the Environmental Statement to contain a thorough assessment of the potential impact of the development on the significance of any heritage assets affected, including any impact caused by development in their setting. This is defined in the Framework as *'the surroundings in which a heritage asset is experienced.'*

The “Historic Environment Good Practice Advice in Planning Note 3 the Setting of Heritage Assets”, provides general advice on understanding setting and how it may contribute to the significance of heritage assets. It also recommends a staged approach to assessing the proposals affecting the setting of heritage assets. Views and visual considerations will be an important component of setting. However, a consideration of other environmental factors such as noise, traffic and light should also be included. The assessment should be carried out in accordance with established policy and guidance, including the National Planning Policy Framework. The Planning Practice Guidance contains guidance on setting (Paragraph: 013 Reference ID: 18a-013-20140306), which is amplified by the Historic England document. Together, these provide a thorough discussion of setting and set out our guidance on the methods for considering the impact of development on setting. We note the proposed methodology for assessment would be guided by this.

Whilst standardised EIA matrices derived from Design Manual for Roads and Bridges (DMRB) Vol 11, ICOMOS’s guidance, or similar, are useful tools, we consider the analysis of setting (and the impact upon it) as a matter of qualitative and expert judgement which cannot be achieved solely by use of systematic matrices or scoring systems. Historic England therefore recommends that, if used, these matrices should be seen primarily as material supporting a clearly expressed and non-technical narrative argument within the cultural heritage chapter. The EIA should use the ideas of benefit, harm and loss (as set out in the NPPF) to set out ‘what matters and why’ in terms of the heritage assets’ significance and setting, together with the effects (including both positive and negative effects) of the development upon them.

Recommendation

It is important that the assessment is designed to ensure that all impacts are fully understood. Section drawings and techniques such as photomontages are a useful part of this. We note there are no viewpoints proposed in relation to the landscape and visual impact assessment. We would welcome the opportunity to advise on these viewpoints in due course.

Given the number and proximity of highly graded designated heritage assets within the vicinity of the site boundary, we are strongly concerned by the possible impact of the development upon their significance caused by harm to their setting and would ask for the chance to comment on any assessment carried out and further details of the proposals as they progress.

We trust that this letter is helpful, but should you have any queries, please do not hesitate to contact me.

Yours sincerely,

Lynette Fawkes

Inspector of Historic Buildings and Areas



Historic England

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**Response to National Grid
Bramford to Twinstead Connection Project
Pre-application Stage**

Response from
Layham Parish Council [LPC]

This response covers a number of aspects of the National Grid's proposals and we express these concerns under the following headings:

Consultation on Proposals – History to Date

Between 2009 and 2013 National Grid [NG] conducted a lengthy public consultation relating to the proposed Bramford to Twinstead line, publishing a Connection Options Report followed by an Environmental Impact Scoping Report in 2012. The Planning Inspectorate then published a Scoping Opinion in March 2013. Later that year National Grid conceded its application was premature and suspended the process.

In early 2021 National Grid restarted the consultation. They offered parish councils an online meeting in line with COVID19 restrictions. National Grid also sent a newsletter and questionnaire to selected households close to the proposed transmission corridor.

The consultation coincided with council elections and there were limited opportunities for engagement. Eleven parish councils signed a Pre-Application Protocol Letter Before claim for Judicial Review providing ground for an extension to the consultation period. This was refused.

The informal public consultation period closed on 6th May. On the 11th May the Planning Inspectorate issued notification of the Scoping Report. The report therefore takes no account of initial consultation responses from statutory consultees or other representative bodies and individuals.

Although the consultation was informal, National Grid has failed in its duty to consult the local community and contravened the spirit of if not the letter of s47. Nor does it follow advice¹ set out by the Planning Inspectorate and thus shows scant regard for the views of local residents and statutory consultees.

Absence of up-to-date local information means the report is also incomplete.

Scope of the proposal under consultation

National Grid [NG] have not included for discussion the other connection proposals that have a direct bearing on the need case and the specification of the proposed Bramford to Twinstead connection.

¹ Advice Note 14 paras 3.14 et al

Layham Parish Council perceive that there is a significant likelihood that these wider proposals will bring additional significant detriment to the Bramford to Twinstead corridor.

Considering NG's rationale for making the Bramford to Twinstead corridor their preferred option for the connection currently under consultation, and by applying the same value judgements, policies and rules that have determined NG's current Bramford to Twinstead proposals, leads us to expect that NG will bring forward routing options for the proposed ATNC, Bramford to Tilbury connection, which will add a third line of pylons to this existing route.

NG's wider proposals along with developments their project could facilitate together have the potential to transform a rural landscape full of cultural heritage and environmental assets in to a landscape dominated by energy industrialisation.

Whether or not NG agree with this characterisation, it is reasonable for the affected communities to judge for themselves the true scale of change they could experience in their surroundings. The current consultation is in all respects inadequate to that task. We therefore call on the Planning Inspectorate to deem the current under informed, narrow and biased informal consultation process as instigated by NG to be not fit for purpose.

Landscape and Visual Impact Assessment [LIVA]

In para 6 National Grid applies a Zone of Theoretical Visibility (ZTV) of 10km and a study area of 5km for the LVIA. This zonal approach is vital to ensure that the benefit of local experience can be taken into consideration on which to base its assumptions, however, it should be noted that National Grid did not seek consultation from communities 10km from the proposed line.

It also states that screening diminishes the impact (6.3.3)

In practice visual impact depends on a number of factors including the way in which local residents use the countryside. Long range views of the new line for example would be evident from the network of public rights of way in and near Layham, Hadleigh, Shelley and Polstead. All of these are popular and well used routes used by local and neighbouring residents to enjoy the countryside of the Brett Valley Special landscape Area and surrounding areas.

Whilst the proposed sealing end compounds are not visible from the Layham area (site locations as presently proposed) there is a major concern that placing 4 large security compounds (80M by 50M) in rural areas with 8 foot steel palisade fencing with numerous sealing end apparatus up to 30ft high and a 70 foot pylon inside, will be very difficult if not impossible to conceal. If tree planting is the suggested solution, it will be decades before the screening is sufficient to mask these large blots to our landscape.

National Grid also pre-judges the difference in impact of the existing 132kV line and the proposed 400 kV line (6.3.6). The difference in theoretical visibility should not be based merely on comparisons between the height of the towers. The cumulative impact of two lines of equal height is quite different to that of one tall and one shorter line.

The interaction of larger lines is significantly greater as perspective dictates than towers and cables are rarely in alignment. A high 'steel fence' is thus created. Ample evidence is provided by the transmission lines from Sizewell to Bramford. Only by accepting these impacts can the LVIA be assessed adequately.

Cumulative impacts

National Grid considers cumulative impacts in chapter 18 and provides an initial list of sites that may be relevant in the Appendix. PINS Advice Note 17: Cumulative Effects Assessment provides a methodology for CEA comprising a staged process, as follows

1. Establishing the Zone of Influence (ZOI) and identify a list of 'other developments' which could potentially interact with the proposed development;
2. Analysing the list obtained in stage 1 and identify the sites that may have a significant effect on the environment, economy or community when assessed cumulatively with the proposed site. Providing a justification as to why the sites that will result in no cumulative effects can be scoped out of the assessment and develop a new list of sites that can progress to stage 3;
3. Gathering all required information for the sites on the new list; and
4. Assessing the likely residual effects as a result of the interrelationship between the proposed and cumulative sites.

This initial list is inadequate because in table 18.1 the Zone of Influence [ZOI] for Environmental Topics is set at 1km from biodiversity, socio economics, recreation and tourism. However, it is self-evident that tourists travel to appreciate the environmental benefits of the surrounding countryside. An hour's walk could easily cover 5km as visitors come out to enjoy the Suffolk countryside. An artificial division of 1km is therefore highly inadequate and the ZOI should depend on the topography, geography and significance of the natural environmental amenities.

The locally designated Special Landscape Areas are thus a good starting point for considering cumulative impacts. They include the Brett Valley and the SLA to the north of the Bramford substation.

Connection Options

National Grid published its initial Connection Options Report in May 2012. Connection decisions have a significant bearing on environmental impact and additional information is required to fully assess impacts locally.

It is not the purpose of this submission to evaluate the potential use of new technology. In the context of Environmental Impact scoping the applicant should demonstrate why new technologies that could significantly reduce environmental impact have been excluded. In this Report potentially disruptive technologies such as superconductors which have been in use in Germany for several years and also in the USA are not mentioned. Independent evidence needs to be provided if they are to be scoped out.

Current proposal would include 4 sealing end compounds with the environmental and visual impacts that these inevitably bring. If the entire line were underground these would be unnecessary significantly reducing the impact. Should the existing hybrid model be adopted then additional impacts should be scoped in, for example transport and the impact this would have on the rural, and mainly single carriageway, network of lanes in Layham. There is also the additional environmental impacts of overhead lines on this rural landscape.

While the Brett Valley is not designated an Area of Outstanding Natural Beauty (AONB) it is, notwithstanding, an area of great natural beauty with many historical and listed buildings. It has strong connections with artists, including Sir Cedric Morris, who ran the East Anglian School of Painting at Benton End, under whom Maggie Hambling and Lucian Freud studied.

Benton End which overlooks the Brett Valley and the base for Sir Cedric Morris's art school is now the base for the Pinchbeck Charitable Trust and is currently being gifted to a national charity The Garden Museum. It will thus shortly become a national centre of importance and the proposal to increase the pylon heights will negatively impact on this beautiful vista. Please see in Appendix 1 a letter from the Trustee.

Designated as Special Landscape Area the erection of taller and wider pylons with more prominent insulators, and carrying 18 power lines each, would adversely affect the quality of the landscape and be detrimental to the visual beauty of this area. As well as the visual impact there is also the environmental impact of increased noise pollution in moist conditions, which will be even more noticeable with larger pylons. Previously in this submission we have referenced the restricted costing model of OHL v undergrounding in this consultation.

NG argue that any additional costs of undergrounding will need to be paid by consumers, however, this cost will be spread over millions of consumers, so have minimal impact, and should be viewed as an inherent cost of generating "green energy" offshore. The alternative is that the socio-economic costs such as the detriment on the wellbeing of those living in the area and the impact on the rural landscape, is borne of the few for the benefit of the many. NG also need to consider lifetime costs, e.g. maintenance, and be transparent in these findings.

Based on the above LPC believe NG should seek to underground the route, including in the Special Landscape Area of the Brett Valley. As extra electricity is generated off the East Coast and possibly Sizewell C, the majority of which is destined for London, NG have a responsibility to look towards the future and to invest in 21st century technologies, rather than rely on 20th century ones, that enable this "green energy" to reach its destination with minimal impact on the communities that live along the route. A responsibility to ensure that these rural and special landscape areas are protected for future generations, rather than blighted by larger pylons, by undergrounding this route.

Minimising the cost of the project has been National Grid's main driver and it only proposes to make additional expenditure where they are forced to do so (AONB for example) and it is surprising that they have not been more transparent with the costings of the project.

The 270-page scoping document and the 215-page appendices have little costing detail and provide no proof that the current proposal (three lengths of overhead pylons, two sections of cable and 4 large sealing end compounds) is cheaper than installing the whole circuit via underground cables.

We would suggest that any costings should also be based on whole life costs rather than just the capital expenditure cost of installation as we understand that the operation and maintenance costs and the electrical losses are very different between pylons and underground cables.

The topography and the ground conditions over the proposed route are not difficult ones (no very steep inclines or granite to dig through etc), so there are no technical reasons for the decision to go for pylons rather than underground cables. We note that the East Anglia One and East Anglia 3 circuits are to be underground along the whole 37 Km of its route and question why the Bramford to Twinstead's 28.5 Km is not being treated in the same way.

Layham Parish Council

8 June 2021

Jane Cryer, Clerk to the Council



The Pinchbeck Charitable Trust

[REDACTED]

The Parish Council
Attn. Ms. Charlotte Britton (Chair)

June 8, 2021

Dear Ms. Britton:

PROPOSED CHANGES TO LAYHAM PYLONS

I write as a Trustee of the Pinchbeck Charitable Trust, the owner of Benton End House in Hadleigh. The Trust is in process of gifting the house to national charity, The Garden Museum. This property dates from the Tudor period and has significant historical, architectural, artistic and horticultural importance, being the former home of celebrated artist-plantsman Sir Cedric Morris and Arthur Lett Haines, and the location of their influential East Anglian School of Painting and Drawing.

It is the intention of the Trust and the Garden Museum to recreate Benton End House and its garden as a centre for artistic and horticultural endeavour. This will be a centre of national importance and is a key element of the economic development of Hadleigh and the surrounding unspoiled area of Suffolk.

We are extremely concerned, therefore, by the proposal to increase significantly the capacity of the nearby power lines. The house and indeed potentially the entire Benton End project are likely to be negatively affected, both as a result of the visual impact and noise pollution. As well, there is a potential risk of health issues for occupants arising from induced magnetic fields around the lines.

Because this part of Suffolk is by any definition an area of outstanding natural beauty, and because the proposed changes are likely to have negative economic consequences locally, the investors in this upgrade scheme must be required, on both safety and aesthetic grounds, to bury the lines.

Yours faithfully,

[REDACTED]

Robin Pinchbeck

Trustee, The Pinchbeck Charitable Trust

cc Mr. John Curran, Parish Council

Planning Inspectorate
By BramfordtoTwinstead@planninginspectorate.gov.uk

7th June 2021

Dear Sirs/Madam,

Re: Environment Scoping Assessment re: Bramford to Twinstead Project
Your ref: EN020002

Thank you for consulting Leavenheath Parish Council in respect of the Environment Scoping reports in respect of this project. In its position as representative of a rural community within an Area of Outstanding Natural Beauty and valued landscape directly affected by the proposed development, the Parish Council wishes to begin by reiterating to the Planning Inspectorate its position in response to National Grid's non-statutory consultation in May.

Leavenheath's residents believe that greater consideration should be given to offshore transmission to reduce the impact on the communities and environment of East Anglia and, if unavoidable, onshore development should be undergrounded to the maximum extent possible to mitigate ongoing and **cumulative impact**.

We take the view that National Grid's Environment Impact (EI) Scoping Report is incomplete and as such materially flawed. It is erroneous because it fails:

- To take account of up-to-date locally provided information;
- To account for significant recent changes that add to cumulative impact;
- To account for its own announcements of future development that increase cumulative impact;
- To account for socio-economic impacts.

National Grid conducted a lengthy public consultation relating to the proposed Bramford to Twinstead transmission line between 2009 and 2013. In 2012 it published a Connection Options Report followed by an EI Scoping Report. The Planning Inspectorate published a Scoping Opinion in March 2013.

Later that year National Grid conceded its application was premature and suspended the process.

National Grid restarted the consultation early in 2021, offering parish councils an on-line meeting due to Covid-19 restrictions. A newsletter was sent to a selection of households close to the proposed transmission corridor along with a questionnaire.

The consultation coincided with council elections and there were limited opportunities for engagement. We along with 10 other parish councils submitted a Pre-Application Protocol Letter before claim for Judicial Review providing convincing reasons for an extension to the consultation period. This was refused and due to the limited timing a decision was taken not to proceed to Court.

The consultation period closed on 6th May and just 5 days later 11th May the Planning Inspectorate issued notification of the Scoping Report. The report therefore takes no account of initial consultation responses from statutory consultees or other representative bodies and individuals.

In some locations entire communities were omitted from the consultation. A survey of residents in Flowton indicates they did not receive the newsletter or questionnaire, despite being close to the substation and with many sites where sensitive visual receptors are likely to be found.

Although the consultation was informal, National Grid has failed in its duty to consult the local community and contravened the spirit of S.47. Neither did the consultation follow advice¹ set out by the Planning Inspectorate and thus shows scant regard for the views of local residents and statutory consultees.

We are extremely concerned that there is an absence of up to-date local information, which means the report is incomplete.

¹ Advice Note 14 paras 3.14 et al

Connection Options

National Grid published its initial Connection Options Report in May 2012. Details are provided in Para 3 on subsequent evaluation. Connection decisions have a significant bearing on environmental impact and additional information is required.

It is not the purpose of this submission to evaluate the potential use of new technology. In the context of EI scoping the applicant should demonstrate why new technologies that could significantly reduce environmental impact have been excluded. In this Report potentially disruptive technologies such as superconductors which have been in use in Germany for several years and in the USA are not mentioned. Independent evidence needs to be provided if they are to be scoped out.

The construction and post construction environmental impacts of some sections are unclear.

The working area of underground cable sections would be 100m (4.5.19) and topsoil clearance would be carried out for this width, except for shorter sections where directional drilling (trenchless cables) would be used. In these sections the surface soil is unaffected.

Further information on the residual 'exclusion' zone is required.

Regarding the necessity for sealing end compounds if the entire line is not placed underground, the following should be scoped in:

In respect of our Parish the impact on Boxford Fruit Farms does not appear to have been significantly weighted both in terms of directional drilling and sealing end compounds.

Thorough consultation must take place to ensure that fruit farmers within the parish and beyond have all existing and future orchards/fruit land is recognised and bypassed. We understand the depth of underground cabling is an issue, which potentially impacts on productivity as it is understood fruit cannot be grown on top of the underground cables. The consultation needs to look to the future as orchards within Leavenheath are growing and new ones are popping up on land not previously containing fruit.

Assessment of visual impact

In paragraph 6 National Grid applies a Zone of Theoretical Visibility (ZTV) of 10 km and a study area of 5 km for the LVIA.

It is notable that it did not seek consultation from communities 10 km from the proposed line and thus does not the benefit of local experience on which to base its assumptions. This we believe is a fundamental flaw and failure of the scoping report.

It also states that screening diminishes the impact (6.3.3), which we believe significantly undermines the true position.

In practice, visual impact depends on several factors. For example, from popular vantage points between Sproughton and Burstall the existing line defines the horizon at a significant distance of with minimal screening in either the near or far distance.

Long range views of the new line would also be evident from public rights of way near Layham and Hadleigh.

Between Hintlesham and Hadleigh the proposed line does not replace a smaller distribution line as in other sectors and the visual impact is thus different. At Hintlesham Woods, a Site of Special Scientific Interest (SSSI), the proposed completely new line could be seen for quite some distance.

From our perspective, part of Leavenheath is within the Dedham Vale Area of Outstanding Natural Beauty (AONB). In planning terms AONB's are significantly protected and have the same level of protection of National Parks.

Paragraph 115 of the National Planning Policy Framework (NPPF) makes clear "great weight should be given to conserving landscape and scenic beauty" within AONB's.

Either side of Leavenheath the current proposal because of the AONB and SSSI the sections will be undergrounded, but within the Parish it will be overground. We understand the overriding factor for the overgrounding in this section is cost. We consider this wholly

misconceived because there has been no consideration as to the amenity value and impact on views looking into the AONB from all around the Parish and the neighbouring parishes.

Leavenheath is shortly to move to Regulation 14 of its Neighborhood Plan, there is a policy within the plan in respect of important community views and it considered views into the AONB are especially important given the great weight and need to maintain/conservate the scenic beauty of the AONB.

Leavenheath has several walking routes², which are well used by Parishioners, local residents and tourists, which we believe will be impacted if our section is overgrounded and not underground. We do not believe the environmental or socio-economic impact (discussed further below) has been adequately considered within the scoping report.

National Grid pre-judges the difference in impact of the existing 132kV line and the proposed 400 kV line (6.3.6). The difference in theoretical visibility should not be based merely on comparisons between the height of the towers. The **cumulative impact** of two lines of equal height is quite different to that of one tall and one shorter line. The interaction of larger lines is significantly greater as perspective dictates than towers and cables are rarely in alignment. A high 'steel fence' is thus created. Ample evidence is provided by the transmission lines from Sizewell to Bramford. Only by accepting these impacts can the LVIA be assessed adequately.

Socio-economic impacts

In para 15 the Report states that socio-economic impacts can be scoped out as tourism primarily benefits the Dedham Vale where the line will be placed underground. By implication National Grid thus accepts that overhead lines may have an impact on visual amenity to the detriment of the tourist industry.

Significantly it also shows a lack of awareness or research into the local tourist industries.

In recent years numerous tourist attractions have been created, supplementing those that already existed. Some – such as glamping sites – rely on the landscape and tranquility of their setting.

² <https://stokebynayland.com/wp-content/uploads/2021/04/LCWWalking-in-Leavenheath-Brochure.pdf>
<http://leavenheath.suffolk.cloud/assets/Footpaths/Circular-Walks/LCW-Leavenheath-Leaflet-Web-Version-1.pdf>

Others provide ‘out of town’ leisure amenities which again benefit to some extent from their rural setting. Examples in the Hintlesham to Burstall area include:

- Suffolk Escape <http://www.suffolkescape.co.uk/>
- The Lost Garden Glamping <http://thelostgardenretreat.com/>
- College Farm – Grade II listed BnB <https://www.collegefarm.net/>
- Hintlesham Hall – Grad 1 listed hotel
- Hintlesham Golf Course and golf driving range
- Copenhagen Cottage – camping and caravanning site
- Finjaro BnB

We are aware of several other local businesses that potentially would be impacted including the Stoke by Nayland Golf Hotel, SESAW a small animal re-homing charity and the Hare and Hounds pub.

We take the view that the socio-economic impacts should therefore be scoped in along the entire length of the project.

Cumulative impact

Cumulative impacts relate to ‘*other existing and or approved development*’. Despite attempts at clarification, this terminology from the EIA Regulations 2017 is ambiguous.³

National Grid considers cumulative impacts in chapter 18 and provides initial lists of sites that may be relevant in the Appendix, but we feel this does not encapsulate all appropriate sites or properly deals with cumulative impact.

PINS Advice Note Nine: Rochdale Envelope identifies ‘other developments’ and more specifically ‘major developments’ as those that are:

- under construction
- permitted application(s), but not yet determined;
- submitted application(s) not yet determined;

³ *Demystifying Cumulative Effects*, IEMA Impact Assessment Outlook Journal Volume 7: July 2020

- projects on the Planning Inspectorate’s Programme of Projects; and,
- identified in the relevant Development Plan
- Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward.

PINS Advice Note 17: Cumulative Effects Assessment provides a methodology for CEA comprising a staged process:

1. Establishing the Zone of Influence (ZOI) and identify a list of ‘other developments’ which could potentially interact with the proposed development;
2. Analysing the list obtained in stage 1 and identify the sites that may have a significant effect on the environment, economy or community when assessed cumulatively with the proposed site. Providing a justification as to why the sites that will result in no cumulative effects can be scoped out of the assessment and develop a new list of sites that can progress to stage 3;
3. Gathering all required information for the sites on the new list; and,
4. Assessing the likely residual effects as a result of the interrelationship between the proposed and cumulative sites.

National Grid accepts the list will continue to be updated. However, at the time of publication the list was already incomplete. As a result, National Grid underestimates the significant of cumulative impacts, especially in the area of the Bramford substation and encompassing the surrounding villages.

The Norwich to Tilbury reinforcement (ATNC/AENC), which also uses the Bramford-to-Twinstead corridor should be scoped-in to the EIA, and any potential cost-saving that could be achieved by undergrounding both lines together should be considered in the economic argument for the overhead line as opposed to undergrounding.

Cumulative impact is a particular problem for National Grid given the recent High Court Judgment R (Pearce) v Secretary of State for Business, Energy and Industrial Strategy [2021] EWHC 326 (Admin), otherwise known as the Vanguard Judgment. This case has made clear that the cumulative impact of the proposal **must** be fully considered.

Justice Holgate articulated the essential principle as follows (at para.120 of the judgment):

“The effect of Directive 2011/92/EU, the 2009 Regulations and the case law is that, as a matter of general principle, a decision-maker may not grant a development consent without, firstly, being satisfied that he has sufficient information to enable him to evaluate and weigh the likely significant environmental effects of the proposal (having regard to any constraints on what an applicant could reasonably be required to provide) and secondly, making that evaluation.”

It is the first decision of the High Court after the end of the UK's post-Brexit transition period to consider EIA legislation as retained EU law, and the issue of discretion in judicial review proceedings relating to breaches of retained EU law. It confirms the duty to properly consider and **weigh the cumulative impact**.

The Court took the opportunity to highlight the principles previously set out by the Court of Appeal in R (Larkfleet Limited) v South Kesteven District Council [2016] Env. L.R. 76, which includes:

“But the mere fact that two sets of proposed works may have a cumulative effect on the environment does not make them a single project for the purposes of EIA. They may instead constitute two projects the cumulative effects of which must be assessed ([36]).”

As such it is clear the Court’s approach is the **cumulative impact must be fully considered**. We are concerned the approach of National Grid to date is to not fully set out the full list of projects because the cumulative impact is obviously substantial and given the Vanguard Judgment they would be in considerable difficulty.

We contend the list is also inadequate because in table 18.1 the Zone of Influence for Environmental Topics is set at 1 km for biodiversity, socio economics, recreation, and tourism. This is materially flawed and appears artificial.

It is self-evident that tourists travel and thus appreciate the environmental benefits of the countryside at scale. An hour's walk in the countryside could easily cover 5 km, as evidenced by the Leavenheath walking routes and maps (footnoted above).

As a Parish Council we are aware visitors into our Hamlet come into the countryside to escape the confines, industrialisation and built landscapes of their urban towns. The Suffolk countryside is not a walled garden, and an artificial division of 1 km is wholly inadequate. The zone of influence should therefore depend on topography, geography, and significance of amenities.

National Grid has also presented provisional plans for further transmission lines in the Bramford area. Although the need case and connection options for these remain opaque and confused, having presented them during the information consultation they cannot be scoped out unless they are withdrawn.

National Grid applies the caveat "*It is expected that a future developer... would carry out their own assessment of cumulative impacts*" to numerous projects, but they cannot ignore the legal duty/requirement to properly consider the **cumulative impact**.

It could be seen as an attempt to circumnavigate the duty as recognised by the Court of Appeal in Larkleat:

*"Because the scrutiny of the cumulative effects of two projects may involve less information than if they had been treated as one (e.g. where one project is brought forward before another), a **planning authority should be astute to see that the developer has not sliced up a single project in order to make it easier to obtain planning permission for the first project and to get a foot in the door for the second** ([37]);*

For example, below is a list of existing installations, applications and published plans at or around the Bramford substation site in Burstall:

- National Grid substation – existing substation including UKPN distribution;
- EA1 substation – existing substation for offshore wind generation;
- Multiple transmission and distribution overhead lines – existing;
- Anesco battery storage – approved;
- Energypeople Ltd – 49.9 MW gas fired energy reserve generation unit – approved;
- Anglian Water strategic pipeline – outline plans published;
- EA3 substation – additional substation for EA3 connection - approved;

- EA3 – additional underground electricity cables from offshore generation – application pending;
- ENSO – 242-acre solar park – application submitted;
- Greybarn – 144-acre solar park – application submitted Bramford to Twinstead - overhead transmission line – scoping;
- EDF – 202-acre solar park – application pending;
- AENC – Norwich Main to Bramford transmission line – NOA 20/21 & National Grid;
- ATNC – Bramford to Tilbury transmission line – NOA 20/21 & National Grid.

*Application includes significant battery energy storage system (BESS). Other solar applications may include BESS.

We ask you to be astute to National Grid's attempt to get its foot in the door. Leavenheath Parish Council is concerned that offshore transmission options were excluded from National Grid's Network Options Assessment, and requests that the Environment Impact Assessment should include full disclosure on the options considered, along with the reasons why offshore transmission is not considered a viable alternative for this project.

Finally, if the route is to go ahead, we take the view that the section that passes through Leavenheath must be undergrounded otherwise it rides rough shod of the views into the AONB and will dominate views into the AONB. We are aware that there is appetite for a Dedham Vale AONB boundary review and National Grid should consider the area within Leavenheath may well become part of the AONB in due course. We understand the AONB at Suffolk County Council supports undergrounding in our parish.

If the route is to go ahead then we take the view it should be undergrounded in its entirety. We are concerned that National Grid is being deceptive in not providing full and updated disclosure of the entire cost calculations used to justify its decisions.

Yours Sincerely.

Leavenheath Parish Council

Leavenheath Parish Council



LITTLE CORNARD PARISH COUNCIL

Clerk: Dave Crimmin, [REDACTED]

Tel: [REDACTED]

email: yourclerk@btinternet.com

8th June 2021

The Planning Inspectorate
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol, BS1 6PN

Dear Sir

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Application by National Grid Electricity Transmission plc (the Applicant) for an Order granting Development Consent for the Bramford to Twinstead overhead line project (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Introduction:

Little Cornard is a small rural parish in the Stour Valley. It has a population of less than 300 people. Demographically it has an older population. It enjoys a magnificent landscape and a wide range of wildlife which has been enjoyed by generations. The landscape has been painted by Constable, Gainsborough and Nash. It is recognised that the area is of AONB standing and is awaiting a decision on inclusion with the nearby AONB which is only one kilometre away. The Stour Valley is increasingly used by visitors enjoying both the outstanding landscape and range of wildlife. The Parish Council is made up of volunteers from the Parish. Recently the Parish Council has prepared a Neighbourhood Plan which is now at Regulation 16 consultation. In preparation of the plan a wide consultation was undertaken. The importance and protection of the landscape and its rural nature was one of the highest priorities for residents. Residents were also very strongly opposed to any new overhead electricity lines crossing the valley.

Increasing tourism to the area, using recognised footpaths, has been a feature of COVID and contributes to improved well-being. This is likely to increase in the future supported by Suffolk and Babergh Councils and initiatives such as the Natural England Guidance on the Stour Valley. The adoption of 'Quiet Lanes', for all the byroads in Little Cornard has been confirmed. This will increase pedestrian, cycling and horse-riding numbers in this area of the Stour Valley. Along the Stour Valley increased tourism increases the significant socio-economic value of the Stour Valley countryside.

The Little Cornard Parish Council 'LCPC' are strongly in favour of green energy and fighting climate change. LCPC do not, however, believe that this has to be, or need be, at the expense of rural landscapes. Any proposal for new electricity lines carried by pylons is strongly opposed and LCPC is encouraged that National Grid is proposing to underground the section through the Stour



LITTLE CORNARD PARISH COUNCIL

Clerk: Dave Crimmin, Cragston, Sudbury Road, Newton, Sudbury, Suffolk CO10 0QH
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Valley although it also believes undergrounding the entire new line is a practical proposal at a not unreasonable cost over a forty-year life. The benefits to improved well-being and an increased socio-economic value to residents cannot be ignored. The attraction for visitors to visit an outstanding area is of high value and should not be undermined.

Process:

LCPC has been concerned that throughout the current process that it has been to a 'rushed' and unreasonable timescale. National Grid has spent years preparing their proposal with the benefit of highly paid consultants and yet the volunteers of LCPC have had to consult with residents and prepare responses in a matter of weeks, on a matter of the highest importance to our residents whilst adhering to COVID restrictions on meetings.

LCPC responded to National Grid and in their response included a number of questions where information was sought to enable a clearer understanding of the rationale for the proposal. Sadly, to date, there has been no response from National Grid. This leads us to believe that the current consultation is a 'sham' with no real attempt to address our concerns or provide the information we need to fully understand and respond.

Concerns:

LCPC do not believe there has been any substantive argument put forward to explain why a national undersea grid could not be incorporated, this would reduce the need for so many on land transmission lines.

LCPC do not believe there has any attempt to explain the totality and impact on Suffolk, and potentially on the Stour Valley, of further transmission requirements beyond the current proposal. These would include the Norwich to Rayleigh proposal.

LCPC also believe that although National Grid is recommending undergrounding for the Stour Valley, which is welcomed, that the case for funding this proposal has not been made strongly enough. The evidence for the need for undergrounding is clear and unambiguous.

LCPC are very concerned that current rules relating to EMF radiation are out of date. It appears that there has been little, if any, new research for the last ten years. This is in stark contrast to the new maritime rules brought in by OFCOM. Residents remain highly suspicious and concerned about the effect of EMF radiation on their health and that of their children and grand-children. Undergrounding is clearly a much safer option. National Grid need to update their 'science' in this area.

In making the case for undergrounding LCPC believe that the 'Holford Rules', if applied to the current proposal, would make overground lines and their impact on high amenity areas unacceptable. This strongly supports the case for undergrounding and needs to be recognised. Any new overground lines would have an undesirable visual impact and it is obvious that swapping lower pylons for new and higher pylons would significantly and negatively impact the visual beauty of the area.

LCPC believe that there a number of new technologies that could both reduce the impact of overhead and underground lines. These technologies include superconductors.



LITTLE CORNARD PARISH COUNCIL

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LCPC are also concerned that the question of microclimates around lines has not been explored. The waste of heat from transmission lines, when energy efficiency is central to any proposal, cannot be ignored. An explanation of how generated heat in underground schemes could be potentially stored and used would also be helpful.

The over ground route chosen would impact a significant number of listed buildings, including for instance, at the bottom of Spout Lane. Within Little Cornard there are a number of wildlife sites, including Cornard Mere. Visitor numbers to these and along our Quiet lanes, Green lanes, bridleways and footpaths are increasing. Visitors and residents alike are thrilled to look up and see Red Kites and Buzzards soaring above them rather than anachronistic pylons.

Conclusion:

LCPC believe that the wider picture for electricity transmission in both East Anglia and nationally needs a coherent strategy which makes use of a 21st century technological approach and takes into account the financial and emotional value of well-being and tourism. Once this national strategy is in place it would then be appropriate to introduce local proposals such as the current one.

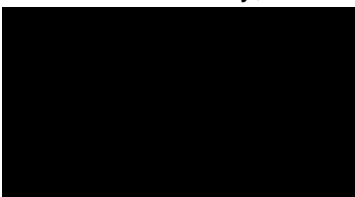
If it is proved that new transmission lines need to go through the Stour Valley then it is imperative that they are undergrounded. Early confirmation of this would provide reassurance to a worried and predominately elderly population.

Further consultation with local communities must be organised to a fairer and more realistic timescale.

The majority of the land which would be used for the underground corridor in the Stour Valley is used predominately for arable and sugar beet crops. We believe that undergrounding would not cause long term disruption to these farming methods. The underground route also avoids significant areas of woodland. An over-ground route would cause additional immense visual disruption.

LCPC believe the option to underground the Stour Valley section is proven and must be confirmed. A further question is whether it makes more sense to underground the section between Polstead and the Stour Valley. This would eliminate the need for two sealing end compounds which are expensive and would, if adopted, reduce the visual impact. Both the compounds, in their current locations, would be visible from areas either within or close to existing AONBs.

Yours faithfully,



Dave Crimmin PSLCC
Clerk to Little Cornard Parish Council

Feekins-Bate, Laura

From: Matthew Duigan [REDACTED]@walthamforest.gov.uk>
Sent: 25 May 2021 08:49
To: BramfordtoTwinstead
Subject: EN020002 Application by National Grid Electricity Transmission plc (the Applicant) for an Order granting Development Consent for the Bramford to Twinstead overhead line project (the Proposed Development)

Good morning

I refer to your correspondence (ref: EN020002) which relates to an upcoming application by National Grid Electricity Transmission plc (the Applicant) for an Order granting Development Consent for the Bramford to Twinstead overhead line project

The Applicant has asked the Planning Inspectorate on behalf of the Secretary of State for its opinion (a Scoping Opinion) as to the information to be provided in an Environmental Statement (ES) relating to the Proposed Development. You have requested that the London Borough of Waltham Forest inform the Planning Inspectorate of the information you consider should be provided in the ES; or to confirm that you do not have any comments.

Having reviewed all 3 volumes, it is apparent that the scope is broad and seems to adequately covers relevant topics. The development will occur beyond the London Borough of Waltham Forest boundary, and while some existing lines located within the London Borough of Waltham Forest are to be retained, this will not alter the existing situation. In view of the comprehensive approach set out by the Applicant in the 3 volumes, and that the proposed development is some distance from the Borough boundary, I can confirm that the London Borough of Waltham Forest do not have any comments

Regards

Matt Duigan
Planner – Majors Team | Development Management
Economic Growth and Housing Delivery

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Decision Notice

MC/21/1377



Laura Feekins-Bate
Planning Inspectorate
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol
BS1 6PN

Planning Service
Physical & Cultural Regeneration
Regeneration, Culture, Environment &
Transformation
Gun Wharf
Dock Road
Chatham
Kent
ME4 4TR

Applicant Name:
Laura Feekins-Bate

Planning.representations@medway.gov.uk

Town and Country Planning Act 1990

Location: Between Bramford In Mid Suffolk And Twinstead In Braintree In Essex, , , ,

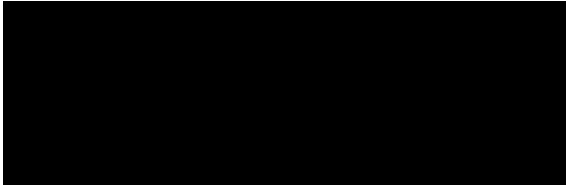
Proposal: Consultation from the Planning Inspectorate - Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) - Regulations 10 and 11 for an Order granting Development Consent for the Bramford to Twinstead overhead line project (the Proposed Development)

I refer to your letter of consultation regarding the above and would inform you that the Council **RAISES NO OBJECTION** to it.

- 0 Medway Council raises no objection to the consultation under The Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA regulations) - Regulations 10 and 11.

Your attention is drawn to the following informative(s) :-

- 1 This comment is based on the consultation to Medway Council received 12 May 2021.



David Harris
Head of Planning
Date of Notice 8 June 2021

**TOWN & COUNTRY PLANNING (APPEALS) (WRITTEN REPRESENTATIONS)
(ENGLAND) (AMENDMENT) (REGULATIONS 2013)**

TOWN AND COUNTRY PLANNING ACT 1990

Appeals to the Secretary of State

- If you are aggrieved by the decision of your Local Planning Authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under section 78 of the Town and Country Planning Act 1990.
- If you want to appeal against your Local Planning Authority's decision then you must do so within **12 weeks** from the date of this notice for appeals being decided under the **Commercial Appeals Service** and **6 months** from the date of this notice for all other **minor and major applications**.
 - However, if an enforcement notice has been served for the same or very similar development within the previous 2 years, the time limit is:
 - **28 days** from the date of the LPA decision if the enforcement notice was served before the decision was made yet not longer than 2 years before the application was made.
 - **28 days** from the date the enforcement notice was served if served on or after the date the decision was made (unless this extends the appeal period beyond 6 months).
 - Appeals must be made using a form which you can obtain from the Planning Inspectorate by contacting Customer Support Team on 0303 444 50 00 or to submit electronically via the Planning Portal at

https://www.planningportal.co.uk/info/200207/appeals/110/making_an_appeal

Commercial Appeals Service

- This type of appeal proceeds by way of written representations, known as the "Commercial Appeals Service". Third parties will not have the opportunity to make further representations to the Planning Inspectorate on these.

All other Minor and Major Applications

- The Secretary of State can allow a longer period for giving notice of an appeal, but he will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.
- The Secretary of State need not consider an appeal if it seems to him that the Local Planning Authority could not have granted planning permission for the

proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.

- In practice, the Secretary of State does not refuse to consider appeals solely because the Local Planning Authority based on their decision on a direction given by him.

Purchase Notes

- If either the Local Planning Authority or the Secretary of State refuses permission to development land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.
- In these circumstances, the owner may serve a purchase notice on the Council (District Council, London Borough Council or Common Council of the City of London) in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.

Feekins-Bate, Laura

From: NATS Safeguarding <NATSSafeguarding@nats.co.uk>
Sent: 17 May 2021 11:23
To: BramfordtoTwinstead
Subject: RE: EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation [SG31500]

Our Ref: SG31500

Dear Sir/Madam

The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.

However, please be aware that this response applies specifically to the above consultation and only reflects the position of NATS (that is responsible for the management of en route air traffic) based on the information supplied at the time of this application. This letter does not provide any indication of the position of any other party, whether they be an airport, airspace user or otherwise. It remains your responsibility to ensure that all the appropriate consultees are properly consulted.

If any changes are proposed to the information supplied to NATS in regard to this application which become the basis of a revised, amended or further application for approval, then as a statutory consultee NERL requires that it be further consulted on any such changes prior to any planning permission or any consent being granted.

Yours faithfully

NATS

NATS Safeguarding

E: natssafeguarding@nats.co.uk

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk



From: BramfordtoTwinstead <BramfordtoTwinstead@planninginspectorate.gov.uk>
Sent: 11 May 2021 17:30
Cc: BramfordtoTwinstead <BramfordtoTwinstead@planninginspectorate.gov.uk>
Subject: EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

Mimecast Attachment Protection has deemed this file to be safe, but always exercise caution when opening files.

Dear Sir/ Madam

Please see attached correspondence on the proposed Bramford to Twinstead overhead line project.

Please note the deadline for consultation responses is **08 June 2021**, and is a statutory requirement that cannot be extended.

Kind regards
Laura

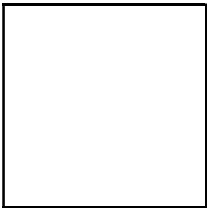
Laura Feekins-Bate
EIA Advisor
Environmental Services
Direct line: [REDACTED]
Mobile: [REDACTED]
Email: [REDACTED] [planninginspectorate.gov.uk](mailto:[REDACTED]@planninginspectorate.gov.uk)

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: [@PINSgov](https://twitter.com/PINSgov)

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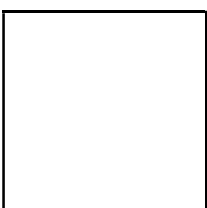


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Date: 08 June 2021
Our ref: 352859
Your ref: EN020002



BramfordtoTwinstead@planninginspectorate.gov.uk
BY EMAIL ONLY

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

Dear Laura Feekins-Bate,

Environmental Impact Assessment Scoping consultation (Regulation 15 (4) of the EIA Regulations 2017): Application by National Grid Electricity Transmission plc (the Applicant) for an Order granting Development Consent for the Bramford to Twinstead overhead line project (the Proposed Development)
Location: Bramford to Twinstead

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in your consultation dated 11 May 2021 which we received on the same date.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Case law¹ and guidance² has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. **Annex A** of this letter provides Natural England's advice on the general scope of the Environmental Impact Assessment (EIA) for this development. More detailed comment on the content of the report entitled *Bramford to Twinstead Scoping Report* (National Grid, dated May 2021) is given in **Annex B** of this letter.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. For any queries relating to the specific advice in this letter only please contact Sam Kench on [REDACTED]. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours faithfully

Sam Kench
Lead Adviser, Norfolk and Suffolk Team

¹ Harrison, J in *R. v. Cornwall County Council ex parte Hardy* (2001)

² *Note on Environmental Impact Assessment Directive for Local Planning Authorities* Office of the Deputy Prime Minister (April 2004) available from <http://webarchive.nationalarchives.gov.uk/+http://www.communities.gov.uk/planningandbuilding/planning/sustainability/environmental/environmentalimpactassessment/noteenvironmental/>

Annex A – Natural England’s general advice relating to the EIA Scoping Requirements

1. General Principles

Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2017, sets out the necessary information to assess impacts on the natural environment to be included in an ES, specifically:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases.
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen.
- A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects. Effects should relate to the existence of the development, the use of natural resources and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment.
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.
- A non-technical summary of the information.
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the ‘in combination’ effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

2. Biodiversity and Geology

2.1 Ecological Aspects of an Environmental Statement

Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EclA) have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM) and are available on their website.

EclA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EclA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.

The National Planning Policy Framework sets out guidance in S.174-177 on how to take account of biodiversity interests in planning decisions and the framework that local authorities should provide to assist developers.

Paragraph 7.4.1 of the EIA Scoping Main Report identifies different biodiversity receptors which will be considered within the ES on the basis of their proximity to the project area. Natural England would like to make clear that biodiversity receptors which could experience a Likely Significant Effect (LSE) as a result of this project should not be identified by arbitrary distances; for example

7.4.1 states, “internationally important statutory designated sites (SPAs; SACs; and Wetlands of International Importance (Ramsar sites) within 2km of the Scoping Boundary, extending to 30km for SACs where bats are the qualifying interest and European sites hydrologically connected to the project that occur within 10km”. This equally applies to all sites of high biodiversity value, including statutory and non-statutory designated sites or otherwise notable habitats and species, veteran or ancient trees. Instead, LSE (and therefore scope of the ES) should be identified by the consideration of any potential impact pathways. Impacts to sites of high biodiversity value can occur over larger distances than 2km. Impact Risk Zones (IRZs), available via MAGIC, Natural England’s external mapping system may provide a useful starting point for identifying potential impact pathways on SSSIs, however, IRZs are only indicative and other impact pathways may exist.

2.2 Internationally and Nationally Designated Sites

The ES should thoroughly assess the potential for the proposal to affect designated sites. European sites (e.g. designated Special Areas of Conservation and Special Protection Areas) fall within the scope of the Conservation of Habitats and Species Regulations 2017 (as amended). In addition paragraph 176 of the National Planning Policy Framework requires that potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites. Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

Should a Likely Significant Effect on a European/Internationally designated site be identified or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.

Sites of Special Scientific Interest (SSSIs) and sites of European or international importance (Special Areas of Conservation, Special Protection Areas and Ramsar sites)

The development site is within the following designated nature conservation site:

- Hintlesham Woods SSSI

Furthermore, the various project elements identified as presenting potential impact pathways to:

- Arger Fen SSSI
- Cattawade Marshes SSSI
- Cornard Mere, Little Cornard SSSI
- Little Blakenham Pit SSSI
- Orwell Estuary SSSI
- Stour Estuary SSSI
- Stour and Orwell Estuaries Ramsar
- Stour and Orwell Estuaries SPA

- Further information on the SSSI and its special interest features can be found at www.magic.gov. The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within these sites and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects.

- - European site conservation objectives are available on our internet site <http://publications.naturalengland.org.uk/category/6490068894089216>

2.3 Regionally and Locally Important Sites

The EIA will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geoconservation group or a local forum established for the purposes of identifying and selecting local sites. They are of county importance for wildlife or geodiversity. The Environmental Statement should therefore include an assessment of the likely impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures. Contact the local wildlife trust, geoconservation group or local sites body in this area for further information.

2.4 Protected Species - Species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 (as amended)

The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law, but advises on the procedures and legislation relevant to such species. Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, groups and individuals; and consideration should be given to the wider context of the site for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.

The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*. The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.

In order to provide this information there may be a requirement for a survey at a particular time of year. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and where necessary, licensed, consultants. Natural England has adopted [standing advice](#) for protected species which includes links to guidance on survey and mitigation.

2.5 Habitats and Species of Principal Importance

The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available here <https://www.gov.uk/guidance/biodiversity-duty-public-authority-duty-to-have-regard-to-conserving-biodiversity>.

Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats, 'are capable of being a material consideration...in the making of planning decisions'. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.

Natural England advises that a habitat survey (equivalent to Phase 2) is carried out on the site, in order to identify any important habitats present. In addition, ornithological, botanical and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present. The Environmental Statement should include details of:

- Any historical data for the site affected by the proposal (e.g. from previous surveys);
- Additional surveys carried out as part of this proposal;
- The habitats and species present;
- The status of these habitats and species (e.g. whether priority species or habitat);

- The direct and indirect effects of the development upon those habitats and species;
- Full details of any mitigation or compensation that might be required.

The development should seek if possible to avoid adverse impact on sensitive areas for wildlife within the site, and if possible provide opportunities for overall wildlife gain.

The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of priority habitat for the area under consideration.

Ancient Woodland

The S41 list includes six priority woodland habitats, which will often be ancient woodland, with all ancient semi-natural woodland in the South East falling into one or more of the six types.

Information about ancient woodland can be found in Natural England's standing advice http://www.naturalengland.org.uk/Images/standing-advice-ancient-woodland_tcm6-32633.pdf.

Ancient woodland is an irreplaceable resource of great importance for its wildlife, its history and the contribution it makes to our diverse landscapes. Local authorities have a vital role in ensuring its conservation, in particular through the planning system. The ES should have regard to the requirements under the NPPF (Para. 175)² which states:

-

When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts);
- 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.

2.6 Contacts for Local Records

Natural England does not hold local information on local sites, local landscape character and local or national biodiversity priority habitats and species. We recommend that you seek further information from the appropriate bodies (which may include the local records centre, the local wildlife trust, local geoconservation group or other recording society and a local landscape characterisation document).

- Local Record Centre (LRC) in Suffolk please contact: <http://www.suffolkbis.org.uk/>
- County Wildlife Sites in Suffolk please contact: <http://www.suffolkbis.org.uk/>
- Geological sites in Suffolk please contact: <http://www.suffolkbis.org.uk/> or <http://www.geosuffolk.co.uk/>

3. Designated Landscapes and Landscape Character

Nationally Designated Landscapes

As the development site is within/adjacent to Dedham Vale Area of Outstanding Natural Beauty (AONB), consideration should be given to the direct and indirect effects upon this designated landscape and in particular the effect upon its purpose for designation within the environmental impact assessment, as well as the content of the Dedham Vale AONB and Stour Valley Management Plan.

Landscape and visual impacts

Natural England would wish to see details of local landscape character areas mapped at a scale

appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography.

The EIA should include a full assessment of the potential impacts of the development on local landscape character using [landscape assessment methodologies](#). We encourage the use of Landscape Character Assessment (LCA), based on the good practice guidelines produced jointly by the Landscape Institute and Institute of Environmental Assessment in 2013. LCA provides a sound basis for guiding, informing and understanding the ability of any location to accommodate change and to make positive proposals for conserving, enhancing or regenerating character, as detailed proposals are developed.

Natural England supports the publication *Guidelines for Landscape and Visual Impact Assessment*, produced by the Landscape Institute and the Institute of Environmental Assessment and Management in 2013 (3rd edition). The methodology set out is almost universally used for landscape and visual impact assessment.

In order to foster high quality development that respects, maintains, or enhances, local landscape character and distinctiveness, Natural England encourages all new development to consider the character and distinctiveness of the area, with the siting and design of the proposed development reflecting local design characteristics and, wherever possible, using local materials. The Environmental Impact Assessment process should detail the measures to be taken to ensure the building design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.

The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context Natural England advises that the cumulative impact assessment should include other proposals currently at Scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at Scoping stage would be likely to be a material consideration at the time of determination of the planning application.

The assessment should refer to the relevant [National Character Areas](#) which can be found on our website. Links for Landscape Character Assessment at a local level are also available on the same page.

Heritage Landscapes

You should consider whether there is land in the area affected by the development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific or historic interest. An up-to-date list may be obtained at www.hmrc.gov.uk/heritage/lbsearch.htm.

4. Access and Recreation

Natural England encourages any proposal to incorporate measures to help encourage people to access the countryside for quiet enjoyment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways are to be encouraged. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.

Rights of Way, Access land, Coastal access and National Trails

The EIA should consider potential impacts on access land, public open land, rights of way and coastal access routes in the vicinity of the development. The National Trails website www.nationaltrail.co.uk provides information including contact details for the National Trail Officer. Appropriate mitigation measures should be incorporated for any adverse impacts. We also recommend reference to the relevant Right of Way Improvement Plans (ROWIP) to identify public

rights of way within or adjacent to the proposed site that should be maintained or enhanced.

5. Soil and Agricultural Land Quality

Impacts from the development should be considered in light of the Government's policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 170 of the NPPF. We also recommend that soils should be considered in the context of the sustainable use of land and the ecosystem services they provide as a natural resource, as also highlighted in paragraph 170 of the NPPF.

Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably.

The applicant should consider the following issues as part of the Environmental Statement:

1. The degree to which soils are going to be disturbed/harmed as part of this development and whether 'best and most versatile' agricultural land is involved.

This may require a detailed survey if one is not already available. For further information on the availability of existing agricultural land classification (ALC) information see www.magic.gov.uk. Natural England Technical Information Note 049 - [Agricultural Land Classification: protecting the best and most versatile agricultural land](#) also contains useful background information.

2. If required, an agricultural land classification and soil survey of the land should be undertaken. This should normally be at a detailed level, eg one auger boring per hectare, (or more detailed for a small site) supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, ie 1.2 metres.
3. The Environmental Statement should provide details of how any adverse impacts on soils can be minimised. Further guidance is contained in the [Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites](#).

As identified in the NPPF new sites or extensions to new sites for peat extraction should not be granted permission by Local Planning Authorities or proposed in development.

6. Air Quality

Air quality in the UK has improved over recent decades but air pollution remains a significant issue; for example over 97% of sensitive habitat area in England is predicted to exceed the critical loads for ecosystem protection from atmospheric nitrogen deposition ([England Biodiversity Strategy](#), Defra 2011). A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The assessment should take account of the risks of air pollution and how these can be managed or reduced. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk). Further information on air pollution modelling and assessment can be found on the Environment Agency website.

7. Climate Change Adaptation

The [England Biodiversity Strategy](#) published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development's effects on the natural environment will be influenced by climate change, and

how ecological networks will be maintained. The NPPF requires that the planning system should contribute to the enhancement of the natural environment 'by establishing coherent ecological networks that are more resilient to current and future pressures' ([NPPF](#) Para 174), which should be demonstrated through the ES.

8. Net Gain

We advise that it is imperative that the project as a whole avoids, mitigates and/or compensates for impacts on habitats and species of high biodiversity value including designated sites, protected species and ancient woodland. As a first principle, the project should therefore represent no 'biodiversity net loss' in these regards.

However, it should be noted that a significant amount of other valuable and sensitive habitats and species are likely to be affected by the project, including priority habitats and species, CWS and LNR. Priority habitats and species listed under section 41 of the NERC Act are, in the Secretary of State's opinion, of principal national importance for the purpose of conserving biodiversity. The avoidance-mitigation-compensation hierarchy should also be clearly followed with respect to these habitats and species where they may be affected by this application.

In this regard, Natural England advises that a project of this scale has the potential to provide a positive environmental legacy for the area within which it is proposed, with considerable long-term benefits to people and wildlife. We welcome your commitment to providing Biodiversity Net Gain (BNG) in advance of it being a statutory requirement in the relevant National Policy Statements (NPS EN-1 and NPS EN-5) for NSIPs and we would be keen to work with the applicant in order to help realise any such ambition.

As you are aware, the BNG approach has been developed to not only help halt declines in wildlife by conserving what habitats and species are left but begin the task of restoring some of what has been lost. In simple terms, BNG calculations should (ideally using the recently released Defra biodiversity net gain metric 3.0) compare the current biodiversity value of the habitats within the project red line boundary to be lost (excluding designated sites and ancient woodland) with the biodiversity value of the habitats forecast to be created following development, with the intention being to demonstrate an overall increase in biodiversity (minimum 10 %). We consider that such an approach could, following completion of the project, provide significant benefits through:

- Enabling wildlife to adapt to the challenges of the future including habitat fragmentation, climate change etc.;
- Providing a wealth of natural capital benefits such as flood prevention, improved air quality, improved soils, clean water etc.;
- Providing inspiration and enjoyment for people through regular access to a high-quality natural environment, improving community health and wellbeing (both mental and physical). This should include enhancement of public access where practical (i.e. where it would not compromise the biodiversity interest, for example) and could also involve local stewardship of any new habitat creation;

We advise that this such an approach would be in line with:

- **The NPS for Energy (NPS EN – 1):** this provide the primary basis for decisions on applications for development consent for energy projects and acknowledges that development proposals "provide many opportunities for building-in beneficial biodiversity or geological features as part of good design" (EN-1, para 5.3.15, pg. 72) and that "the applicant should demonstrate that...opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals" (EN-1, para 5.3.18, pg. 72, also see para 5.3.4 on pg. 69).

- **The upcoming revisions to the NPSs:** The recent **government response to the revised NPS consultation in relation to net gain** states that “the 2011 Natural Environment white paper³ set out an ambition to achieve net gain for biodiversity as opposed to net loss. The recently published 25 Year Environment Plan identified actions to both strengthen the commitment to biodiversity net gain and expand the approach over time to natural capital net gain and ultimately wider environmental net gains as appropriate metrics become available. The NPS will establish the need to consider the potential to achieve biodiversity net gain and will set the context for achieving this at a strategic level without analysis of impacts on individual sites. More detailed assessment, for example based on the Defra biodiversity metric, will be undertaken as part of the DCO application”. We hope that the above is therefore useful in giving you some foresight on what the NPS revisions might include in terms of net gain requirements.
- **The Government's 25 Year Environment Plan:** As already mentioned, net gain is embedded in the Government's recently published **25 Year Environment Plan** as a key action for ensuring that land is used and managed sustainably (see pp. 32-34 for general principles). As per the **Advice Note 11, Annex C – Natural England and the Planning Inspectorate**, “Natural England will seek opportunities for positive environmental outcomes from major infrastructure developments. NSIPs can make a significant contribution to delivering the environmental ambition in the Government's 25 Year Environment Plan (25YEP). This aims to deliver an environmental net gain through development and infrastructure. We can help applicants and the Examining Authority to better understand and value the benefits derived from the natural environment ('natural capital'). We may advise on opportunities to secure positive environmental benefits from NSIPs. Priorities include establishing more coherent and resilient ecological networks and providing and enhancing habitats for protected species. We can also advise on approaches and metrics that enable projects to achieve biodiversity net gain, as set out in the National Planning Policy Framework and the recent and developing National Policy Statements, and on approaches to achieving wider natural capital gains”. Furthermore, the 2019 spring statement from the Chancellor (13th March 2019) also made specific reference to mandating biodiversity net gain, in which he said: “Following consultation, the government will use the forthcoming Environment Bill to mandate biodiversity net gain for development in England, ensuring that the delivery of much-needed infrastructure and housing is not at the expense of vital biodiversity”.
- **The recent mandatory biodiversity net gain consultation:** The requirement for biodiversity net gain was also the subject of this consultation. The construction industry research and information association (CIRIA), the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Institute of Environmental Management and Assessment (IEMA) have launched **Biodiversity Net Gain Best Practice guidance** to which Natural England provided input to and further best practice guidance is also now available. Many major infrastructure projects in the UK have now committed to delivering a biodiversity net gain and some examples of these are included in this guidance.
- The revised **National Planning Policy Framework (NPPF)**: The NPPF identifies that one of the three overarching objectives to achieving sustainable development through the planning system is an environmental objective “to contribute to protecting and enhancing our natural...environment; including making effective use of land, helping to improve biodiversity...”. The revised NPPF was published on 24 July 2018 and updated **Planning Practice Guidance (PPG)** has also been issued by the Ministry of Housing, Communities and Local Government (MHCLG) to support various aspects of the revisions. Whilst broadly maintaining existing policies to protect and enhance the natural environment, importantly, it also includes strengthened policies on biodiversity and wider environmental net gain;

³ <https://www.gov.uk/government/publications/the-natural-choice-securing-the-value-of-nature>

specifically, planning proposals and decisions are to provide net gains for biodiversity and are to identify and pursue opportunities for biodiversity net gain (paras 170, 174,175) and wider environmental gain (paras 102, 118)".

9. Cumulative and in-combination effects

A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):

- a. existing completed projects;
- b. approved but uncompleted projects;
- c. ongoing activities;
- d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
- e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

Annex B: Natural England's specific comments on the Bramford to Twinstead EIA Scoping Report

Topic	Section	Comment
3. Main Alternatives Considered 4. Project Description	3. and 4.	Natural England is engaging with and will continue to engage with the National Grid over the projects design to ensure that impacts to biodiversity assets are minimised.
Repair (operational phase) and Decommissioning	4.6.1 4.6.4 – 4.6.7 5.3.7	Natural England considers that whilst some change in the regulatory framework, good working practices and the future baseline are to be expected, the effects of decommissioning and repair are likely to be relatively well known as the scope of the project progresses. As ongoing disturbance/damage to biodiversity assets are a likely effect during both repair and decommissioning this should be scoped into the ES, unless evidence can be provided to demonstrate that there will be no likely significant effect.
6. Landscape and Visual	6.3.1	The LVIA will need to identify the landscape and visual effects of the whole project. 6.3.1 appears to indicate that the applicant will establish an area around the entire scheme that is likely to experience those significant effects and intending not explore landscape and visual effects over an unreasonably wide area. This would be acceptable to Natural England, however, clarification is sought over the statement in 6.3.1. If the applicant intends to focus only on certain locations within the project scope, then they will need to discuss that with all the relevant consultees and the planning authority.
6. Landscape and Visual	6.3.2 – 6.3.6 6.4.3	When Natural England, the AONB and the Local Planning Authorities (LPAs) are consulted on the number and location of viewpoints for the LVIA, there may be a need for some viewpoints that are beyond 3km or 5km of the scheme, this is intended to check for effects of the scheme by itself and not just cumulative effects. This will be particularly important in relation to views from the AONB; to confirm that the effects from any key, publicly accessible viewpoints within the AONB are not significant.
6. Landscape and Visual The Stour Valley	6.4.12	In regard to 6.4.12, Natural England considers it important to reiterate advise provided to the applicant about the importance of the Stour Valley as the 'setting' of the Dedham Vale AONB. The section of the Stour Valley affected by this scheme falls within the 'setting' of the Dedham Vale AONB. The area's landscape character complements that of the adjacent designated area and therefore supports the delivery of the AONB's statutory purpose i.e. to conserve and enhance the area's natural beauty. This is recognised locally with the AONB and Stour Valley Project Area being subject to joint management arrangements. That the area has not so far been formally assessed for possible inclusion within the AONB designation does not detract from the very important, mutually supportive relationship between the AONB and Stour Valley.

Topic	Section	Comment
		<p>Natural England therefore strongly advises that, subject to any other overriding environmental hindrances, this section is fully undergrounded. Justification for this is provided by both the quality of the landscape and its relationship to the AONB, together with a combination of legal duties and national planning guidance. The latter are set out below.</p> <p>National Grid, like all public bodies and utility providers, has a statutory duty under Section 85 of the Countryside and Rights of Way Act 2000 which states that <i>in exercising or performing any functions in relation to, or so as to affect, land in and AONB, authorities “shall have regard” to their purposes.</i> This ‘duty of regard’ applies to developments outside the AONB which will nonetheless affect their statutory purpose. This is confirmed by the government’s on-line Planning Practice Guidance https://www.gov.uk/guidance/natural-environment which states:</p> <p><i>This duty is particularly important to the delivery of the statutory purposes of protected areas. It applies to all local planning authorities, not just National Park authorities, and is relevant in considering development proposals that are situated outside National Park or Area of Outstanding Natural Beauty boundaries, but which might have an impact on their setting or protection.</i></p> <p>That same planning guidance also deals with the ‘settings’ issue in the context of development management policy. The guidance is as follows:</p> <p><i>How should development within the setting of National Parks, the Broads and Areas of Outstanding Natural Beauty be dealt with?</i></p> <p><i>Land within the setting of these areas often makes an important contribution to maintaining their natural beauty, and where poorly located or designed development can do significant harm. This is especially the case where long views from or to the designated landscape are identified as important, or where the landscape character of land within and adjoining the designated area is complementary. Development within the settings of these areas will therefore need sensitive handling that takes these potential impacts into account.</i></p> <p>The approval and delivery of extensions to the National Grid are guided by the relevant National Policy Statements (NPS). These are the Overarching National Policy Statement for Energy (EN-1) and National Policy Statement for Electricity Networks Infrastructure (EN-5). EN-1 paragraph 5.9.12 reiterates the duty of regard and its application to the settings of designated landscapes.</p> <p><i>5.9.12 The duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints.</i></p>

Topic	Section	Comment
		<p>Paragraph 2.8.9 of NPS EN- 5 directs the decision maker to factor in <i>'the landscape in which the proposed line will be set, (in particular, the impact on residential areas, and those of natural beauty or historic importance such as National Parks, AONBs and the Broads'</i>. We note that this references areas 'such as' AONBs and isn't limited to only those covered by a statutory designation.</p> <p>Schedule 9 of the Electricity Act 1989 (as amended by the Utilities Act 2000) imposes specific obligations on electricity companies in respect of the environment. Extracts from Schedule 9 are printed below.</p> <p><i>1 (1) In formulating any relevant proposals, a licence holder or a person authorised by exemption to generate or supply electricity –</i> <i>(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</i> <i>(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.</i></p> <p>We again note that for this duty 'natural beauty' is not restricted to AONBs or National Parks.</p> <p>We hope that, particularly in terms of a very clear steer from statute and planning policy, this helps to make a strong case for undergrounding across the Stour Valley. We look forward to working with National Grid on the detailed landscape issues as the scheme moves into its statutory consultation phase as a Nationally Significant Infrastructure Project.</p>
<p>6. Landscape and Visual</p> <p>6.5 Embedded and Good Practice Measures</p>	<p>6.5.4 (LV01)</p>	<p>Where vegetation is lost and trees cannot be replaced in situ, planting schemes should be sensitive to and seek to restore and strengthen landscape character, whilst simultaneously seeking to maximise biodiversity value.</p>
<p>6. Landscape and Visual</p> <p>6.6 Likely Significant Effects</p>	<p>6.6.4</p>	<p>The designated landscape section of the ES will need to consider the effects resulting from the development within the setting of the AONB. Therefore, the sections of the Stour Valley considered to be within the setting of the AONB will need to be considered in the designated landscape section of the ES. Effects on the landscape of the Stour Valley which don't have any effect on the AONB can be documented in a separate section.</p>
<p>6. Landscape and Visual</p> <p>6.6 Likely Significant Effects</p>	<p>6.6.13</p>	<p>Natural England suggest that this scoping decision is checked with the AONB Partnership and the relevant LPAs.</p>

Topic	Section	Comment
Landscape Character		
6. Landscape and Visual Table 6.5: Proposed Scope of the Assessment Sub-topic	Table 6.5	<p>The report states that there are “no likely significant effects on designated landscapes, landscape character or views at night,” for the sub-topic ‘Designated landscapes, landscape character and views’.</p> <p>NE assumes that this means there will be no likely significant effect at night and does not consider daytime. Natural England provides cautious agreement on the basis that the route does not require lighting at night. However, the AONB Partnership may wish to provide a more advice on this topic which would be valuable.</p>
7. Biodiversity 7.3 Approach and Methods	7.3.6	Natural England is providing ongoing advice to the applicant about the information required for Natural England to issue the ‘Letter of No Impediment’ required to support the application for development consent.
7. Biodiversity 7.4 Study Area 7.5 Existing Baseline	7.4.1 7.5.3	<p>Paragraph 7.4.1 of the EIA Scoping Main Report identifies different biodiversity receptors which will be considered within the ES on the basis of their proximity to the project area. Natural England would like to make clear that biodiversity receptors which could experience a Likely Significant Effect (LSE) as a result of this project should not be identified by arbitrary distances (as stated in Annex A); for example 7.4.1 states, “internationally important statutory designated sites (SPAs; SACs; and Wetlands of International Importance (Ramsar sites) within 2km of the Scoping Boundary, extending to 30km for SACs where bats are the qualifying interest and European sites hydrologically connected to the project that occur within 10km”. This equally applies to all sites of high biodiversity value, including statutory and non-statutory designated sites or otherwise notable habitats and species, veteran or ancient trees. Instead, LSE (and therefore scope of the ES) should be identified by the consideration of any potential impact pathways. Impacts to sites of high biodiversity value can occur over larger distances than 2km. Impact Risk Zones (IRZs), available via MAGIC, Natural England’s external mapping system may provide a useful starting point for identifying potential impact pathways on SSSIs, however, IRZs are only indicative and other impact pathways may exist.</p>
7. Biodiversity	7.5.42	From the information presented it appears a reasonable assumption that the Stour and Orwell Estuaries SPA and Ramsar is not functionally linked to the project study area. However, this will need to be further considered as the desk study and ecological surveys progress.
7. Biodiversity	Table 7.4	<p>Table 7.4 provides a summary of Potential Impact Pathways and Zones of Influence.</p> <p>The table states that species disturbance (from changes in levels of noise, vibration, visual and light stimuli) will not occur during the operation period of the project. Natural England advises that it is too early to discount disturbance at this stage with the projects infrastructure placed adjacent to sensitive habitats (and associated</p>

Topic	Section	Comment
		<p>protected species) which could be at risk of light or visual disturbance. It is not currently clear how often operational staff and associated required lighting, would be required in the locations of the GSP substation and possible CSE compounds.</p> <p>In regard to air quality changes (resulting in habitat loss/modification) during the construction phase, NE notes that only statutory and non-statutory sites are listed as possible sensitive receptors. Natural England seeks clarification if this includes sensitive receptors such as ancient woodland and other priority habitats?</p>
<p>7. Biodiversity</p> <p>7.7 Likely Significant Effects</p> <p>Mortality and Injury of Species</p>	<p>7.7.11</p> <p>7.7.12</p>	<p>The applicant should consider whether increased pylon height (from 30m to 50m in some instances), might result in increased numbers of bird collisions through flight paths if birds aren't used to avoiding higher pylons in the area.</p>
<p>7. Biodiversity</p> <p>7.7 Likely Significant Effects</p> <p>Habitat Loss/Gain and Fragmentation</p>	<p>7.7.15</p>	<p>The planting of native shrub might not be appropriate in all locations. Natural England considers that it would be most appropriate to plant replacement vegetation which simultaneously reflects the local environment and provides the highest biodiversity value, with consideration that it should also be sympathetic to the local habitat type. Generic shrub planting will not provide the best outcome for biodiversity.</p> <p>Note that whilst the project intends to utilise best practice, including avoidance and mitigation of habitat fragmentation, this impact pathway will still occur in the short to medium term (and potentially long term in certain circumstances) over the construction period and as the replacement planting matures through the operational phase.</p>
<p>7. Biodiversity</p> <p>7.7 Likely Significant Effects</p> <p>Species Disturbance (Changes in Noise, Vibration, Visual and Light Stimuli)</p>	<p>7.7.18</p> <p>7.7.19</p>	<p>Lighting should not yet be scoped out as there are not yet any defined locations for either the construction or operational phases and therefore effects cannot yet be properly assessed.</p>
<p>7. Biodiversity</p> <p>7.7 Likely Significant Effects</p> <p>Air Quality Change</p>	<p>7.7.20</p> <p>7.7.21</p>	<p>Dust impacts to sensitive ecological receptors should be scoped into the ES due to the likely significant effect. NE considers that even if the effects are relatively easy to mitigate through good practice, it is important that these effects go through the planning process and therefore potential dust impacts should be scoped into the ES.</p>
<p>7. Biodiversity</p>	<p>7.7.25</p>	<p>Similarly to air quality changes (associated with dust), as a likely significant effect has been identified, NE considers that even if the effects are relatively easy to mitigate through good practice, it is</p>

Topic	Section	Comment
7.7 Likely Significant Effects Hydrological Changes		important that these effects go through the planning process and therefore potential impacts to surface water should be scoped into the ES.
7. Biodiversity 7.7 Likely Significant Effects Receptor Based Assessment – Scoped out	7.7.32 – 7.7.40	Natural England has produced standing advice to help planning authorities understand the impact of particular developments on protected species. We advise you to refer to this advice.
7. Biodiversity 7.9 Conclusion	Table 7.6	<p>Table 7.6 identifies the ‘Proposed Scope of the Assessment’.</p> <p>In regard to statutory designated sites (excluding Groundwater dependent terrestrial ecosystems (GWDTEs)), the report identifies no likely significant effects during the operational phase and scopes this out of the ES. However, NE advises that due to the ongoing requirement from repairs and maintenance which could potentially impact Hintlesham Woods SSSI, as well as potential decommissioning impacts, operational phase impacts to statutory designated sites should be scoped in.</p> <p>As with statutory designated sites, similar impacts could have a likely significant effect on other sites of high biodiversity value. The applicant and planning authority should consider whether operational effects should be scoped in for these sites.</p>
11. Agriculture and Soils		<p>The likely extent (in hectares) of the impacts on soils and agricultural land including best and most versatile (BMV) agricultural land have not been quantified as would be expected. Given the general location there is likely to be high amount of BMV agricultural land (BMV= Agricultural Land Classification grades 1, 2 and 3a).</p> <p>Significant adverse effects can be anticipated where any soil is subject to construction activities, particularly where built development such as substations is involved or where extensive trenching for buried cables takes place. Given the potential for significant adverse effects over a big area due to large scale soil removal, handling and storage, trafficking etc then these activities should be scoped in (not scoped out as is proposed) for more detailed examination and assessment as part of the Environmental Statement, both in terms of the impact of the development on best and most versatile agricultural land and on the identified soil resources present and their associated delivery of ecosystem services.</p> <p>A detailed ALC survey is required to assess the land use implications of a proposed development where significant amounts of agricultural land are involved, in line with national planning policy and national policy statements. It also provides a baseline to ensure that land which is temporarily taken for development is</p>

Topic	Section	Comment
		<p>returned back to its original grade, particularly where BMV agricultural land is affected by trenching associated with buried cables .</p> <p>A soil resource survey (as required by the Defra Construction Code of Practice for the Sustainable Use of Soil on Construction Sites) can utilise the site-specific soil data collected as part of a detailed ALC survey to inform the detail of a soil management plan based for the whole scheme, which should form a part of the CEMP.</p>
<p>14. Noise and Vibration</p> <p>14.6 Likely Significant Effects</p> <p>Vibration Effects from Construction Activities</p>	<p>14.6.8</p>	<p>Construction vibration could also affect sensitive biodiversity receptors, although this doesn't appear to be discussed in detail within this section.</p>
<p>14. Noise and Vibration</p> <p>14.6 Likely Significant Effects</p> <p>During Operation Noise Effects from the GSP Substation</p>	<p>14.6.11 14.6.12</p>	<p>Noise effects from the GSP substation during construction have not yet been quantified, nor have the noise levels after mitigation been identified either. Therefore, as mitigation is being proposed at this stage and a technical note is required, Natural England advises that operation noise at the substation should be scoped into the ES.</p>
<p>18. Cumulative Effects</p>	<p>Table 18.1</p>	<p>Table 18.1 identifies the 'Zone of Influence (ZOI) for Environmental Topics'.</p> <p>Natural England again advises that arbitrary distances such as the 1km proposed ZOI for biodiversity (and other 'Environmental Topics') will not satisfactorily identify cumulative effects and a more thorough consideration of cumulative effects on receptors is required.</p>



Seana Heaney
Network Rail - Planning,
1 Stratford Place,
London, E15 1AZ

Planning Department

By email only

02/06/2021

Network Rail Consultation Response

Overhead Line Project from Bramford to Twinstead Development Consent Order

Thank you for consulting Network Rail. It is strongly recommended that the following comments and requirements are complied with to maintain the safe operation of the railway and protect Network Rail's infrastructure. It is imperative that Network Rail's Asset Protection and Optimisation team are contacted via AssetProtectionAnglia@networkrail.co.uk prior to any works commencing.

The Existing Aerial Crossing

There is an existing aerial crossing at SUD : 55m 0672yds (coordinates X: 589121, Y: 236602) which is to be decommissioned. It crosses the railway supported either side by pylons. It is strongly recommended that a Basic Asset Protection Agreement with Network Rail is put in place in order to carry out the decommissioning works.

Proposed 400kV Under Track Crossing (UTX)

It is strongly recommended that a Basic Asset Protection Agreement is put in place with Network Rail prior to works commencing on the UTX. Consultation with Network Rail must take place regarding all works within the 'track support zone' defined in Network Rail standard NR/L2/CIV/177 The proposal - which will require works to be conducted within this zone - must be identified by the outside party. A track monitoring plan should be agreed with Network Rail.

Asset Protection and Optimisation

1. All operations, including the use of cranes or other mechanical plant working adjacent to Network Rail's property, must at all times be carried out in a "fail safe" manner such that in the event of mishandling, collapse or failure, no plant or materials are capable of falling within 3 metres of the boundary with Network Rail.
2. Any works which could destabilise an embankment or cutting must be considered. If there is any risk then Network Rail must be consulted and adequate mitigation measures put in place.
3. An easement/ wayleave should be sought through Network Rail property department for the proposed cable crossing and the Network Rail design approval process for outside parties works must be followed as advised by Network Rail asset protection.
4. Any scaffold which is to be constructed within 10 metres of the railway boundary fence must be erected in such a manner that at no time will any poles over-sail the railway and protective netting around such scaffold must be installed. The applicant/applicant's contractor must consider if they can undertake the works and associated scaffold/access for working at height within the footprint of their property boundary.

I trust the above clearly sets out Network Rail's position on the planning application. Should you require any more information from Network Rail, please do not hesitate to contact me.

Kind regards,

Seana Heaney

Town Planning Technician

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POLSTEAD PARISH COUNCIL

Clerk: Dave Crimmin, [REDACTED]

Tel: [REDACTED] email: [REDACTED]

8th June 2021

The Planning Inspectorate
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol, BS1 6PN

Dear Sir

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Application by National Grid Electricity Transmission plc (the Applicant) for an Order granting Development Consent for the Bramford to Twinstead overhead line project (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Consultation Timetable

National Grid (NG) chose to launch an informal consultation during the pandemic lockdown, which had the effect of making it difficult for our parishioners to get properly involved. The six-week period for responses has proved to be too short to share and examine the proposals in detail.

The deadline for return of responses coincided with nationwide Local Government elections. Politicians were in a "purdah" period making them less able to contribute.

Babergh District and Polstead Parish have a higher than average number of older residents and the latest national statistics suggest that 18% of the over 65 year olds have no digital connections (ONS). Coupled with the Council's inability to hold in-person Parish meetings there is a significant proportion of our parishioners who were not reached with information about the proposals. The Council takes the view that all our residents will be impacted, not just those living within a kilometre of the proposed route, a one kilometre corridor was the NG zone for direct communication with residents.

National Context

The perspective against which the reinforcement of the 400kv Bramford to Twinstead line is to be viewed must include the wider picture so that informed conclusions can be reached. For example, the offshore transmission network from East Anglia to London and the South East is part of Government policy with indicated timings broadly in step.

NG has planned a Norwich to Tilbury connector but has yet to publish any significant information about it. Clearly the precise route of this connector may well impact on Polstead and nearby parishes if a third Bramford to Twinstead line is contemplated.

Lack of Information

The consultation exercise provided only small scale maps with potential sites for CSE compounds only indicated diagrammatically. NG has made available limited information about these compounds with various sets of dimensions and a lack of clarity about whether the compound would or would not contain a 50 metre high pylon.

POLSTEAD PARISH COUNCIL

Clerk: Dave Crimmin, [REDACTED]

Tel: [REDACTED] email: p [REDACTED]

Health Concerns and EMF

We remain very concerned about the risk to our village health from the passage of two 400kv lines, not to mention the possible addition of the Norwich to Tilbury connector.

The W.H.O. EMF Environmental Health Criteria Monograph No. 238 states:

“ the few new epidemiological and animal studies that have assessed ELF exposure and cancer do not change the previous assessment that ELF magnetic fields are a possible carcinogen and might contribute to an increase in childhood leukaemia.”

The International Association for Research on Cancer (IARC) continues to classify the risk as 2B.

This is a risk that must be negated at all costs and as a Council we insist that the lines are undergrounded through our parish and that NG at all times comply with policy from Public Health England (PHE) “ in developing a route for connection the NG will seek to maximise the distance from settlements, residential properties and schools”.

We would respectively request that a minimum safe distance be observed in line with agreed standards. We note that a recommendation of 100 metres is made for 400kv. There is no available data for 800 or 1200kv. What we know is that the stronger the field the larger the risk.

We note that, under the proposals, two dwellings in this Parish (Pope's Green Farm & Valley Farm) will be closer to the new overhead lines than the recommended 100m and this gives us large cause for concern. Considering that the magnetic field from underground cables reduces more quickly with distance than the magnetic field from overhead cables, we consider it essential for the health of these residents that the cables are buried underground.

Preferred Option

If Polstead Parish Council (PPC) accepts that reinforcement of the Bramford to Twinstead line is unavoidable then the preferred option is for NG to re-visit PSO 22 (the fully underground route). It is asserted that the additional cost is the determining factor for this option. If a full cost/benefit analysis has been carried out it has not been shared. In any case, the additional cost does not adequately consider the substantial indirect costs of overhead lines, such as the cost of damaging the landscape and associated cost on the wellbeing of residents and visitors, and the rural economy. It's wholly unreasonable that these indirect costs should fall solely upon the Parishes of South Suffolk, rather than be borne equally by all regions of the country that stand to benefit from this project.

If a hybrid overground/underground line is the option which the Parishes of South Suffolk have to accept, then greater steps must be taken to mitigate the impact on the AONB and its setting. PPC's preferred route for the underground section would be Option 2ai or Option 2aii. At the webinar PPC attended, NG engineers made it clear that HDD type drilling under Dollops Wood would be slow, difficult and costly whilst the line between Sprotts Hall and Sprotts Farm would be quicker and simpler (as long as a safe corridor can be negotiated.) The construction time would be less with the consequential benefits to the tranquility of Polstead. The benefit of undergrounding the new line as it crosses the AONB within Polstead is entirely negated by siting a CSE on the very boundary of the AONB at Dollops Wood along with the 50 metre pylon it would contain.

Position and Design of CSE compound

The diagrams submitted by NG show two possible positions for CSE compounds – to the West and to the East of Heath Road. The Dollops Wood position on the very boundary of the AONB mars the aspect and setting of a much-loved amenity area as was recognised by NG in the landscape appraisal from 2012. The compound, as proposed, would be hard to blend in especially if it contained a 50 metre high pylon and associated engineering. In the absence of design detail, it is hard to imagine how the visual impact can be successfully mitigated, especially if a metallised

POLSTEAD PARISH COUNCIL

Clerk: Dave Crimmin, [REDACTED]

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service road is needed along with full perimeter access. The terminal pylon, and at least 5 pylons to its east, would be visible from many viewpoints within the AONB.

As was noted by NG the Millfield Wood location to the East of Heath Road would be visible from much further away across flat, open countryside, and is therefore an even less suitable location. In our response to the consultation from 2012 we suggested that Layham Quarry would make a much better site for the CSE compound albeit with a consequential extension of the undergrounded line. Layham Quarry is a brownfield site of degraded land, it has good topography for masking a compound and a direct access road to the B1071, purpose built for construction traffic. In the subsequent 9 years the importance of preserving our natural landscape has been given even greater recognition, and this has enhanced our assertion that Layham Quarry is a far more suitable site for a CSE compound; we strongly encourage NG to bring this option back onto the table.

Conclusions

Polstead Parish Council joined other Suffolk parishes in requesting an extension to the informal consultation exercise so that more information could be provided and evaluated. This extension was denied by NG.

We insist that NG adheres to PHE advice and keep our parishioners safe from the potential dangers of EMF.

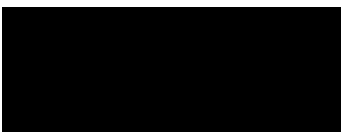
The need for the connection reinforcement is based on a historic scheme. The EI scoping should place the proposal within the context of the current and future national power infrastructure. The offshore transmission network should be the principal means of transmitting power to London and SE England.

If the line from Bramford to Twinstead is to be reinforced, then the fully undergrounded option must be evaluated alongside the hybrid line being proposed.

The underground line should be the Option 2ai or 2aia shown as running to the north of Dollops Wood (as long as safe margins are adhered to), and not the HDD route under the valley.

The EI scoping should include full consideration of the impact of the proposed CSE compound. The CSE compound in either of the two positions indicated would be an unacceptable landscape intrusion and it must be taken further eastwards and sited in Layham Quarry.

Yours faithfully



Dave Crimmin PSLCC
Clerk to Polstead Parish Council



Public Health
England

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Your Ref: EN020002

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Ms Laura Feekins-Bate
EIA Advisor
The Planning Inspectorate
Temple Quay house
2 The Square
Bristol BS1 6PN

7th June 2021

Dear Ms Feekins-Bate

**Nationally Significant Infrastructure Project
Bramford to Twinstead overhead line project
Scoping Consultation Stage**

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Advice offered by PHE is impartial and independent.

We note that we have replied to earlier consultations, as listed below, and this response should be read in conjunction with that earlier correspondence.

- Public Consultation – 13 November 2009
- Request for a Scoping Opinion – 15 March 2013
- Public Consultation – 05 May 2021

PHE exists to protect and improve the nation's health and wellbeing and reduce health inequalities; these two organisational aims are reflected in the way we review and respond to Nationally Significant Infrastructure Project (NSIP) applications.

The health of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people. Although assessing impacts on health beyond direct effects from for example emissions to air or road traffic incidents is complex, there is a need to ensure a proportionate assessment focused on an application's significant effects.

Having considered the submitted scoping report we wish to make the following specific comments and recommendations:

V1.0 March 2021

Environmental Public Health

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. The attached appendix summarises PHE's requirements and recommendations regarding the content of and methodology used in preparing the ES. Please note that where impacts relating to health and/or further assessments are scoped out, promoters should fully explain and justify this within the submitted documentation.

We understand that the promoter wishes to avoid unnecessary duplication and doesn't intend to complete a separate health chapter noting that it will be embedded in other chapters e.g. air quality, emissions to water, waste, contaminated land etc. in the Environmental Statement.

We note that the promoter has outlined the potential for health impacts from Electric and Magnetic Fields (EMF) during operation of the project. However, as the project will be designed in accordance with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidance and DECC codes of practice, further assessment is not proposed. The promoter states a compliance report will be submitted with the application for development consent and we will comment further at this stage.

The promoter notes (Section 13.4.10) that there are elevated concentrations of air pollutants (i.e. particulate matter and nitrogen dioxide) in Sudbury and along the A12 due to road traffic emissions and that these areas are likely to be used by project related vehicles during construction. However, it is unclear if Sudbury will fall into the study area for the air quality assessment based on the criteria set out.

Recommendation

Our position is that pollutants associated with road traffic or combustion, particularly particulate matter and oxides of nitrogen are non-threshold; i.e., an exposed population is likely to be subject to potential harm at any level and that reducing public exposures of non-threshold pollutants (such as particulate matter and nitrogen dioxide) below air quality standards will have potential public health benefits. We support approaches which minimise or mitigate public exposure to non-threshold air pollutants, address inequalities (in exposure), maximise co-benefits (such as physical exercise). Given the promoter has identified the potential to contribute to air pollution in Sudbury (and potentially in its air quality management area) during the construction phase we would encourage air pollution consideration during development design, environmental and health impact assessment, and development consent.

Human Health and Wellbeing

This section of PHE's scoping response, identifies the wider determinants of health and wellbeing we expect the Environmental Statement (ES) to address, to demonstrate whether they are likely to give rise to significant effects. PHE has focused its approach on scoping determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements. The four themes are:

- Access
- Traffic and Transport
- Socioeconomic
- Land Use

Having considered the submitted scoping report PHE wish to make the following specific comments and recommendations:

The scoping report identifies the routes will be predominantly rural, with few local communities. Pre-application consultation has been completed with local authorities to discuss potential impacts and areas that may be scoped out, given the nature of the scheme and the location.

General

It is acknowledged that the scoping report intends to scope out health and wellbeing as a chapter but relies on health being embedded within the remaining chapters. This approach is accepted, however should be reviewed and revised dependent on the identified impacts and effects as the assessment detail develops.

Traffic and transport

The scoping report identifies the use of the Design Manual for Roads and Bridges (DMRB) LA112 to identify the impacts for walkers, cyclists and horse riders (WCH). The DMRB from Highways England may not be suitable for a scheme of this nature and location and the IEMA Guidelines for the Environmental Assessment of Road Traffic (GEART) can provide an alternative screening and assessment framework, particularly for amenity, severance, safety, delay and intimidation.

Recommendations

The DMRB from Highways England may not be suitable for a scheme of this nature and location as such the IEMA Guidelines for the Environmental Assessment of Road Traffic (GEART) should be used as an alternative screening and assessment framework, particularly for amenity, severance, safety, delay and intimidation.

Yours sincerely

For and on behalf of Public Health England

nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

Appendix: PHE recommendations regarding the scoping document

Introduction

The Planning Inspectorate's Advice Note 11: Working with Public Bodies covers many of the generic points of interaction relevant to the Planning Inspectorate and Public Health England (PHE). The purpose of this Annex is to help applicants understand the issues that PHE expect to see addressed by applicants preparing an Environmental Statement (ES) as part of their Nationally Significant Infrastructure Planning (NSIP) submission.

We have included a comprehensive outline of the type of issues we would expect to be considered as part of an NSIP which falls under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations). PHE encourages applicants to contact us as early in the process as possible if they wish to discuss or clarify any matters relating to chemical, poison, radiation or wider public health.

General Information on Public Health England

PHE was established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service. We are an executive agency of the Department of Health and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the National Health Service (NHS) in a professionally independent manner.

We work closely with public health professionals in Wales, Scotland and Northern Ireland, and internationally.¹ We have specialist teams advising on specific issues and the potential impacts arising from environmental public health including chemicals, noise, air quality, ionising and non-ionising radiation.

PHE's NSIP roles and responsibilities

PHE is a statutory consultee in the NSIP process for any *applications likely to involve chemicals, poisons or radiation which could potentially cause harm to people and are likely to affect significantly public health.*² PHE will consider potential significant effects (direct and indirect) of a proposed development on population and human health and the impacts from chemicals, radiation and environmental hazards. We also consider other factors which may have an impact on public health, such as the wider determinants of health, health improvement and health inequalities (where PHE has a legal duty specified in the Health and Social Care Act 2012)³.

Under certain circumstances PHE may provide comments on radiation on behalf of the Scottish Government. If a proposer is submitting a planning application in Scotland which may require advice on radiation you are recommended to contact the appropriate Scottish Planning Authority for advice on how to proceed.

In the case of applications in Wales, PHE remains a statutory consultee but the regime applies to a more limited range of development types. For NSIP applications likely to affect land in Wales, an applicant should still consult PHE but, additionally will be required to consult the Welsh Government.

Environmental Impact Assessments – PHE Responsibilities

¹ <https://www.gov.uk/government/organisations/public-health-england/about#priorities>

² The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015

³ <http://www.legislation.gov.uk/ukpga/2012/7/contents/enacted>

PHE has a statutory role as a consultation body under the EIA Regulations. Where an applicant has requested a scoping opinion from the Planning Inspectorate⁴, PHE will be consulted regarding the scope, and level of detail, of the information to be provided in the ES. PHE has a duty to make information available to the applicant.

PHE provides advice relating to EIA within this document and during the NSIP consultation stages. PHE encourages applicants to discuss the scope of the ES with us at an early stage to explore, for example, whether careful site selection or other design issues could minimise or eliminate public health impacts or to outline the requirement for, scope and methodology of any assessments related to public health. PHE's standard recommendations in response to EIA scoping consultations are below.

PHE's recommendations to applicants regarding Environmental Impact Assessments

General approach

PHE provides advice relating to EIA within this document and during the NSIP consultation stages. It is the role of the applicant to prepare the ES.

When preparing an ES the applicant should give consideration to best practice guidance such as the Government's Handbook for scoping projects: environmental impact assessment⁵, and Guidance: on Environmental Impact Assessment⁶

The [Planning Inspectorate's Advice Note Seven](#): Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements also provide guidance to applicants and other persons with interest in the EIA process as it relates to NSIPs. It is important that the submitted ES identifies and assesses the potential public health impacts of the activities at, and emissions from, the development.

Applicants are reminded that Section 5(2)(a) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 specifically includes a requirement that the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on population and human health.

PHE is of the opinion that this requirement encompasses the wider determinants of public health, as well as chemicals, poisons and radiation. Further information on PHE's recommendations and requirements is included below.

PHE understands that there may be separate sections of the ES covering the assessment of impacts on air, land, water and so on, but expects an ES to include a specific section summarising potential impacts on population and health. This section should bring together and interpret the information from other assessments as necessary. The health, wellbeing and population impacts section should address the following steps.

1. Screening: Identify any significant effects.

⁴ The scoping process is administered and undertaken by the Planning Inspectorate on behalf of the Secretary of State

⁵ <https://www.gov.uk/government/publications/handbook-for-scoping-projects-environmental-impact-assessment>

⁶ <https://www.gov.uk/guidance/environmental-impact-assessment#the-purpose-of-environmental-impact-assessment>

- a. Summarise the methodologies used to identify health impacts, assess significance and sources of information
 - b. Evaluate any reference standards used in carrying out the assessment and in evaluating health impacts (e.g., environmental quality standards)
 - c. Where the applicant proposes the 'scoping out' of any effects a clear rationale and justification should be provided along with any supporting evidence.
2. Baseline Survey:
- a. Identify information needed and available, evaluate quality and applicability of available information
 - b. Undertake assessment
3. Alternatives:
- a. Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, the EIA process should start at the stage of site selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES⁷.
4. Design and assess possible mitigation
- a. Consider and propose suitable corrective actions should mitigation measures not perform as effectively predicted.
5. Impact Prediction: Quantify and Assess Impacts:
- a. Evaluate and assess the extent of any positive and negative effects of the development. Effects should be assessed in terms of likely health outcomes, including those relating to the wider determinants of health such as socio-economic outcomes, in addition to health outcomes resulting from exposure to environmental hazards. Mental health effects should be included and given equivalent weighting to physical effects.
 - b. Clearly identify any omissions, uncertainties and dependencies (e.g., air quality assessments being dependant on the accuracy of traffic predictions)
 - c. Evaluate short-term impacts associated with the construction and development phase
 - d. Evaluate long-term impacts associated with the operation of the development
 - e. Evaluate any impacts associated with decommissioning of the development
 - f. Evaluate any potential cumulative impacts as a result of the development, currently approved developments which have yet to be constructed, and proposed developments which do not currently have development consent
6. Monitoring and Audit
- a. Identify key modelling predictions and mitigation impacts and consider implementing monitoring and audit to assess their accuracy / effectiveness.

Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this decision is made, the applicant should fully explain and justify their rationale in the submitted documentation.

Human and environmental receptors

⁷ DCLG guidance, 1999 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf>

The applicant should clearly identify the development's location and the distance of the development to off-site receptors that may be affected by emissions from, or activities at, the development. Off-site receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land.

Identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities, as well as other vulnerable population groups such as those who are young, older, with disabilities or long-term conditions, or on low incomes) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development

Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

Impacts arising from construction and decommissioning

Any assessment of impacts arising from emissions or activities due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

We would expect the applicant to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential negative impact on health from emissions (point source, fugitive and traffic-related) and activities. An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The applicant should ensure that there are robust mechanisms in place to respond to any complaints made during construction, operation, and decommissioning of the facility.

Emissions to air and water

PHE has a number of comments regarding the assessment of emissions from any type of development in order that the ES provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these should:

- include an evaluation of the public health benefits of development options which reduce air pollution – even below limit values – as pollutants such as nitrogen dioxide and particulate matter show no threshold below which health effects do not occur;^{8, 9}
- consider the construction, operational, and decommissioning phases;
- consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts;
- fully account for fugitive emissions;
- include appropriate estimates of background levels (i.e., when assessing the human health risk of a chemical emitted from a facility or operation, background exposure to the chemical from other sources should be taken into account);

⁸ <https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>

⁹

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/795185/Review_of_interventions_to_improve_air_quality.pdf

- encompass the combined impacts of all pollutants which may be emitted by the development with all pollutants arising from associated development and transport, considered in a single holistic assessment (i.e., of overall impacts);
- identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions. This should include consideration of any new receptors arising from future development;
- identify cumulative and incremental impacts (i.e., assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e., rail, sea, and air);
- compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium. Where available, the most recent UK standards for the appropriate media (i.e., air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants;
- where UK standards or guideline values are not available, or other reputable International bodies e.g. European Union or OECD:
 - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (e.g., a Tolerable Daily Intake or equivalent);
 - This should consider all applicable routes of exposure (e.g., include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion).
- include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary;
- include Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES;
- include consideration of local authority, Environment Agency, Natural Resources Wales, Defra national network, and any other local site-specific sources of monitoring data;
- when quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants, PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the Committee on Carcinogenicity of Chemicals approach¹⁰ is used.

Whilst screening of impacts using qualitative methodologies is common practice (eg, for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

PHE's view is that the applicant should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure. Further to assessments of compliance with limit values, for non-threshold pollutants (ie, those that have no threshold below which health effects do not occur) the **benefits** of development options which reduce population exposure should be evaluated.

Additional points specific to emissions to air

¹⁰ <https://www.gov.uk/government/publications/cancer-risk-characterisation-methods>

When considering baseline conditions (of existing air quality) and the assessment and future monitoring of impacts, these should include:

- consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs) or Clean Air Zones (CAZ). The applicant should demonstrate close working/consultation with the appropriate local authorities
- modelling using appropriate meteorological data (i.e. from the nearest suitable meteorological station and include a range of years and worst-case conditions)
- modelling taking into account local topography, congestion and acceleration

Additional points specific to emissions to water

When considering baseline conditions (of existing water quality) and the assessment and future monitoring of impacts, these should:

- include assessment of potential impacts on human health and not focus solely on ecological impacts
- identify and consider all routes by which emissions may lead to population exposure (e.g., surface watercourses, recreational waters, sewers, geological routes etc.)
- assess the potential off-site effects of emissions to groundwater (eg, on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure
- include consideration of potential impacts on recreational users (eg, from fishing, canoeing etc.) alongside assessment of potential exposure via drinking water

Land quality

We would expect the applicant to provide details of any hazardous contamination present on site (including ground gas) as part of a site condition report and associated risk assessment.

Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, during construction and once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the migration of material off-site should be assessed in accordance with the Environment Agency publication Land Contamination: risk management¹¹ and the potential impact on nearby receptors; control and mitigation measures should be outlined.

Waste

The applicant should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the development the ES should assess:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

If the development includes wastes delivered to the installation:

- Consider issues associated with waste delivery and acceptance procedures (including delivery of prohibited wastes) and should assess potential off-site impacts and describe their mitigation

Other aspects

Within the ES, PHE would expect to see information about how the applicant would respond to accidents with potential off-site emissions (e.g., flooding or fires, spills, leaks or releases off-site). Assessment of accidents should: identify all potential hazards in relation to construction, operation

¹¹ Available from <https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks>

and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

PHE would expect the applicant to consider the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations: both in terms of their applicability to the development itself, and the development's potential to impact on, or be impacted by, any nearby installations themselves subject to these Regulations.

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report¹², jointly published by Liverpool John Moores University and the Health Protection Agency (HPA), examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: "*Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be negligible.*" PHE supports the inclusion of this information within ES' as good practice.

Electromagnetic fields (EMF)

This advice relates to electrical installations such as substations and connecting underground cables or overhead lines. PHE advice on the health effects of power frequency electric and magnetic fields is available on the Gov.UK website.¹³

There is a potential health impact associated with the electric and magnetic fields around substations, overhead power lines and underground cables. The field strengths tend to reduce with distance from such equipment.

The following information provides a framework for considering the health impact associated with the electric and magnetic fields produced by the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

Policy Measures for the Electricity Industry

A voluntary code of practice is published which sets out key principles for complying with the ICNIRP guidelines.¹⁴ Companion codes of practice dealing with optimum phasing of high voltage power lines and aspects of the guidelines that relate to indirect effects are also available.^{15, 16}

Exposure Guidelines

PHE recommends the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP). Formal advice to this effect, based on an accompanying comprehensive review of the scientific evidence, was published in 2004 by the National Radiological Protection Board (NRPB), one of PHE's predecessor organisations¹⁷

¹² Available from: http://allcatsrgrey.org.uk/wp/download/public_health/Health-Risk-Perception-Env-Probs.pdf

¹³ <https://www.gov.uk/government/collections/electromagnetic-fields#low-frequency-electric-and-magnetic-fields>

¹⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf

¹⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf

¹⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224766/powerlines_vcop_microshocks.pdf

¹⁷

<http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/>

Updates to the ICNIRP guidelines for static fields have been issued in 2009 and for low frequency fields in 2010. However, Government policy is that the ICNIRP guidelines are implemented as expressed in the 1999 EU Council Recommendation on limiting exposure of the general public (1999/519/EC):¹⁸

Static magnetic fields

For static magnetic fields, the ICNIRP guidelines published in 2009 recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT.

Power frequency electric and magnetic fields

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to electric fields. The ICNIRP guidelines published in 1998 give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m⁻¹ (kilovolts per metre) and 100 µT (microtesla). The reference level for magnetic fields changes to 200 µT in the revised (ICNIRP 2010) guidelines because of new basic restrictions based on induced electric fields inside the body, rather than induced current density. If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with underlying basic restrictions and reducing the risk of indirect effects.

Long term effects

There is concern about the possible effects of long-term exposure to extremely low frequency electric and magnetic fields, from power lines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia in relation to power frequency magnetic fields, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

The Stakeholder Advisory Group on ELF EMFs (SAGE)

SAGE was set up to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), which include power frequency fields, and to make practical recommendations to Government:¹⁹

Relevant here is SAGE's 2007 First Interim Assessment, which makes several recommendations concerning high voltage power lines. In responding, Government supported the implementation of low cost options such as optimal phasing to reduce exposure; however it did not support the option of creating corridors around power lines in which development would be restricted on health grounds, which was considered to be a disproportionate measure given the evidence base on the potential long term health risks

¹⁸ http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500

¹⁹ <http://www.emfs.info/policy/sage/>

arising from exposure. The Government response to SAGE's First Interim Assessment is available on the national archive website.²⁰

The Government also supported calls for providing more information on power frequency electric and magnetic fields, which is available on the PHE web pages.

Ionising radiation

Particular considerations apply when an application involves the possibility of exposure to ionising radiation. In such cases it is important that the basic principles of radiation protection recommended by the International Commission on Radiological Protection²¹ (ICRP) are followed. PHE provides advice on the application of these recommendations in the UK. The ICRP recommendations are implemented in the Euratom Basic Safety Standards²² (BSS) and these form the basis for UK legislation, including the Ionising Radiation Regulations 1999, the Radioactive Substances Act 1993, and the Environmental Permitting Regulations 2016.

As part of the EIA process PHE expects applicants to carry out the necessary radiological impact assessments to demonstrate compliance with UK legislation and the principles of radiation protection. This should be set out clearly in a separate section or report and should not require any further analysis by PHE. In particular, the important principles of justification, optimisation and radiation dose limitation should be addressed. In addition compliance with the Euratom BSS and UK legislation should be clear.

When considering the radiological impact of routine discharges of radionuclides to the environment PHE would, as part of the EIA process, expect to see a full radiation dose assessment considering both individual and collective (population) doses for the public and, where necessary, workers. For individual doses, consideration should be given to those members of the public who are likely to receive the highest exposures (referred to as the representative person, which is equivalent to the previous term, critical group).

Different age groups should be considered as appropriate and should normally include adults, 1 year old and 10 year old children. In particular situations doses to the fetus should also be calculated²³.

The estimated doses to the representative person should be compared to the appropriate radiation dose criteria (dose constraints and dose limits), taking account of other releases of radionuclides from nearby locations as appropriate. Collective doses should also be considered for the UK, European and world populations where appropriate.

The methods for assessing individual and collective radiation doses should follow the guidance given in 'Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012'²⁴

²⁰

http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124

²¹ These recommendations are given in publications of the ICRP notably publications 90 and 103 see the website at <http://www.icrp.org/>

²² Council Directive 96/29/EURATOM laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation.

²³ HPA (2008) Guidance on the application of dose coefficients for the embryo, fetus and breastfed infant in dose assessments for members of the public. Doc HPA, RCE-5, 1-78, available at

<https://www.gov.uk/government/publications/embryo-fetus-and-breastfed-infant-application-of-dose-coefficients>

²⁴ The Environment Agency (EA), Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency, Health Protection Agency and the Food Standards Agency (FSA).

Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296390/geho1202bklh-e-e.pdf

It is important that the methods used in any radiological dose assessment are clear and that key parameter values and assumptions are given (for example, the location of the representative persons, habit data and models used in the assessment).

Any radiological impact assessment, undertaken as part of the EIA, should also consider the possibility of short-term planned releases and the potential for accidental releases of radionuclides to the environment. This can be done by referring to compliance with the Ionising Radiation Regulations and other relevant legislation and guidance.

The radiological impact of any solid waste storage and disposal should also be addressed in the assessment to ensure that this complies with UK practice and legislation; information should be provided on the category of waste involved (e.g. very low level waste, VLLW). It is also important that the radiological impact associated with the decommissioning of the site is addressed.

Of relevance here is PHE advice on radiological criteria and assessments for land-based solid waste disposal facilities²⁵. PHE advises that assessments of radiological impact during the operational phase should be performed in the same way as for any site authorised to discharge radioactive waste. PHE also advises that assessments of radiological impact during the post operational phase of the facility should consider long timescales (possibly in excess of 10,000 years) that are appropriate to the long-lived nature of the radionuclides in the waste, some of which may have half-lives of millions of years.

The radiological assessment should consider exposure of members of hypothetical representative groups for a number of scenarios including the expected migration of radionuclides from the facility, and inadvertent intrusion into the facility once institutional control has ceased.

For scenarios where the probability of occurrence can be estimated, both doses and health risks should be presented, where the health risk is the product of the probability that the scenario occurs, the dose if the scenario occurs and the health risk corresponding to unit dose.

For inadvertent intrusion, the dose if the intrusion occurs should be presented. It is recommended that the post-closure phase be considered as a series of timescales, with the approach changing from more quantitative to more qualitative as times further in the future are considered.

The level of detail and sophistication in the modelling should also reflect the level of hazard presented by the waste. The uncertainty due to the long timescales means that the concept of collective dose has very limited use, although estimates of collective dose from the 'expected' migration scenario can be used to compare the relatively early impacts from some disposal options if required.

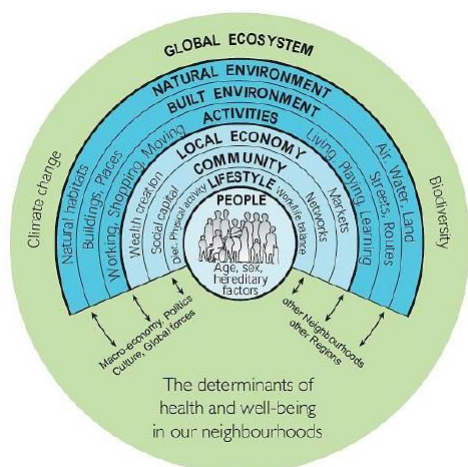
Wider Determinants of Health

The World Health Organization (WHO's) defines health as "a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity" (WHO, 1948).

The health and wellbeing of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in

²⁵ HPA RCE-8, Radiological Protection Objectives for the Land-based Disposal of Solid Radioactive Wastes, February 2009

turn will influence the health and wellbeing of the general population, vulnerable groups and individual people.



Barton and Grant²⁶

PHE recognises that evaluating an NSIP’s impacts on health through the wider determinants is more complex than assessing a project’s direct impacts against clearly defined regulatory protections. The 2017 EIA Regulations clarify that the likely significant effects of a development proposal on population and human health must be assessed.

PHE’s expectations are that the proponent of an NSIP will conduct a proportionate and evidence-based assessment of the anticipated direct and indirect effects on health and wellbeing in line with the relevant regulatory and policy requirements. Consideration should be given to impacts during the construction, operation and decommissioning phase of NSIPs. Consideration should be given to the avoidance or mitigation of any negative impacts, as well as to how the NSIP could be designed to maximise potential positive benefits.

We accept that the relevance of wider determinants and associated impacts will vary depending on the nature of the proposed development. PHE has focused its approach on scoping determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements.

The four themes are:

- Access
- Traffic and Transport
- Socioeconomic
- Land Use

PHE has developed a list of 21 determinants of health and wellbeing under these four broad themes. These determinants should be considered within any scoping report and if the applicant proposes to scope any areas out of the assessment, they should provide clear evidence-based reasoning and justification. Appendix 2 provides greater detail on the nature of each determinant.

Methodology

PHE will expect assessments to set out the methodology used to assess impacts on each determinant included in the scope of the assessment. In some instances, the methodologies described may be established and refer to existing standards and/or guidance. In other instances, there may be no pre-defined methodology, which can often be the case for the wider determinants

²⁶ Barton H, Grant M. A health map for the local human habitat. The Journal of the Royal Society for the Promotion of Health 2006; 126(6): 252-3.

of health; as such there should be an application of a logical evidence based impact assessment method that:

- identifies the temporal and geographic scope of assessment
- identifies affected sensitive receptors (general population and vulnerable populations) to impacts from the relevant determinant
- establishes the current baseline situation
- identifies the NSIP's potential direct and indirect impacts on each population
- if impacts are identified, evaluates whether the potential effect is likely to be significant in relation to the affected population
- identifies appropriate mitigation to eliminate or minimise impacts or the subsequent effects on health and inequalities
- identifies opportunities to achieve benefits from the scheme for health and inequalities
- considers any in combination or cumulative effects
- identifies appropriate monitoring programmes

Currently there is no standard methodology for assessing the population and human health effects of infrastructure projects, but a number of guides exist, including:

- Institute of Environmental Management and Assessment, 2017: Health in Environmental Assessment, a primer for a proportionate approach;²⁷
- NHS London Healthy Urban Development Unit (HUDU), 2015. Healthy Urban Planning Checklist and Rapid Health Impact Assessment Tool;²⁸
- Wales Health Impact Assessment Unit, 2012: HIA a practical guide;²⁹
- National Mental Wellbeing Impact Assessment Development Unit 2011: Mental Wellbeing Impact Assessment Toolkit;³⁰

PHE expects assessments to follow best practice from these guides and from methodologies adopted within other successful health/environmental impacts assessments.

Determining significant effects

Neither the EIA regulations nor the National Policy Statements provide a definition of what constitutes a 'significant' effect, and so PHE have derived a list of factors which it will take into consideration in the assessment of significance of effects, as outlined below. These list of factors should be read in conjunction with guidance from the above guides.

1. Sensitivity:

Is the population exposed to the NSIP at particular risk from effects on this determinant due to pre-existing vulnerabilities or inequalities (for example, are there high numbers in the local population of people who are young, older, with disabilities or long-term conditions, or on a low income)? Will the NSIP widen existing inequalities or introduce new inequalities in relation to this determinant?

2. Magnitude:

How likely is the impact on this determinant to occur? If likely, will the impact affect a large number of people / Will the impact affect a large geographic extent? Will the effects be frequent or continuous? Will the effects be temporary or permanent and irreversible?

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https://www.researchgate.net/publication/316968065_Health_in_Environmental_Impact_Assessment_a_primer_for_a_proportionate_approach

28 <https://www.healthyrbanddevelopment.nhs.uk/our-services/delivering-healthy-urban-development/health-impact-assessment/>

29 https://whiasu.publichealthnetwork.cymru/files/1415/0710/5107/HIA_Tool_Kit_V2_WEB.pdf

30 <https://q.health.org.uk/document/mental-wellbeing-impact-assessment-a-toolkit-for-wellbeing/>

3. Cumulative effects:

Will the NSIP's impacts on this determinant combine with effects from other existing or proposed NSIPs or large-scale developments in the area, resulting in an overall cumulative effect different to that of the project alone?

What are the cumulative effects of the impacts of the scheme on communities or populations. Individual impacts individually may not be significant but in combination may produce an overall significant effect.

4. Importance:

Is there evidence for the NSIP's effect on this determinant on health? Is the impact on this determinant important in the context of national, regional or local policy?

5. Acceptability:

What is the local community's level of acceptance of the NSIP in relation to this determinant? Do the local community have confidence that the applicants will promote positive health impacts and mitigate against negative health effects?

6. Opportunity for mitigation:

If this determinant is included in the scope for the EIA is there an opportunity to enhance any positive health impacts and/or mitigate any negative health impacts?

Vulnerable groups

Certain parts of the population may experience disproportionate negative health effects as a result of a development. Vulnerable populations can be identified through research literature, local population health data or from the identification of pre-existing health conditions that increase vulnerability.

The effects on health and wellbeing and health inequalities of the scheme will have particular effect on vulnerable or disadvantaged populations, including those that fall within the list of protected characteristics. Some protected groups are more likely to have elevated vulnerability associated with social and economic disadvantages. Consideration should be given to language or lifestyles that influence how certain populations are affected by impacts of the proposal, for example non-English speakers may face barriers to accessing information about the works or expressing their concerns.

Equality Impact Assessments (EqIA) are used to identify disproportionate effects on Protected Groups (defined by the Equality Act, 2010), including health effects. The assessments and findings of the Environmental Statement and the EqIA should be cross referenced between the two documents, particularly to ensure the assessment of potential impacts for health and inequalities and that resulting mitigation measures are mutually supportive.

The Wales Health Impact Assessment Support Unit (WHIASU), provides a suggested guide to vulnerable groups

Age related groups

- Children and young people
- Older people

Income related groups

- People on low income
- Economically inactive
- Unemployed/workless
- People who are unable to work due to ill health

Groups who suffer discrimination or other social disadvantage

- People with physical or learning disabilities/difficulties
- Refugee groups
- People seeking asylum
- Travellers
- Single parent families
- Lesbian, gay or transgender people
- Black and minority ethnic groups
- Religious groups

Geographical groups

- People living in areas known to exhibit poor economic and/or health indicators
- People living in isolated/over-populated areas
- People unable to access services and facilities

Mental health

PHE supports the use of the broad definition of health proposed by the World Health Organisation (WHO). Mental well-being is fundamental to achieving a healthy, resilient and thriving population. It underpins healthy lifestyles, physical health, educational attainment, employment and productivity, relationships, community safety and cohesion and quality of life. NSIP schemes can be of such scale and nature that they will impact on the over-arching protective factors, which are:

- Enhancing control
- Increasing resilience and community assets
- Facilitating participation and promoting inclusion.

There should be parity between mental and physical health, and any assessment of health impact should include the appreciation of both. A systematic approach to the assessment of the impacts on mental health, including suicide, is required. The Mental Well-being Impact Assessment (MWIA) could be used as a methodology. The assessment should identify vulnerable populations and provide clear mitigation strategies that are adequately linked to any local services or assets

Perceptions about the proposed scheme may increase the risk of anxiety or health effects by perceived effects. “Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard.

Evidence base and baseline data

Baseline population / community health data (quantitative and qualitative) should be sufficient to represent current health status and identify areas or groups with poor health or inequalities. This should provide sufficient information on the physical and mental health and wellbeing and social determinants of health for the affected populations and any vulnerable groups identified.

A baseline health assessment could include:

- General population data (including size, density, age, gender, income and employment, socio-economic status, crime and disorder etc, health status.)
- Environmental information (housing, transport, access to services, provision and access to green space, tranquillity or sound environment)
- Data on behaviour, such as levels of physical activity, smoking, car usage, walking and cycling
- Surveys of local conditions
- Local concerns and anxieties (where documented)
- Secondary analysis of existing local data
- Resident surveys or consultations
- Health status, particularly of the population groups already identified as vulnerable and likely to benefit or be harmed by the proposal. This should include mental health and suicide.

- Quality of life indicators (if available / relevant)
- Local people's views of the area and of the services provided (community engagement exercises)

There will be a range of publicly available health data including:

- National datasets such as those from the Office of National Statistics,
- PHE, including the fingertips data sets,
- Non-governmental organisations,
- Local public health reports, such as the Joint Strategic Needs Assessment and Health and Wellbeing Strategies;
- Consultation with local authorities, including public health teams
- Information received through public consultations, including community engagement exercises

There should be a narrative which interprets the data collected in the context of the project. A list of tables and data is not sufficient, so the report should consider:

- Are particular groups or vulnerable groups likely to be impacted more than others and is this clearly described and explained?
- What indicators within the current health baseline that are worse than England average/ local ward or LSOA levels?
- What are the levels of inequality in the study area?
What are the potential inequalities in the distribution of impacts?

Mitigation

If the assessment has identified that significant negative effects are likely to occur with respect to the wider determinants of health, the assessment should include a description of planned mitigation measures the applicant will implement to avoid or prevent effects on the population.

Mitigation and/or monitoring proposals should be logical, feasible and have a clear governance and accountability framework indicating who will be responsible for implementation and how this will be secured during the construction and/or operation of the NSIP.

Any proposed mitigation should have sufficient detail to allow for an assessment of the adequacy of the proposed mitigation measures.

Positive benefits from the scheme

The scale of many NSIP developments will generate the potential for positive impacts on health and wellbeing; however, delivering such positive health outcomes often requires specific enabling or enhancement measures. For example, the construction of a new road network to access an NSIP site may provide an opportunity to improve the active transport infrastructure for the local community. PHE expects developments to consider and report on the opportunity and feasibility of positive impacts. These may be stand alone or be considered as part of the mitigation measures.

Replacement publicly accessible space or community assets

The replacement of community assets provides opportunity for positive impacts and the design, location and operation of the replacement asset should be considered in consultation with user, the local community and agencies.

Any replacement recreational land, open space or other community assets should be located and designed to:

- Not unreasonably extend journey times or increase transport costs, or result in too many people being prevented from travelling sustainably due to unsuitable walking or cycling routes.

- Ensure that accessibility planning has been properly taken into account and that the proposal will not adversely impact on disadvantaged groups.
- Meet identified community needs which may go beyond direct replacement but can be reasonably incorporated
- Provide acceptable recreational amenity, including noise environment, for outdoor spaces associated with the individual community facilities
- The design of the sites should be carried out in consultation with the local community. It should incorporate features and designs to enable access and use across the life course.
- The PEIR should contain sufficient detail regarding the location and design in order to determine the acceptability of the replacement facilities.
- Quality, quantity and accessibility should be determined against defined criteria agreed with stakeholders. The following evidence based assessment tools should be considered:

The quality of the provision of replacement green space should be assessed, for example by the use of:

[Building with Nature](#) - There are 6 wellbeing standards, which are:

- Accessible
- Inclusive
- Seasonal enjoyment
- Locally relevant
- Socially sustainable
- Distinctive

The [ANGSt standards](#) address amount, access and quality

The [ORVaL tool](#) - This tool works on areas that are currently publicly accessible and looks at welfare values for this area. The site functionality allows users to investigate how altering the land cover, features or the area of existing recreation sites will change usage and welfare values. This allows a comparison between existing and the proposed sites. Contact should be made with the ORVaL team to establish the functionality of the tool relevant to the DCO and interpretation of the findings³¹.

[Green Flag Award](#)- a robust framework for assessing the quality of public green spaces of all types and sizes.

Employment

NSIP schemes have the potential to negatively impact through the relocation or loss of local businesses. Equally they can offer an opportunity for new business activity and employment both at the construction stage and operation of the development approved by the DCO.

There is clear evidence that good work improves health and wellbeing across people's lives and protects against social exclusion. Conversely, unemployment is bad for health and wellbeing, as it is associated with an increased risk of mortality and morbidity. For many individuals, in particular those with long-term conditions such as mental health problems, musculoskeletal (MSK) conditions and disabilities, health issues can be a barrier to gaining and retaining employment. Employment rates are lowest among disabled people, with only 51.3% in work, meaning there is a substantial employment rate gap in the UK between disabled and non-disabled people (81.4% in employment). Among these working age disabled people in the UK, 54% have a mental health or MSK condition as their main health condition³². Enabling people with health issues to obtain or retain work, and be

³¹ https://www.leep.exeter.ac.uk/orval/pdf-reports/ORVal2_User_Guide.pdf

³² [PHE \(Jan 2019\). Guidance - Health matters: health and work \(https://publichealthmatters.blog.gov.uk/2019/01/31/health-matters-health-and-work/\)](https://publichealthmatters.blog.gov.uk/2019/01/31/health-matters-health-and-work/)

productive within the workplace, is a crucial part of the economic success and wellbeing of every community and industry.

It is important that people are supported to gain employment and maintain economic independence for themselves and their families, especially as they age. This is of particular importance for individuals with long-term conditions and disabilities, due to the barriers they face in gaining employment and retaining a job.

Where relevant any assessments should include:

- The impact of business relocation in order to identify the likely level of job losses within the study area
- The proposed support mechanisms to be established for business owners and employees
- A clear strategy and action plan that addresses barriers to employment within the local population and those that cease employment due to the DCO.

Compulsory purchase

NSIP schemes can involve the compulsory acquisition of property from land take. Mitigation will involve supporting home-owners and tenants in understanding and utilising the compensation and support offered through the compensation policies.

The impacts from compulsory acquisition of land and property can affect health and wellbeing, including mental health, for example from home, school and employment relocation and loss of employment. This will be particularly relevant to sensitive receptors within communities, many of which will form part of the private rented sector.

Compensation and support can be an important element of mitigation, but developers should consider opportunities to work through partners and local Voluntary, Community and Social Enterprise (VCSE) organisations. These organisations offer the potential for engagement with vulnerable groups and may gain greater acceptance by the wider community.

Any compulsory purchase support schemes should ensure sufficient competency in public health, including public mental health, in order to help support local communities. The aim would be to establish a workforce that is confident, competent and committed to:

- promote good physical and mental health across the population
- prevent mental illness and suicide
- improve the quality and length of life of people living within affected communities

The Public mental health leadership and workforce development framework³³ published by PHE offers a skills framework for the wider public health workforce. As well as the competences in this framework. Health Education England (HEE) have published a course content guide entitled Public Mental Health Content Guide For introductory courses or professional development in mental health and wellbeing³⁴.

Monitoring

PHE expects an assessment to include consideration of the need for monitoring and the ES should clearly state the principles on which the monitoring strategy has been established, including monitoring in response to unforeseen impacts or effects.

³³ [Public mental health leadership and workforce development framework - Confidence, competence, commitment. PHE \(2015\)](#)

³⁴ [Public Mental Health Content Guide for introductory courses or professional development in mental health and wellbeing. Health education England](#)

It may be appropriate to undertake monitoring where:

- Critical assumptions have been made in the absence of supporting evidence or data
- There is uncertainty about whether significant negative effects are likely to occur and it would be appropriate to include planned monitoring measures to track their presence, scale and nature.
- There is uncertainty about the potential success of mitigation measures
- It is necessary to track the nature of the impact or effect and provide useful and timely feedback that would allow action to be taken should negative effects occur

The monitoring strategy should set out:

- Monitoring methodologies
- Data sources, particularly if being obtained from third parties or open access data
- Assessment methods
- Publication methodology
- Reporting frequency
- Temporal and geographic scope

For very large controversial schemes it may be worth considering the need to have an independent organisation undertake / report on the monitoring and the need for academic robustness.

Community based reports

Large complex schemes that involve significant effects on communities or significant cumulative effects can benefit from identifying impacts and reporting at an individual community level. This assists in the identification of the overall potential effects across a range of impacts. These community level reports will also aid local communities to engage with consultations by providing relevant and accessible information.

How to contact PHE

If you wish to contact us regarding an existing or potential NSIP application please email: nsipconsultations@phe.gov.uk

Appendix 2

Table 1 – Wider determinants of health and wellbeing

Health and wellbeing themes			
Access	Traffic and Transport	Socioeconomic	Land Use
Wider determinants of health and wellbeing			
<p>Access to :</p> <ul style="list-style-type: none"> • local public and key services and facilities. • Good quality affordable housing. • Healthy affordable food. • The natural environment. • The natural environment within the urban environment. • Leisure, recreation and physical activities within the urban and natural environments. 	<ul style="list-style-type: none"> • Accessibility. • Access to/by public transport. • Opportunities for access by cycling and walking. • Links between communities. • Community severance. • Connections to jobs. • Connections to services, facilities and leisure opportunities. 	<ul style="list-style-type: none"> • Employment opportunities, including training opportunities. • Local business activity. • Regeneration. • Tourism and leisure industries. • Community/social cohesions and access to social networks. • Community engagement. 	<ul style="list-style-type: none"> • Land use in urban and/or /rural settings. • Quality of Urban and natural environments

1) Access

- a. Access to local, public and key services and facilities
 Access to local facilities can increase mobility and social participation. Body mass index is significantly associated with access to facilities, including factors such as the mix and density of facilities in the area. The distance to facilities has no or only a small effect on walking and other physical activities. Access to recreational facilities can increase physical activity, especially walking for recreation, reduce body weight, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions.

Local services include health and social care, education, employment, and leisure and recreation. Local facilities include community centres, shops, banks/credit unions and Post Offices. Services and facilities can be operated by the public, private and/or voluntary sectors. Access to services and facilities is important to both physical and mental health and wellbeing. Access is affected by factors such as availability, proximity to people's place of residence, existence of transport services or active

travel infrastructure to the location of services and facilities, and the quality of services and facilities.

The construction or operation of an NSIP can affect access adversely: it may increase demand and therefore reduce availability for the existing community; during construction, physical accessibility may be reduced due to increased traffic and/or the blockage of or changes to certain travel routes. It is also possible that some local services and facilities are lost due to the land-take needed for the NSIP.

Conversely if new routes are built or new services or facilities provided the NSIP may increase access. NSIPs relating to utilities such as energy and water can maintain, secure or increase access to those utilities, and thereby support health and wellbeing.

b. Access to good-quality affordable housing

Housing refurbishment can lead to an improvement in general health and reduce health inequalities. Housing improvements may also benefit mental health. The provision of diverse forms and types of housing is associated with increased physical activity. The provision of affordable housing is strongly associated with improved safety perceptions in the neighbourhood, particularly among people from low-income groups. For vulnerable groups, the provision of affordable housing can lead to improvements in social, behavioural and health related outcomes. For some people with long term conditions, the provision of secure and affordable housing can increase engagement with healthcare services, which can lead to improved health-related outcomes. The provision of secure and affordable housing can also reduce engagement in risky health-related behaviours. For people who are homeless, the provision of affordable housing increases engagement with healthcare services, improves quality of life and increases employment, and contributes to improving mental health.

Access to housing meets a basic human need, although housing of itself is not necessarily sufficient to support health and wellbeing: it is also important that the housing is of good quality and affordable. Factors affecting the quality of housing include energy efficiency (eg effective heating, insulation), sanitation and hygiene (eg toilet and bathroom), indoor air quality including ventilation and the presence of damp and/or mould, resilience to climate change, and overcrowding. The affordability of housing is important because for many people, especially people on a low income, housing will be the largest monthly expense; if the cost of housing is high, people may not be able to meet other needs such as the need for heating in winter or food. Some proposals for NSIPs include the provision of housing, which could be beneficial for the health and wellbeing of the local population. It is also possible that some housing will be subject to a compulsory purchase order due to the land-take needed for an NSIP.

c. Access to affordable healthy food

Access to healthy food is related to the provision of public and active transport infrastructure and the location and proximity of outlets selling healthier food such as fruit and vegetables. For the general population, increased access to healthy, affordable food through a variety of outlets (shops, supermarkets, farmers' markets and community gardens) is associated with improved dietary behaviours, including attitudes towards healthy eating and food purchasing behaviour, and improved adult weight. Increased access to unhealthier food retail outlets is associated with increased weight in the general population and increased obesity and unhealthy eating behaviours among children living in low-income areas. Urban agriculture can improve attitudes towards healthier food and increase fruit and vegetable consumption.

Factors affecting access to healthy affordable food include whether it is readily available from local shops, supermarkets, markets or delivery schemes and/or there are opportunities to grow food in local allotments or community gardens. People in environments where there is a high proportion of fast food outlets may not have easy access to healthy affordable food.

d. Access to the natural environment

Availability of and access to safe open green space is associated with increased physical activity across a variety of behaviours, social connectedness, childhood development, reduced risk of overweight and obesity and improved physical and mental health outcomes. While the quantity of green space in a neighbourhood helps to promote physical activity and is beneficial to physical health, eg lower rates of mortality from cardiovascular disease and respiratory disease in men, the availability of green environments is likely to contribute more to mental health than to physical health: the prevalence of some disease clusters, particularly anxiety and depression, is lower in living environments which have more green space within a 1-km radius.

The proximity, size, type, quality, distribution, density and context of green space are also important factors. Quality of green space may be a better predictor of health than quantity, and any type of green space in a neighbourhood does not necessarily act as a venue for, or will encourage, physical activity. 'Walkable' green environments are important for better health, and streetscape greenery is as strongly related to self-reported health as green areas. Residents in deprived areas are more likely to perceive access to green space as difficult, to report poorer safety, to visit the green space less frequently and to have lower levels of physical activity. The benefits to health and wellbeing of blue space include lower psychological distress.

The natural environment includes the landscape, waterscape and seascape. Factors affecting access include the proximity of the natural environment to people's place of residence, the existence of public transport services or active travel infrastructure to the natural environment, the quality of the natural environment and feelings of safety in the natural environment. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local area. It is also possible that green or blue infrastructure will be lost due to the land-take needed for the NSIP.

e. Access to the natural environment within the urban environment

Public open spaces are key elements of the built environment. Ecosystem services through the provision of green infrastructure are as important as other types of urban infrastructure. It supports physical, psychological and social health, although the quality, perceptions of safety and accessibility of green space affects its use. Safe parks may be particularly important for promoting physical activity among urban adolescents. Proximity to urban green space and an increased proportion of green space are associated with decreased treatment of anxiety/mood disorders, the benefits deriving from both participation in usable green space near to home and observable green space in the neighbourhood. Urban agriculture may increase opportunities for physical activity and social connections.

A view of 'greenery' or of the sea moderates the annoyance response to noise. Water is associated with positive perceptive experiences in urban environments, with benefits for health such as enhanced contemplation, emotional bonding, participation and physical activity. Increasing biodiversity in urban environments, however, may promote the introduction of vector or host organisms for infectious pathogens, eg green connectivity may potentiate the role of rats and ticks in the spread of disease,

and bodies of water may provide habitats for mosquitoes.

The natural environment within the urban environment includes the provision of green and blue space in towns and cities. Factors involved in access include the proximity of the green and/or blue space to people's place of residence, the existence of transport services or active travel infrastructure to the green and/or blue space, the quality of the green and/or blue space and feelings of safety when using the green and/or blue space. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local urban environment. It is also possible that green or blue infrastructure in the urban environment will be lost due to the land-take needed for the NSIP.

- f. Access to leisure, recreation and physical activity opportunities within the urban and natural environments.

Access to recreational opportunities, facilities and services is associated with risk factors for long-term disease; it can increase physical activity, especially walking for recreation, reduce body mass index and overweight and obesity, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. It can also enhance social connectedness. Children tend to play on light-traffic streets, whereas outdoor activities are less common on high-traffic streets. A perception of air pollution can be a barrier to participating in outdoor physical activity³⁵. However, the health co-benefits from physical activity outweigh the adverse effects of air pollution. There is a positive association between urban agriculture and increased opportunities for physical activity and social connectivity. Gardening in an allotment setting can result in many positive physical and mental health-related outcomes. Exercising in the natural environment can have a positive effect on mental wellbeing when compared with exercising indoors.

Leisure and recreation opportunities include opportunities that are both formal, such as belonging to a sports club, and informal, such as walking in the local park or wood. Physical activity opportunities include routine activity as part of daily life, such as walking or cycling to work, and activity as part of leisure or recreation, such as playing football. The construction of an NSIP may enhance the opportunities available for leisure and recreation and physical activity through the provision of new or improved travel routes, community infrastructure and/or green or blue space. Conversely, construction may reduce access through the disruption of travel routes to leisure, recreation and physical activity opportunities.

2) **Traffic and Transport**

- a. Accessibility

Walkability, regional accessibility, pavements and bike facilities are positively associated with physical activity and negatively related to body weight and high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. Body mass index is associated with street network accessibility and slope variability.

Accessibility in relation to transport and travel has several aspects including whether potential users can gain physical access to the infrastructure and access to the

³⁵ Annear, M., Keeling, S., Wilkinson, T., Cushman, G., Gidlow, B., & Hopkins, H. (2014). Environmental influences on healthy and active ageing: A systematic review. *Ageing & Society*, 34 (4), 590-622. Available at https://www.academia.edu/34314864/Environmental_influences_on_healthy_and_active_ageing_a_systematic_review

services the infrastructure provides. The design and operation of transport infrastructure and the associated services should take account of the travel needs of all potential users including people with limited mobility. People whose specific needs should be considered include pregnant women, older people, children and young people and people with a disability. Other aspects of transport infrastructure affecting accessibility include safety and affordability, both of which will affect people's ability to travel to places of employment and/or key local services and facilities and/or access their social networks.

b. Access to / by public transport

Provision of high-quality public transport is associated with higher levels of active travel among children and among people commuting to work, with a decrease in the use of private cars. Combining public transport with other forms of active travel can improve cardiovascular fitness. Innovative or new public transport interventions may need to be marketed and promoted differently to different groups of transport users, eg by emphasising novelty to car users while ensuring that the new system is seen by existing users as coherently integrated with existing services.

Transport facilitates access to other services, facilities and amenities important to health and wellbeing. Public transport is any transport open to members of the public including bus, rail and taxi services operated by the public, private or community sectors. For people who do not have access to private transport, access to public transport is important as the main agency of travel especially for journeys >1 mile. Access to public transport is not sufficient, however, and access by public transport needs to be taken into account: public transport services should link places where people live with the destinations they need or want to visit such as places of employment, education and healthcare, shops, banks and leisure facilities. Other aspects of access to public transport include affordability, safety, frequency and reliability of services.

c. Opportunities for / access by cycling & walking

Walking and cycling infrastructure can enhance street connectivity, helping to reduce perceptions of long-distance trips and providing alternative routes for active travel. Awareness of air pollution could be a barrier to participating in active travel, however those that choose to walk or cycle often experience lower exposure to pollution, and create less pollution than those in vehicles³⁶. Prioritising pedestrians and cyclists through changes in physical infrastructure can have positive behavioural and health outcomes, such as physical activity, mobility and cardiovascular outcomes. The provision and proximity of active transport infrastructure is also related to other long-term disease risk factors, such as access to healthy food, social connectedness and air quality.

Perceived or objective danger may also have an adverse effect on cycling and walking, both of which activities decrease with increasing traffic volume and speed, and cycling for leisure decreases as local traffic density increases. Health gains from active travel policies outweigh the adverse effects of road traffic incidents. New infrastructure to promote cycling, walking and the use of public transport can increase the time spent cycling on the commute to work, and the overall time spent commuting among the least-active people. Active travel to work or school can be associated with body mass index and weight, and may reduce cardiovascular risk factors and improve cardiovascular outcomes. The distance of services from cycle paths can have an adverse effect on cycling behaviour, whereas mixed land use, higher densities and

³⁶ Defra 2019, Clean Air Strategy 2019. Available at <https://www.gov.uk/government/publications/clean-air-strategy-2019>

reduced distances to non-residential destinations promote transportation walking.

- d. Links between communities
Social connectedness can be enhanced by the provision of public and active transport infrastructure and the location of employment, amenities, facilities and services.
- e. Community severance
In neighbourhoods with high volumes of traffic, the likelihood of people knowing and trusting neighbours is reduced.
- f. Connections to jobs
The location of employment opportunities and the provision of public and active transportation infrastructure are associated with risk factors for long-term disease such as physical activity. Good pedestrian and cycling infrastructure can promote commuting physical activity. Improved transport infrastructure has the potential to shift the population distribution of physical activity in relation to commuting, although a prerequisite may be a supportive social environment. Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking.

The ease of access to employment, shops and services including the provision of public and active transport are important considerations and schemes should take any opportunity to improve infrastructure to promote cycling, walking and the use of public transport

- g. Connections to services, facilities and leisure opportunities
Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking. Access to recreational opportunities and the location of shops and services are associated with risk factors for long-term disease such as physical activity, access to healthy food and social connectedness. Increased distance of services from cycle paths can have an adverse effect on cycling behaviour.

3) **Socio Economic**

- a. Employment opportunities including training opportunities
Employment is generally good for physical and mental health and well-being, and worklessness is associated with poorer physical and mental health and well-being. Work can be therapeutic and can reverse the adverse health effects of unemployment for healthy people of working age, many disabled people, most people with common health problems and social security beneficiaries. Account must be taken of the nature and quality of work and its social context and jobs should be safe and accommodating. Overall, the beneficial effects of work outweigh the risks of work and are greater than the harmful effects of long-term unemployment or prolonged sickness absence. Employment has a protective effect on depression and general mental health.

Transitions from unemployment to paid employment can reduce the risk of distress and improve mental health, whereas transitions into unemployment are psychologically distressing and detrimental to mental health. The mental health benefits of becoming employed are also dependent on the psychosocial quality of the job, including level of control, demands, complexity, job insecurity and level of pay: transition from unemployment to a high-quality job is good for mental health, whereas transition from unemployment to a low-quality job is worse for mental health than being unemployed. For people receiving social benefits, entry into paid employment

can improve quality of life and self-rated health (physical, mental, social) within a short time-frame. For people receiving disability benefits, transition into employment can improve mental and physical health. For people with mental health needs, entry into employment reduces the use of mental health services.

For vocational rehabilitation of people with severe mental illness (SMI), Supported Employment is more effective than Pre-vocational Training in helping clients obtain competitive employment; moreover, clients in Supported Employment earn more and work more hours per month than those in Pre-vocational Training.

b. Local Business Activity

It is important to demonstrate how a proposed development will contribute to ensuring the vitality of town centres. Schemes should consider the impact on local employment, promote beneficial competition within and between town centres, and create attractive, diverse places where people want to live, visit and work

In rural areas the applicant should assess the impact of the proposals on a prosperous rural economy, demonstrate how they will support the sustainable growth and expansion of all types of business and enterprise in rural areas, promoting the development and diversification of agricultural and other land based rural businesses.

c. Regeneration

Following rebuilding and housing improvements in deprived neighbourhoods, better housing conditions are associated with better health behaviours; allowing people to remain in their neighbourhood during demolition and rebuilding is more likely to stimulate life-changing improvements in health behaviour than in people who are relocated. The partial demolition of neighbourhoods does not appear to affect residents' physical or mental health. Mega-events, such as the Olympic Games, often promoted on the basis of their potential legacy for regeneration, appear to have only a short-term impact on mental health.

d. Tourism and Leisure Industries

The applicant should assess the impact of the proposed development on retail, leisure, commercial, office, tourism, cultural, community and residential development needed in town centres. In rural locations assessment and evaluation of potential impacts on sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors should be undertaken.

e. Community / social cohesion and access to social networks

The location of employment, shops and services, provision of public and active transport infrastructure and access to open space and recreational opportunities are associated with social connectedness. Access to local amenities can increase social participation. Neighbourhoods that are more walkable can increase social capital. Urban agriculture can increase opportunities for social connectivity. Infrastructure developments, however, can affect the quality of life of communities living in the vicinity, mediated by substantial community change, including feelings of threat and anxiety, which can lead to psychosocial stress and intra-community conflict.

f. Community engagement

Public participation can improve environmental impact assessments, thereby increasing the total welfare of different interest groups in the community. Infrastructure development may be more acceptable to communities if it involves substantial public participation.

4) Land Use

a. Land use in urban and / or rural settings

Land-use mix including infrastructure:

Land use affects health not only by shaping the built environment, but also through the balance of various types of infrastructure including transport. Vulnerable groups in the population are disproportionately affected by decisions about land use, transport and the built environment. Land use and transport policies can result in negative health impacts due to low physical activity levels, sedentary behaviours, road traffic incidents, social isolation, air pollution, noise and heat. Mixed land use can increase both active travel and physical activity. Transportation walking is related to land-use mix, density and distance to non-residential destinations; recreational walking is related to density and mixed use. Using modelling, if land-use density and diversity are increased, there is a shift from motorised transport to cycling, walking and the use of public transport with consequent health gain from a reduction in long-term conditions including diabetes, cardiovascular disease and respiratory disease.

b. Quality of urban and natural environments

Long-term conditions such as cardiovascular disease, diabetes, obesity, asthma and depression can be moderated by the built environment. People in neighbourhoods characterised by high 'walkability' walk more than people in neighbourhoods with low 'walkability' irrespective of the land-use mix. In neighbourhoods associated with high 'walkability' there is an increase in physical activity and social capital, a reduction in overweight and blood pressure, and fewer reports of depression and of alcohol abuse. The presence of walkable land uses, rather than their equal mixture, relates to a healthy weight. Transportation walking is at its highest levels in neighbourhoods where the land-use mix includes residential, retail, office, health, welfare and community, and entertainment, culture and recreation land uses; recreational walking is at its highest levels when the land-use mix includes public open space, sporting infrastructure and primary and rural land uses. Reduced levels of pollution and street connectivity increase participation in physical activity.

Good-quality street lighting and traffic calming can increase pedestrian activity, while traffic calming reduces the risk of pedestrian injury. 20-mph zones and limits are effective at reducing the incidence of road traffic incidents and injuries, while good-quality street lighting may prevent them. Public open spaces within neighbourhoods encourage physical activity, although the physical activity is dependent on different aspects of open space, such as proximity, size and quality. Improving the quality of urban green spaces and parks can increase visitation and physical activity levels.

Living in a neighbourhood overlooking public areas can improve mental health, and residential greenness can reduce the risk of cardiovascular mortality. Crime and safety issues in a neighbourhood affect both health status and mental health. Despite the complexity of the relationship, the presence of green space has a positive effect on crime, and general environmental improvements may reduce the fear of crime. Trees can have a cooling effect on the environment – an urban park is cooler than a non-green site. Linking road infrastructure planning and green infrastructure planning can produce improved outcomes for both, including meeting local communities' landscape sustainability objectives.

National Grid Electricity Transmission by email

Planning Act 2008: Bramford to Twinstead NSIP

This is the response of Sproughton Parish Council to the informal public consultation between 25 March and 6 May 2021 to the informal pre-application consultation undertaken by National Grid Electricity Transmission for the proposed National Grid Bramford to Twinstead NSIP.

We agree with other parishes and the amenity group comments. We also fail to understand why this is being pursued without consideration of the alternative SCD2 offshore power link from the East Anglian windfarms to the coastal power line links in the Thames and Medway which would have a significantly lower environmental impact and provide greater flexibility to the offshore power network around our island coast'.

We completely agree with the report of our Neighbourhood Plan Committee report which is part of our Planning Committee Structure which is as follows:'

Timing of consultation

We are concerned that the application has not taken into consideration the cumulative impact including the route for AENC/ATNC, until this has been established and published it is unfair to ask either the councils, and public to comment without a full arsenal of information, and therefore make informed decisions.

Further concerns regarding the timing of the consultation, during the Covid-19 pandemic, including a period of lockdown and coinciding with the pre-election moratorium for County Council elections have been identified.

These factors compound concerns, regarding the potential adequacy of consultation in respect of hard to reach and hard to hear groups which may be further complicated by the choice to conduct the consultation during these restricted conditions, particularly having regard to those members of these largely rural communities who may be digitally and physically isolated.

All communities and stakeholders need to be able to engage in a position whereby they are fully informed of the total cumulative impact of proposals to build new electricity pylons in their locations.

National Grid's EI Scoping Report.

The above report is incomplete and under scrutinized and in the scoping matters it fails:

- To take account of up-to-date locally provided information, thorough consultation and review of local parish knowledge including:
 - Biodiversity
 - Ecology
 - Tourism
 - Cumulative impact
 - Green spaces/PROW developing and current/landscape heritage.
 - Health and welfare of local communities
 - All through parish documents, neighbourhood plans, current and emerging.
- To account for significant recent changes that add to cumulative impact
- To account for its own announcements of future development that increase cumulative impact
- To account for socio-economic impacts
- The report takes no account of initial consultation responses from statutory consultees or other representative bodies and individuals. In some locations entire communities were omitted from the consultation. A survey of residents in Flowton indicates they did not receive the newsletter or questionnaire, despite being close to the substation and with many sites where sensitive visual receptors are likely to be found.
- National Grid has failed in its duty to consult the local community and contravened the spirit of not the letter of s47. Nor does it follow advice¹ set out by the Planning Inspectorate and thus shows scant regard for the views of local residents and statutory consultees.

Cumulative impact

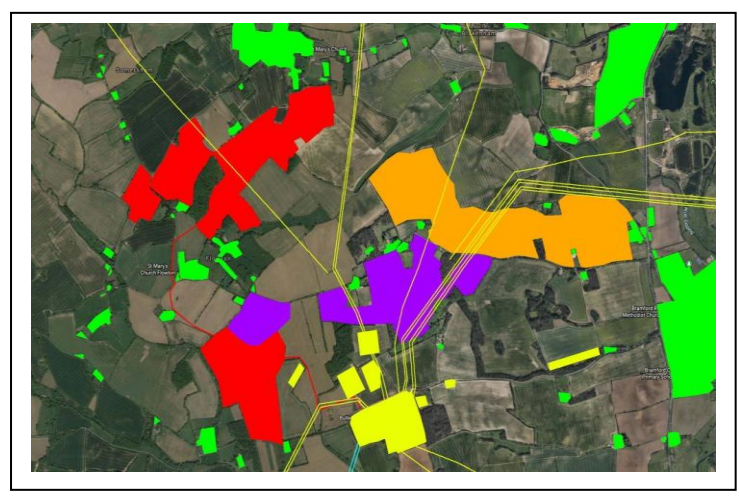
The committee has concerns about the timing and consideration of the project and its impact on and interaction with other large-scale housing and energy

¹ Advice Note 14 paras 3.14 et al

projects in the parish, particularly having regard to the need for adequate assessment of potential cumulative impacts.

Currently within our area we have:

1. Four Solar Energy application for over 600 acres - adjacent parishes
2. Proposed overhead National Grid Lines - through our parish
3. Proposed water pipe installation - though our parish
4. Increase in housing in the parish from 650 homes to over 2000



from different developers, again to which no consideration of cumulative impact on infrastructure within our parish has been given.

5. Adjacent to our parish: Energypeople Ltd - 49.9W gas powered standby electricity generation facility <https://planning.baberghmidsuffolk.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=PKTCHYSHMK300>

The historic landscape area that the proposal will affect has an interlocking series of narrow traditional Suffolk lanes, the cumulative impact on the infrastructure is immense and should NOT be lightly dismissed. There are over 5000 homes planned along the Gipping Valley in the next 20-30 years and in conjunction with Valley Ridge (Snoasis), increased industrial building at Great Blakenham the B1113 from Great Blakenham to Washbrook will become unsustainable. This B Road links all these developments with the A14, and is intersected by four historic villages.

Consideration given to the impact on the local infrastructure with regard to the Orwell Bridge closure, diversions of traffic through Sproughton for roadworks etc.

PINS Advice Note 17: Cumulative Effects Assessment provides a methodology for CEA comprising a staged process.

1. Establishing the Zone of Influence (ZOI) and identify a list of 'other developments' which could potentially interact with the proposed development;
2. Analysing the list obtained in stage 1 and identify the sites that may have a significant effect on the environment, economy or community when assessed cumulatively with the proposed site. Providing a justification as to why the sites that will result in no cumulative effects can be scoped out of the assessment and develop a new list of sites that can progress to stage 3;
3. Gathering all required information for the sites on the new list; and,
4. Assessing the likely residual effects as a result of the interrelationship between the proposed and cumulative sites.

The importance of dealing with cumulative impacts appropriately has been demonstrated in the recent 'Vanguard Judgement'. The decision of the Secretary of State for Business, Energy and Industrial Strategy (BEIS) to grant the application for development consent for the Norfolk Vanguard Offshore Wind Farm was quashed following an order issued by the High Court in judicial review proceedings. The issue which the court had to consider was whether the Secretary of State could defer evaluation of the cumulative impacts of the onshore substation of Norfolk Vanguard and its 'sister' project Norfolk Boreas, until the second application was examined.

National Grid accepts the list will continue to be updated. However, at the time of publication the list was already incomplete. As a result, National Grid underestimates the significant of cumulative impacts, especially in the area of the Bramford substation and encompassing the surrounding villages specifically the Gipping Valley and Sproughton.

The list is also inadequate because in table 18.1 the Zone of Influence for Environmental Topics is set at 1 km for biodiversity, socio economics, recreation and tourism.

It is self-evident that tourists travel and thus appreciate the environmental benefits of the countryside at scale. An hour's walk in the countryside could easily cover 5 km. It is quite likely visitors have come into the countryside to escape the confines or industrialisation of towns and built landscapes. The Suffolk countryside is not a walled garden, and an artificial division of 1 km is wholly inadequate. The ZOI should therefore depend on topography, geography and significance of amenities. The locally designated Special Landscape Areas

are thus a good starting point for considering cumulative impacts. They include the Brett Valley and the SLA to the north of the Bramford substation.

Undergrounding

There has been no consideration to the immediate impact of multiple overhead lines into and out of the Bramford Site. The environmental landscape impact on the historic countryside surrounding and including Sproughton Parish will not only harm the physical and visual landscape but also the parishioners that live there. The impact will no doubt lead to increased stress and mentally impact the community.

Surely, in order to reduce this impact some of the proposed overhead lines coming in to the Bramford substation could be placed underground. The Bramford Substation should not be neglected visually just because "it already has multiple pylons" it does not mean we should just have more because the damage is done. Preference for these considerations should not all be about AONB.

Opportunities

Additional financial support to the local communities including local initiatives, such as the provision of community woodlands, tree and hedgerow planting, the establishment of traditional orchards and the enhancement of wildlife habitats would be welcome. However, direct meaningful engagements with community groups, parish councils and voluntary sector organisations to establish parishioners' views on wildlife enhancement and the location of these proposals would be beneficial. Public funding should not be seen as a way of placating the community. They should also be timely and part of the legal requirements to the application e.g. S106. The Sproughton Neighbourhood Plan Committee would welcome further discussions to explore opportunities to secure benefits for the host communities arising from the development.

Other concerns

Biodiversity - The current landscaping is a natural barrier to wildlife and wildlife corridors. The fences are obstructing the movement of larger mammals that roam our historic landscape. Sproughton currently resides in a Special Land Scape area.

Heritage - the proposed 10km buffer to either side of the proposed pylon route is acceptable. Impacts on all heritage assets including SAMs, listed buildings, Registered Parks and Gardens and non-designated heritage assets will need to be considered. Given the long valley view's, joint consideration needs to be given to the impact on the historic landscape and its associated historic buildings, not as separated entities. As raised by the Secretary of States findings on the Hopkins Homes Site DC/18/02010 and DC/18/02412, Sproughton.

Landscape - The visual impact of the development is a key issue. Some of the area is designated a Special Landscape Area and therefore should be considered with reverence. The landscape is also part of the reason many of us live here and that again should be respected. Ref 2018 Landscape Assessment and 2021 Sproughton Landscape Assessment.

Drainage - The landscape surrounding Sproughton, Burstall and Bramford traditionally don't have open ditches, much of the water courses run beneath ground and the impacts to these should be considered.

Public health - noise, light and air quality are concerns. Noise not only from the associated building and transport but also from the buzzing of overhead lines. Lighting during construction and subsequent security issues all have a negative impact on the dark skies area, biodiversity and environment.

PROW- these should be improved and extended, it has been proven over the last two years that mental wellbeing is greatly enhanced by outdoor rural exercise.

Tourism - the rural landscape has significant value to the local economy as a tourist attraction. The development has the potential to have a negative impact on the attractiveness of the area for visitors and these adverse impacts will in turn affect the current local tourism businesses in the locality.

In para 15 the Report states that socio-economic impacts can be scoped out as tourism primarily benefits the Dedham Vale where the line will be placed underground.

By implication National Grid thus accepts that overhead lines may have an impact on visual amenity to the detriment of the tourist industry.

Significantly it also shows a lack of awareness or research into the local tourist industries.

In recent years numerous tourist attractions have been created, supplementing those that already existed. Some - such as glamping sites - rely on the landscape and tranquility of their setting. Others provide 'out of town' leisure amenities which again benefit to some extent from their rural setting.

Examples in the Hintlesham/Burstall and Sproughton area include:

- Suffolk Escape <http://www.suffolkescape.co.uk/>
- The Lost Garden Glamping <http://thelostgardenretreat.com/>
- College Farm - Grade II listed B&B <https://www.collegefarm.net/>
- Hintlesham Hall - Grad 1 listed hotel
- Hintlesham Golf Course and golf driving range
- Copenhagen Cottage - camping and caravanning site
- Finjaro B&B
- Walnut Tree Cottage self-catering holiday let

Socio-economic impacts should therefore be scoped in along the entire length of the project. (15.6.9)

Ecology - The Ecological Mitigation Hierarchy of Avoid - Mitigate - Compensate - Enhance should be employed. Full 12-month investigation on the Ecology within the impacted area and its periphery should be undertaken. Any mitigation should be kept as close to the area affected, not a skylark field 20 miles away.

Archeology- the investigation seems to be very out of date and misleading as some items of historic interest are apparently missing. As highlighted by the SCC report.

This is cumulative unsustainable industrial development, and we must ensure our important rural character and community is maintained and safeguarded, as it impacts on our heritage landscape with light pollution, interruption of valley views, historic buildings and their place in the historic landscape, it is uncharacteristic, a distinct contrast to the local distinctiveness.

Strict regard must be given to the SCC and BMSDC policies that are impacted by this proposal. Under no circumstances should leniency be given to the policies in favour development. We ask that the councils stand by their appointed positions to uphold, maintain, protect and enhance the communities we live in.

Kirsty Webber
Sproughton Parish Clerk

Stoke by Nayland Parish Council

Clerk: Mr James Dark, [REDACTED]

Tel: [REDACTED] e-mail:stokepc@hotmail.co.uk

The Planning Inspectorate
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol BS1 6PN

Ref EN020002
8 June 2021

Dear Sir

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Application by National Grid Electricity Transmission plc (the Applicant) for an Order granting Development Consent for the Bramford to Twinstead overhead line project (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Further to your letter dated 11th May 2021, we write on behalf of the Parish Council in response to the EIA Scoping consultation.

Specifically with reference to the Scoping Report and Appendices, their issue follows within 5 days of the end of the non-statutory consultation. This demonstrates that the Applicant (National Grid or "NG") has failed to take any account of the responses from consultees, and supports the contention expressed in our previous response that the Applicant is using the statutory timetable to drive through its DCO application without due regard to the opinions of the affected communities.

The documents circulated are voluminous and highly detailed, relying no doubt to a great extent on the work of technical experts. Our comments are submitted as lay representatives of our community.

Our principal concerns are fourfold:

(1) Alternative Offshore Transmission Options

We are concerned that NG relies heavily on its opinion that the T2B upgrade is required in all circumstances, without any detailed analysis of offshore transmission options, which were excluded from its Network Options Assessment. We request that the EIA should include full disclosure on the options considered, along with the reasons why offshore transmission is not considered a viable alternative to the emerging proposal.

(2) Full Undergrounding

Stoke by Nayland has expressed a strong preference for the line to be undergrounded in its entirety, not least because the benefit of undergrounding

through the Dedham Vale and Stour Valley, which we support, is diminished if other sections remain overhead and are permitted to dominate important views from the AONB. The Parish Council requests that the EIA should include full and updated disclosure of the cost calculations used to justify the decisions, including evidence of consideration given to technologies which could be employed to make undergrounding more economical, and detail on the calculated savings from removing sealing-end compounds if full undergrounding were pursued. In addition, the EIA regulations require consideration of non-cost metrics, including environmental impact. This should be included.

(3) Visual Impact Assessment

We remind the reader that the whole of Stoke by Nayland Parish sits within the Dedham Vale AONB, and that due to our elevated position, the existing pylons can be viewed at far greater distances than the 5 Km.

The Parish Council believes that the visual-amenity impact of the proposed development should be considered across the whole 10Km zone of theoretical visibility for the proposal. The Holford Rules¹ specifically require the developer to avoid sky backgrounds, and in this regard, we can identify many locations across the Parish where the existing pylons can be viewed at far greater distances than the 5Km (general study area) and 3Km (area of emphasis) offsets from the proposed centreline identified in the Scoping Report.² The addition of a second 50m high pylon line, even when standing clear of any woodland screening, will exacerbate the already negative impact of the existing route from long distance views out of the AONB.

We strongly disagree with the opinion expressed by the Applicant that “the most likely significant effects will be within 1Km of the line.”³ Whilst we acknowledge that the power lines through the Dedham Vale AONB and Stour Valley will be placed underground, key elements of the proposed overground section will be visible from within the AONB, particularly crossing the Brett Valley (Section C), through Polstead (Section D) and the section between Leavenheath through Assington (Section F).

The documents appear to acknowledge that the surroundings of AONBs can influence the overall character and quality of the landscape, described as the “setting” of the AONB. The documents note that “*the land surrounding the designated area which, although not in itself designated, has a typically complementary relationship and is likely to be inter-visible with the designated landscape.*”⁴ This entire section appears to be an acknowledgement that, in terms of planning policy, **views out of the AONB carry the same weight as views within the AONB.** That being the case, we would expect that those same views carry a Value Sensitivity of “Very High” within the designations set out in Table 5.1 of the Main Report.⁵

We also question to what extent adoption of Highways England's Value & Sensitivity Criteria (Table 5.1) and Magnitude Criteria (Table 5.2) is relevant to the continuous provision of infrastructure elevated 50m above the natural ground – we would

¹ NG Scoping Report, May 2021, Volume 1 Main Report, para 2.5.10

² NG Scoping Report, May 2021, Volume 1 Main Report, para 6.3.4

³ NG Scoping Report, May 2021, Volume 1 Main Report, para 6.6.18

⁴ NG Scoping Report May 2021, Volume 2 Appendices, Appendix 6.2, para 3.1.4

⁵ NG Scoping Report, May 2021, Volume 1 Main Report, Table 5.1, p44

suggest they are not. These matters are critical to the Parish Council since they are directly associated with the Matrix of Significance (Illustration 5.1).⁶

We disagree strongly with the contention contained in paragraph 6.6.6 that the River Box SLA will not be impacted by the project and should be scoped out.⁷ We believe that, as with the discussion above, the River Box SLA will be severely affected by additional visual impacts.

In summary, we believe that the General Study Area and Area of Emphasis should be increased to 10Km and 5Km respectively in order to fully capture the long-distance visual impacts from within the AONB.

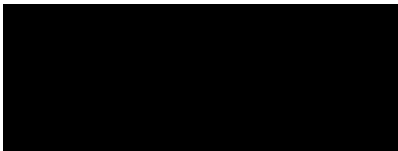
(4) Construction Impacts

We have not seen any references in the scoping documents to provide for the following:

- Assurances that A134 will not be subject to road closures, since such closures invariably result in long traffic diversions using B1068, with HGVs passing through the historic village of Stoke by Nayland and its Conservation Area; and
- Assurances that construction vehicles will be prohibited from using B1068 which has an 18t weight restriction between the entrance to Konings Factory and the main crossroads within Stoke by Nayland.

In conclusion, we note that the Parish Council would be very happy to indicate to landscape assessors where distant views of the proposed route can be obtained from public rights-of-way within the AONB.

Yours faithfully



James Dark
Clerk to Stoke by Nayland Parish Council

⁶ NG Scoping Report, May 2021, Volume 1 Main Report, Illustration 5.1, p45

⁷ NG Scoping Report, May 2021, Volume 1 Main Report, para 6.6.6 p62

Our Ref: BTNO
Date: 8 June 2021
Enquiries to: Graham Gunby
Tel: [REDACTED]
Email: [REDACTED]@suffolk.gov.uk

BY EMAIL

BramfordtoTwinstead@planninginspectorate.gov.uk

Dear Sir/Madam,

**BRAMFORD TO TWINSTEAD dDCO
SCOPING CONSULTATION**

Please find attached to this letter the County Council's response to the above consultation.

If I can be of any further assistance with the above, please do not hesitate to contact me.

Yours sincerely,

Graham Gunby

Graham Gunby
Development Manager
Growth, Highways & Infrastructure

Planning Act 2008

Comments of Suffolk County Council

upon the

Scoping Consultation ending on the 8 June 2021

by

The Planning Inspectorate

upon

National Grid Electricity Transmission's proposals for the construction of a new 400kV double circuit network reinforcement of c.27km (17miles) including new lattice towers, an element of undergrounding, and associated development between Bramford in Suffolk and Twinstead in Essex

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Executive summary

1. Summary of response

- 1.1 This document includes Suffolk County Council's (SCC) response to the Planning Inspectorate's Scoping Consultation in respect of National Grid Electricity Transmission (NGET)'s proposals for the construction of a new 400kV double circuit network reinforcement of c.27km (17 miles), including new lattice towers, an element of undergrounding, and associated development between Bramford in Suffolk and Twinstead in Essex.

2. The history of the proposals

- 2.1 Preparatory planning work started on these proposals in 2009 but was put on hold in 2013, as reinforcement was not required at that time. Preparatory planning work has now restarted with the intention that the upgraded infrastructure will be in place before the end of the decade. Although these proposals are, on the face of it, very similar to those discussed previously, Suffolk County Council (SCC) is taking a fresh look within the context of current national and local policies.

3. Poorly timed consultation

- 3.1 SCC acknowledges the imperative to proceed quickly to support the net-zero ambitions, but this should not be at the expense of proper engagement, quality of evidence gathered and communicated, or the thorough consideration of the proposal and its impacts.
- 3.2 It is noted that this Scoping Consultation has taken place closely following the recent Informal Consultation which ended less than a week earlier on the 6 May 2021. This calls into question whether any or thorough consideration has in fact be given by NGET to the views expressed by SCC and others during the Informal Consultation stage. So far as SCC can tell from the information provided, the project has not been materially changed as a result of that Informal Consultation. Whilst not directly an issue for the Scoping exercise (which has to relate to the project as formulated by NGET), it is a concern if consultation responses are not conscientiously considered by NGET as the project evolves and before it is finalised.

4. Contents of this response

- 4.1 The remainder of this summary sets out the technical views of staff employed directly or instructed by SCC.
- 4.2 Appendix 1 provides their response in full.
- 4.3 Appendix 2 is the response of the Dedham Vale Area of Outstanding Natural Beauty (AONB) and Stour Valley Team, which, although supported by SCC, are not a statutory consultee in their own right. The views expressed by the AONB are their own and not necessarily those of SCC. However, the issues that they raise do need to be included in the assessment of effects on landscape, biodiversity, historic environment, recreation, and tourism.

- 4.4 Appendix 3 includes a response on behalf of County Councillor James Finch who's Division includes part of the area affected by the proposed development. The views expressed are not necessarily those of SCC but the issues raised are relevant to the assessment of socio- economic effects.

5. **SCC Archaeology (Essex Place Services)**

- 5.1 In reviewing the Scoping Report number of potential issues have been identified:
- it is important that a full assessment of the historic environment impact of the scheme, especially in the undergrounding areas;
 - geo-archaeological and palaeo-environmental assessment will need to be undertaken for the whole route;
 - it is recommended that a full programme of archaeological trial trenching is undertaken on the below-ground sections of the scheme;
 - hedgerow assessments should be undertaken as part of the ES to identify those important hedges where directional drilling could be considered to minimise impact, and;
 - protected lanes are not considered; however, these may suffer if realignment occurs to allow access for construction traffic and should form part of the dataset for consideration as part of this scheme.

6. **SCC Ecology**

- 6.1 SCC, like other public authorities in England, has a duty to conserve biodiversity. General comments are as follows:
- account should be taken of the Biodiversity Motion passed by SCC's Full Council in December 2020;
 - the Suffolk Biodiversity Information Service holds vital information and should be contacted;
 - surveys must be carried out within accepted guidelines;
 - the ecological mitigation hierarchy of avoiding, mitigate, compensate, enhance should be employed, and
- 6.2 If necessary, the DCO provides further ecological validation mechanisms alongside any discharge of requirements such as details relating to construction methods and drainage, for example. Specific areas of concern raised prior to the 2013 hiatus remain:
- potential impacts on watercourses;
 - potential impacts on groundwater flow;
 - potential impacts on ecological connectivity;
 - potential impacts on the robustness of existing habitats, and
 - extent and mechanisms for mitigation and compensation, and enhancement.
- 6.3 Mitigation should include:
- formulation of a Construction Environmental Management Plan (CEMP);
 - disturbance of the narrowest swathe of land.

6.4 Compensation and enhancement should include:

- an Environmental Improvement Fund for tree planting etc. and;
- biodiversity net gain.

6.5 Detailed comments:

- wherever the Applicant wishes to rely on old data and surveys, they must, in each and every case, give a full rationale and explanation to satisfy the requirements of the CIEEM Guidelines on the validity of reports;
- aiming for 10% Biodiversity Net Gain as a minimum;
- the Applicants refer to a couple of Suffolk Wildlife Trust Reports regarding certain mammals (Dormouse, Otter and Water Vole) from 2021 and links to the full versions of those SWT Reports are required;
- we agree with the overall sentiment expressed at Vol. 1, Para 7.7.3 that "...the direct effects of electricity reinforcement projects ... are generally confined to the construction period..." but this will depend on the robustness of the CEMP and the ability of contractors to adhere to the advice and recommendations of the Ecological (rather than Environmental) Clerk of Work;
- regarding the Vol 2 Appendices (the plans and diagrams), the scale is insufficient to determine the route accurately, impacts upon natural features and how the most sensitive features (such as mature trees and watercourses) can be retained by, e.g., micro-siting of the cables;
- generally, the lists of Ecological Receptor Features seems to be in order (subject to the ongoing survey work, of course) and;
- we need to see more details regarding the various surveys they are currently undertaking and proposing to undertake as well as how the applicant will avoid potential harm to Protected Species and Habitats within the proposal footprint during operations (although SCC expects this information will be forthcoming).

7. SCC Economic Development

7.1 Workforce

- At this point in the process, workforce numbers are currently unconfirmed. Therefore, any areas that the workforce will impact upon cannot be scoped out of the Environmental Statement as there is not enough information to make an informed decision.
- It is acknowledged that the likely demands on the workforce and the supply chain are likely to be less than those of other infrastructure projects in the region. However, it is vital that the workforce assessment considers the different demands on the different phases of the project and assess these cumulatively with other potential major construction projects.

7.2 Tourism

- A large proportion of tourist trips are likely to be associated with the natural and historic beauty of the area as a whole. Therefore, it is more relevant to consider the extent to which the impact of pylons in the landscape detracts from the environmental quality for recreational activity more broadly and the perception and propensity of people to visit the area.

7.3 Detailed comments

- In addition to the general points, the following also apply:
- 15.3 - Wider study area too small, SCC considers that the study area is unlikely to adequately reflect travel to work patterns for construction workers for infrastructure projects and needs to be clearly justified or extended.
- 15.4 - Very limited data sources, no reference to key regional economic strategies and no reference to Destination Management Organisation information, for example;
- 15.6.9 – Cannot include Tourism Economy in with Effects on the local economy during operation, need to be split and remain as two separate areas examined separately;
- 15.6.11 – Indirect economic effects on local businesses shouldn't be addressed individually through direct compensation as there are more effects that have a wider impact than individual impact, and;
- 15.7.1 – Chapters on Socio-Economics and Tourism need to be included in the ES. They cannot be scoped out as suggested previously as have not been examined thoroughly either as stand-alone or within the inter-project cumulative assessment as set out above;
- SCC is aware that specific issues relevant to any assessment of socio-economic impacts have been raised by a landowner/local business affected by the proposed routing (see correspondence in Appendix 3) and it will be important to ensure that all relevant impacts on local businesses are included in the assessment of socio-economic effects.

8. Joint Emergency Planning Unit

- 8.1 There are no significant impacts or effects anticipated which would impact on our emergency response plans or our ability to respond to any emergencies or incidents.

9. SCC as Lead Local Flood Authority

General comments

- 9.1 It is likely that the new substation at Butlers Wood will require sufficient, sustainable drainage infrastructure that will need to be accommodated within the local environment, although this located outside of Suffolk.
- 9.2 Experience suggests with other DCO projects within Suffolk indicates, however, that drainage needs to be carefully considered along the cable routes. In particular, enough space needs to be left to accommodate drainage during construction.
- 9.3 Detailed consideration will need to be given along the cable routes to in particular, the interaction with watercourses.

Detailed comments

- 9.4 The Scoping has missed some water environment features/data sets; the data is public open-source on .gov websites or via Magic Maps
- Drinking Water Protected Areas (Surface Water) (England)

- Drinking Water Safeguard Zones (Surface Water) (England)
- Groundwater Vulnerability Map (England)

9.5 The Land Drainage Act consents required will come from SCC

10. SCC as Local Highways Authority

10.1 Although not primarily a transport scheme, recent experience with other DCOs suggests that a considerable amount of effort will be required to accommodate all of the undoubted transport-related issues that will arise. This is likely to include consideration of the following:

- access arrangements;
- workforce traffic;
- freight traffic;
- construction programme;
- management and controls;
- constraints;
- national cycle network;
- hazardous and dangerous loads;
- assessment of impacts;
- driver delay;
- pedestrian and cycle delay;
- pedestrian and cycle amenity;
- fear and intimidation;
- cumulative impact assessment, and;
- requirements.

11. SCC Landscape

11.1 SCC wishes to raise specific concerns around the following aspects:

- landscape character assessments;
- methodology;
- visualisations;
- viewpoint selection;
- management of impacts on the fabric of the landscape;
- cultural sensitivity and significance of the receiving landscape;
- treatment of designated landscapes;
- treatment of candidate landscape designations, and;
- cumulative landscape and visual effects.

12. SCC Property

12.1 No comments were received at the time of writing.

13. SCC Public Rights of Way (PROW)

- 13.1 Impacts, particularly during construction, must be adequately mitigated. There has been increased use of the PROW network since the original assessments were undertaken. Enhancements to the network may be needed to offset impacts.

14. SCC Public health

- 14.1 The impacts of the proposed development upon the health of local communities must be taken into account. Comments have been made in respect of the following specific chapters of the EIA scoping report:

- Environmental Impact Assessment Approach and Methods;
- Landscape and Visual;
- Biodiversity;
- Traffic and Transport;
- Air quality;
- Noise and vibration;
- Socio-economics, recreation and tourism;
- Health and wellbeing including electromagnetic field exposure (EMF);
- The proposed scope of the assessment, and;
- Cumulative effects.

15. SCC Planning

- 15.1 SCC would like to draw attention to the following issues:
- the consideration of Minerals Consultation Areas;
 - the discharge of requirements, and;
 - the scoping in of additional cumulative impacts.

Appendix A - Full copy of SCC responses

16. SCC Archaeology (Essex Place Services)

- 16.1 The following response is to the Bramford to Twinstead Project Development Options report dated March 2021 and the Scoping Report dated May 2021 in relation to its archaeological impact. It identifies the further work required to ensure that there is an appropriate understanding of the impacts of the scheme prior to the development being submitted as an application.
- 16.2 In summary, the proposed development will have various impacts on the archaeological deposits along its length. Those areas which will be most significantly impacted will be those identified for undergrounding and the areas of the pylon bases and sub stations. Following a recent historic environment meeting, it has been confirmed that the area of construction for the undergrounding will require a land take of approximately 100m in width. This can be compared to the land take for a six-lane road. Evidence from both the Suffolk and Essex historic environment records and the Scoping Report indicates this will impact on a landscape occupied from the prehistoric through to the modern period with a significant impact on archaeological deposits from the Late Prehistoric through to the medieval period.
- 16.3 The high potential for previously unknown multi-period archaeological sites is identified in the statement in 8.4.12 of the Scoping Report. Therefore it is important that a full assessment of the historic environment impact of the scheme, especially in the undergrounding areas, is presented to the Examining Authority within the Environmental statement.
- 16.4 Section 8.7-8.9 relates to the geo-archaeological work. Geo-archaeological and palaeo-environmental assessment will need to be undertaken for the whole route. Geoarchaeological deposits are not necessarily only associated with deeper layers, and we would expect to see a geoarchaeological assessment for the project. This should be undertaken by a suitably qualified specialist in this area, and they should review the borehole logs to determine the depth of deposits.
- 16.5 Section 8.7.10 of the Scoping Document indicates any intrusive evaluation is only undertaken by preconstruction. Considering the sensitivity of the heritage assets, particularly the below-ground archaeological deposits, this work needs to be undertaken to support the production of the ES. It is recommended that it is essential to have an understanding of the surviving below ground heritage assets, especially within the undergrounding sections at the ES stage, so that the full impact on the historic environment can be appropriately considered. Experience of linear schemes undertaken in the East of England has shown the major impacts, both on cost and time delays, that result from a poor understanding of the below-ground archaeological impacts, are a frequent occurrence. As such, it is recommended that a full programme of archaeological trial trenching is undertaken on the below-ground sections of the scheme to facilitate the

production of a mitigation strategy to be included with the ES for submission with the DCO.

- 16.6 It is unclear from the document if there has been an integrated approach to the historic environment, with the archaeology and historic buildings being considered within the historic landscape. Hedgerow assessments should be undertaken as part of the ES to identify those important hedges where directional drilling could be considered to minimise impact.
- 16.7 Under paragraph 8.6.14, protected lanes in Essex are not considered; however, these may suffer if realignment occurs to allow access for construction traffic and should form part of the dataset for consideration as part of this scheme.
- 16.8 The potential beneficial effects of the undergrounding described under 8.6.17 will need to be weighed against the potential impact of the below-ground archaeology destroyed and the changes in water levels in the areas of the cable corridor required, which will have a knock-on effect on neighbouring archaeological sites that may not otherwise be directly impacted. It is recommended that this is increased to a minimum of 500m from the central line.
- 16.9 The 250-metre study area for non-designated heritage assets identified under paragraph 8.7.5 is a concern as it may not allow the applicants to appropriately understand or assess the nature of the historic environment that will be impacted.
- 16.10 The present baseline data identified will require updating in some areas. This includes the aerial photographic report being assessed against new aerial coverage from Google earth in the last decade.
- 16.11 Also, in this period, the use of Lidar has become normal practice, and this should be incorporated with the aerial survey update.

17. SCC Ecology

Preliminary:

- 17.1 Any proposal before SCC must seek to deliver real improvements in habitat and management to secure enhancements for biodiversity. This is a critical tenet of SCC Policy and should be recognised as such.

Generally:

- 17.2 Until such time as more detailed mapping showing the route (including access roads, compounds, methods for, e.g., crossing watercourse and so on) is available, comments must be general and over-arching.
- 17.3 Once specific details are available, we must reserve the right to alter, amend and add to any comments made herein.

Data and Surveys:

- 17.4 SCC will expect the Applicant to undertake the fullest possible searches for information. We strongly recommend that Suffolk Biodiversity Information Service is contacted (not just at the outset but from time to time throughout the life of the project as new data is added frequently).
- 17.5 We expect all ecological survey work to be carried out by suitably trained and qualified personnel and refer to the latest guidance and best practice

throughout (we would particularly draw the Applicant's attention to CIEEM guidance in this respect). It shouldn't be necessary to say that surveys should be carried out at suitable times of the year for the target species and habitats of interest. A Zone of Influence (agreed with the relevant ecological stakeholders) should also be surveyed.

Mitigation Hierarchy:

- 17.6 The Ecological Mitigation Hierarchy of Avoid – Mitigate – Compensate – Enhance should be employed.
- 17.7 Avoidance: Strenuous efforts must be made in planning any project or development to avoid loss or damage to any ecological feature. These features are valuable in so many ways, not least in the ecosystem services that they offer.
- 17.8 Mitigation: If removal or cutting back of any feature is the only option available, then harm must be mitigated by undertaking the appropriate surveys for, e.g., breeding birds, bat roosts or other essential bat habitats, floral interest, and so on. Surveys must meet the appropriate guidelines for best practice (see, e.g., CIEEM website) and be carried out by suitably qualified and experienced personnel.
- 17.9 The application must explain how mitigation will address the likely impacts of the proposal and identify key timing issues to protect the biodiversity that may constrain the development. Mitigation proposals must be robust and likely to be effective.
- 17.10 It is expected that detailed mitigation proposals will be secured through appropriate planning conditions, e.g. a Construction Ecological Management Plan (CEMP) and the long-term management secured by way of a Landscape and Ecological Management Plan (LEMP).
- 17.11 Compensation: The loss of any natural feature must be compensated for. This means that, for example, if there is no alternative to removal of a mature tree, at least three appropriate (suitable species and provenance) trees must be planted elsewhere, as close as possible to the removed feature, two such trees for an immature specimen and one-for-one for saplings.
- 17.12 Enhancement: It is an SCC requirement that all projects and developments deliver Biodiversity Net Gain. The site must be surveyed to establish a baseline, and a Landscape Plan provided showing how Biodiversity Net Gain will be achieved. Such a plan must also show full details of monitoring and maintenance (including replacement where necessary).
- 17.13 By following the mitigation hierarchy set out above, it is to be hoped that developments will be delivered in the most sustainable way possible, always seeking to deliver the maximum gain for our wildlife and habitats as they are so vital to our health and wellbeing and an essential tool in tackling the declared climate emergency.
- 17.14 Some specific points:
- 17.15 Referring to the proposals of nearly ten years ago, we can recall concern over a number of specific areas:
 - Potential impacts on watercourses.

- Potential impacts on groundwater flows.
 - Potential impacts on ecological connectivity.
 - Potential impacts on the robustness of existing habitats.
- 17.16 In addition, the disturbance caused by access to the construction route, the haul road, and associated features may well include noise, light, dust, air quality, and similar environmental factors. SCC Ecology Team will expect to see all of these features assessed in the light of the potential receptor species and habitats.
- 17.17 As an example, the siting of sealing end compounds cannot be dictated by civil engineering requirements alone. These features are likely to cause considerable negative impacts, and sensitive siting, informed by detailed ecological advice, will be required.

Mitigation:

- 17.18 As mentioned above, once there is a clear understanding of the actual route, and there has been sufficient ecological survey effort, A Construction Ecological Management Plan (CEMP) or similar document will be anticipated. It is expected that ecological stakeholders will be fully consulted, and their relevant comments and requirements included in such a plan.
- 17.19 A key ecological principle will be an undertaking by the Applicant to employ the narrowest practical swathe of vegetation clearance and consequent disturbance and destruction through Suffolk's countryside in order to deliver the power line. This is likely to be scrutinised very closely indeed by the ecological stakeholders.

Compensation and Enhancement:

- 17.20 SCC will expect the Applicants to present the fullest understanding of how habitats under threat from the proposal function, not just under the cable route but within a Zone of Influence to be agreed with ecological stakeholders. This will inform how compensatory habitat will be delivered.
- 17.21 In 2012, SCC asked for an Environmental Improvement Fund to plant, e.g., community woodlands, general tree planting, and wildlife habitat enhancement. Since the adoption in December 2020 by SCC of a Biodiversity Motion, a measurable enhancement to habitats will be required. This may include hedgerow reinforcement, watercourse restoration, enhancing and expanding management of existing woodlands, and so on. More details on this point can be offered once the route is clear. SCC will be particularly concerned to see the re-establishment of ecological connectivity as an underlying tenet of delivering enhancement in line with the Lawton Principles of "more, bigger, better and joined up".

Biodiversity Net Gain:

- 17.22 An exemption from providing this, the situation could change before the application is submitted (currently expected to be in late 2022) and it would therefore be prudent on a precautionary basis for the ES to include an assessment of how biodiversity net gain (at least 10%) could be achieved. SCC notes (and welcomes) that Vol. 1, para 7.3.8 states that NGET has a

target to seek 10% biodiversity net gain on its projects and SCC will certainly expect this to be addressed.

Detailed Comments

17.23 We also have some further detailed comments.

- Wherever the Applicant wishes to rely on old data and surveys, they must, in each and every case, give a full rationale and explanation to satisfy the requirements of the CIEEM Guidelines on the validity of reports.
- Aiming for 10% Biodiversity Net Gain is a minimum.
- The Applicants refer to a couple of Suffolk Wildlife Trust Reports regarding certain mammals (Dormouse, Otter and Water Vole) from 2021 and links to the full versions of those SWT Reports are required.
- We agree with the overall sentiment expressed at Vol. 1, Para 7.7.3 that "...the direct effects of electricity reinforcement projects ... are generally confined to the construction period..." but this will depend on the robustness of the CEMP and the ability of contractors to adhere to the advice and recommendations of the Ecological (rather than Environmental) Clerk of Works...
- Regarding the Vol 2 Appendices (the plans and diagrams), the scale is insufficient to accurately determine the route, impacts upon natural features and how the most sensitive features (such as mature trees and watercourses) can be retained by, e.g., micro-siting of the cables.
- Generally, the lists of Ecological Receptor Features seems to be in order (subject to the ongoing survey work, of course).
- We need to see more details regarding the various surveys they are currently undertaking and proposing to undertake as well as how the applicant will avoid potential harm to Protected Species and Habitats within the proposal footprint during operations (although I'm sure this information will be forthcoming).

Conclusion:

17.24 The SCC Ecology Team will be keen to work closely with the Applicant to assist in delivering all of the above. It will support measures that result in the conservation of biodiversity.

18. SCC Economic Development

18.1 Chapter 15 identifies the potential socio-economic, recreation and tourism consequences of the project during construction and operation.

18.2 At this point in the process, workforce numbers are currently unconfirmed. Therefore, any areas that workforce will impact upon cannot be scoped out of the Environmental Statement as there is not enough information to make an informed decision. This will include:

- Effects on Tourist Accommodation During Construction
- Effects on the Local Economy During Construction
- Effects on Local Businesses, Jobs and Employment During Construction
- Effects on Planning and Development During Construction
- Effects on Community Services During Construction and Operation

- Effects on Tourism and Recreation During Construction

- 18.3 The Environmental Statement should consider the impact and opportunities the development may place on the local labour market. It should set out clearly the expected number and nature of employment opportunities during each phase of the development. It should relate this to the availability of labour in the area and identify how any mismatch between supply and demand will be addressed.
- 18.4 Furthermore, the wider study area, particularly for labour market impact, should consider a wider travel to work radius for residential workers. This is alongside a supply chain assessment that would identify local supply for construction and operation, being conducted over a far greater geography, ensuring areas such as Ipswich and Lowestoft, where a significant supply chain supporting other infrastructure builds, is located. Maximising the use of local and regional supply chains should be a priority for the applicant.
- 18.5 Consideration needs to be given to the potential impact of any reliance on a mobile workforce for the availability of tourist accommodation. The spending patterns of a transitory labour force would be quite different to those of tourists; thus, this might jeopardise trade for other related tourist businesses, such as restaurants and visitor attractions.
- 18.6 In all cases, the impact of this project must be considered alongside others in the region – particularly other Nationally Significant Infrastructure Projects. For example, East Anglia Hubs onshore construction and Sizewell C.
- 18.7 It is acknowledged that the likely demands on the workforce and the supply chain are likely to be less than those of other infrastructure projects in the region. However, it is vital that the workforce assessment considers the different demands on the different phases of the project and assess these cumulatively with other potential major construction projects.

Tourism

- 18.8 A large proportion of tourist trips are likely to be associated with the natural and historic beauty of the area as a whole. Therefore, it is more relevant to consider the extent to which the impact of pylons in the landscape detracts from the environmental quality for recreational activity more broadly and the perception and propensity of people to visit the area.
- 18.9 Although it is proposed to scope out tourism in terms of likely significant impact as a topic area in its own right, it should be covered in the Cumulative Impacts Chapter, where intra-project cumulative effects are assessed. The Environmental Statement needs to consider the perception and propensity negative impact upon tourism from the negative cumulative impact set out in chapters:
- Landscape and Visual
 - Historic Environment
 - Traffic and Transport
 - Air Quality

- Noise and Vibration
- Socio-Economics, Recreation and Tourism

Detailed Comments

- 15.3 - Wider study area too small – SCC considers that the study area is unlikely to adequately reflect travel to work patterns for construction workers for infrastructure projects and needs to be clearly justified or extended.
- 15.4 - Very limited data sources, no reference to key regional economic strategies and no reference to Destination Management Organisation information, for example
- 15.6.9 – Cannot include Tourism Economy in with Effects on the local economy during operation, need to be split and remain as two separate areas examined separately.
- 15.6.11 – Indirect economic effects on local businesses shouldn't be addressed individually through direct compensation as there are more effects that have a wider impact than individual impact. There is a need to ensure that the effects on all local businesses are assessed, for example see Appendix 3.
- 15.7.1 – Chapters on Socio-Economics and Tourism need to be included in the ES. They cannot be scoped out as suggested previously as have not been examined thoroughly either as stand-alone or within the inter-project cumulative assessment as set out above.

19. Joint Emergency Planning Unit

- 19.1 There are no significant impacts or effects anticipated which would impact on our emergency response plans or our ability to respond to any emergencies or incidents.

20. SCC as Lead Local Flood Authority

- 20.1 The Scoping has missed some water environment features/data sets, the data is public open source on .gov websites or via Magic Maps
- Drinking Water Protected Areas (Surface Water) (England)
 - Drinking Water Safeguard Zones (Surface Water) (England)
 - Groundwater Vulnerability Map (England)

- 20.2 The Land Drainage Act consents required will come from SCC.

21. SCC as Local Highways Authority

- 21.1 Notice is hereby given that Suffolk County Council (SCC), as one of the relevant highway authorities, make the following comments relating to the National Grid Scoping Report BT-JAC-020631-550-0002-EIA issued in May 2021. Whilst the Scoping Report provides information on the high-level emerging proposals for the scheme, limited information is provided on

highway and transport matters, particularly the potential scale of impact, access arrangements and routeing.

- 21.2 On this basis, Suffolk County Council, as highway authority for the majority of the length of the scheme, are providing comments on the information provided and the details that we would encourage the Applicant to provide as part of future submissions, and comments on the proposed assessment methods. The additional details that are requested would help in our ability to comment and to address our concerns. The comments below should be considered together with those from Essex County Council and Highways England for locations where they are the relevant highway authority.

Access Arrangements

- 21.3 The highway authority will need to understand the proposed access arrangements for constructing the cable corridor, cable sealing end compounds, temporary construction compounds or site offices and preparatory work such as archaeological or ground investigations. This includes an understanding of required visibility and vehicle swept paths in order to provide safe turning movements in/out of each access. This may require relevant speed surveys to understand visibility requirements or potential temporary speed limit changes to reduce impacts on hedgerows etc. The Applicant should identify what highway powers they will be incorporating within the DCO. It is clear how permanent and temporary restrictions on the highway (including rights of way) are to be implemented.
- 21.4 Details of the connection of the access tracks or crossing points will need to be provided to show that they are safe to use, with the need for an adequate length of the access road that is of a suitable width to allow two vehicles to pass safely and that this is not obstructed by gates preventing vehicles leaving the public highway. The access roads will need to be designed to prevent the trafficking of mud and debris or the flow of water onto the public highway.
- 21.5 Concerning paragraphs 12.7.8 and 12.7.9 for the construction access points and routes and paragraph 4.1.4 concerning temporary minor amendments to the existing highway network, SCC would welcome early discussions concerning this as we are yet to understand the full impact so therefore cannot comment at this stage aside from on general constraints on the local highway network, as set out below in the constraints section of our response.
- 21.6 Any temporary accesses specifically for the construction accesses would need a technical approval by the highway authority, potentially using a Minor Works Licence; details are here. www.suffolk.gov.uk/planning-waste-and-environment/planning-and-development-advice/. Scaffolding over the public highways (4.5.6) would likewise require technical approval.
- 21.7 Paragraph 4.5.26 indicates that local road crossings would be ducted in order to avoid a full road closure. A number of the roads crossed are narrow. The proposed half and half-width construction will not be possible without temporary widening of the carriageway, potentially requiring removal of hedges or trees. The LHA preference is for the use of trenchless technology where practical. The extent of these closures needs to be understood by

the relevant highway authority. SCC may require relevant Protective Provisions with regards to any works on the highway.

Workforce Traffic

- 21.8 As part of future submissions, evidence should be provided outlining the:
- Peak daily number of workforce and vehicle movements;
 - Average daily workforce numbers and vehicle movements;
 - The profile of workforce numbers and vehicle movements for the construction activities;
 - Origin of the workforce;
 - Staff shift patterns, including evidence where appropriate, especially where this affects the assessment of traffic impacts;
 - The measures that will be used to reduce single-occupancy vehicle trips to the construction site, including monitoring and enforcement;
 - The level of and management of on-site car parking and potential monitoring of fly parking.

Freight Traffic

- 21.9 As part of future submissions, evidence should be provided setting out the following:
- Consideration that was given to transporting freight traffic by rail;
 - The peak number of daily HGV construction movements (including movements to/from each access and along each link);
 - The average daily number of HGV construction movements to the site (including movements to/from each access and along each link);
 - The profile for the requirements for the transportation of construction materials over the duration of the project, including that for temporary works such as installation and removal of haul roads;
 - Operational HGV traffic;
 - Routeing of HGV traffic;
 - The proposals that are in place to limit the impact of HGV movements on the local highway network such as restricting working hours;
 - Origin/destination of HGV movements, including the location of temporary construction areas or site offices;
 - The peak number of daily LGV movements;
 - The average number of daily LGV movements;
 - Numbers of anticipated abnormal loads and abnormal indivisible loads;
 - Routeing of anticipated abnormal loads and abnormal indivisible loads;
- 21.10 Here is the link for the SCC website concerning abnormal loads.
<https://www.suffolk.gov.uk/roads-and-transport/lorry-management/apply-to-move-abnormal-loads/>

Construction Programme

21.11 The scoping report indicates that the project would be constructed between 2024 and 2028 and that not all of the works would occur at the same time., information should be provided on the expected programme for construction, including the duration of individual construction activities and the potential for overlap so that the traffic impacts can be understood. It should be made clear where any conclusions regarding impacts are based on the length of construction activities and their 'temporary' nature. This would include preparatory work such as utility diversions if applicable. It may be possible to utilise the Suffolk County Transport Model in the Transport Assessment to forecast baseline traffic flows and a reasonable trip distribution, as it may be difficult to gather suitable survey data in the current C-19 situation; however, this is dependent on the data that is proposed to be used.

Management and Controls

21.12 Section 12.5 sets out the proposed embedded management measures, which include a Construction Traffic Management Plan (CTMP). As suggested, relevant controls, monitoring, and enforcement measures will need to be put in place to ensure that all HGV movements do not exceed those assessed within the relevant Development Consent Order submission and supporting documents, such as the Transport Assessment and Environmental Statement. This will need to include the ability to monitor HGV numbers and routeing to/from each site access through an appropriate delivery management system, such as through the use of GPS. The reporting system should include appropriate communication with the highway authorities and should make all reports publicly available.

21.13 Controls and monitoring will be needed on the HGV fleet used to ensure that it is compliant with EURO VI standards as indicated in the Code of Construction Practice submitted in Appendix 4.1.

21.14 The submission should include relevant management documents in the form of:

- As referenced, a Construction Traffic Management Plan: to set out the details, limits and methods, for controlling and monitoring freight traffic to/from the site;
- A Construction Worker Travel Plan: to set out the details, limits and methods, for controlling and monitoring workforce numbers and traffic to/from the site, as well as encouraging and enabling sustainable travel practices;
- An Access Management Plan: to set out details of the proposed access arrangements;
- An updated version of the Code of Construction Practice (submitted in Appendix 4.1).

21.15 SCC will not accept any assertions that a transport impact assessment is the worst case that does not rely on relevant management, controls, monitoring and enforcement, e.g. any assumptions that underpin the worst-

case assessment need to be monitored and controlled in order for it to be ensured it is a worst-case.

Constraints

21.16 The transportation network surrounding the site is rural in nature, with all roads being single carriageway, often single lane but generally narrow with limited opportunities for passing slow-moving vehicles or pedestrian facilities. These can have a disproportionate impact on the local highway network.

21.17 Whilst this list is not aimed to be exhaustive, specifically as the list excludes minor roads that may be used for access; the below represent a number of locations within Suffolk where potential constraints may exist:

National Cycle Network

21.18 The study area includes two routes on the National Cycle Network (NCN), which include both on-road and off-road sections, and impacts on these routes need to be considered within the assessment. NCN 13 is in Essex, and so ECC would provide appropriate commentary. NCN 1, which includes a section in Suffolk, passes broadly east west using unclassified roads between Hadleigh and Ipswich, crossing the Scoping Boundary at the Hadleigh Railway Walk.

21.19 A1071

- Access to the A1071 requires using the A14 junction 55 'Copdock', the A1214 / Scrivener Drive roundabout and the A1214 / A071 signal junction, all of which have capacity constraints.
- The Wolsey Grange Planning Permission (B/15/00993 and DC/19/05738) is a Two-Phase mixed-use development and includes works at a number of junctions, with a brief summary provided below.
- A1071 / B1113 /Swan Hill roundabout enhancement (B15/00993)
- A1071 / Poplar Lane traffic signal control junction (DC/19/05738 / under construction)
- A1071 / Hadleigh Road traffic signal control junction (DC/19/05738)
- A1071 / A1214 traffic and signal traffic control enhancement (DC/19/05738 under construction)
- A1214 / Site access (new traffic signal control access – start date of July 2021)
- A1214 / Scrivener Drive / Tesco Roundabout junction.
- The carriageway narrows at Burstall Bridge approximately 1km east of Hintlesham, restricting two-way vehicle movement for large vehicles.
- The community of Hintlesham includes properties on either side of the road and includes a school and a signalised crossing facility.
- There are a number of speed restrictive bends, particularly to the immediate west of Hintlesham.
- Being an evolved road, many of the minor junctions connecting to the A1071 do not meet current design criteria, such as for visibility.

- Parts of the A1071 have or have had a history of collisions resulting in injuries. Areas of concern have been Burstall to Hintlesham, the bends south west of Hintlesham and the A1071 / A134 junction, although the frequency and location of road collisions fluctuates.
- A1071 / A134 junction has a capacity constraint.
- There are a number of properties on the A1071 at Boxford.

21.20 A134

- The A134 creates severance between a small number of properties to the west of the A134 at Nayland.
- The A134 passes through the community of Newton, where there are either narrow or an absence of footways and causes severance through Newton.
- The A134 forms the outer arterial route for Sudbury; this is a built-up area and includes the presence of high numbers of vulnerable road users and associated crossing facilities.
- Outline planning permission has been granted for a 1,150-dwelling development, with other uses, at Chilton Woods north of Sudbury (Planning Reference: B/15/01718)
- Being an evolved road section of the A134 and particularly minor junctions are not designed to modern standards.

21.21 A131

- A131 passes through Sudbury, including Sudbury Market Hill (King Street), which is a built-up area with large numbers of vulnerable road user movements; there is on-street parking, numerous turning locations, properties in close proximity to the highway, and a pinch-point at A131 Cross Street to the north of the bridge over the River Stour restricting two-way traffic flow. An Air Quality Management Area has been declared on Cross Street in Sudbury.
- The A131 / B1508 / Newton Road roundabout junction has a capacity constraint.

21.22 B1508

- This road passes through the built-up area of Great Cornard.
- To the south towards Bures, the road is more rural in character, narrow with bends and poor forward visibility. Due to past road safety concerns, most sections are subject to speed restrictions.
- Th B1508 through Bures is constrained by buildings, a number of which are listed and overhang the road. Footways, where present, are narrow and in places constrained by bollards protecting buildings from vehicle strikes.

21.23 B1068

- The B1068 / Brick Kiln Hill junction Boxford has a road collision history.
- The minor road between the B1068 and A1071 Boxford passes through Stone Street, where the carriageway is narrow and forward visibility reduced due to the built environment. Even limited numbers of light vehicles meeting head-to-head create delays, and there is a record of damage to buildings by vehicles.

- There is an 18-tonne with exemptions weight limit on the B1068 from the junction with the A134 to past Stoke By Nayland.
- The B1068 passes through the community of Stoke By Nayland. There are properties on either side of the community, many listed and within a conservation area with limited and often no footway provision (particularly on the southern footway).
- Although subject to a 20mph speed limit, the B1068 and joining minor roads are narrow; often, single lane and forward visibility can be poor. Damage to historic buildings with frontages directly onto the carriageway has been recorded on a number of occasions.
- Between Stoke by Nayland and Thorrington Street, there are narrow canyon sections where vehicles cannot pass easily.
- There are a small number of properties on either side and with direct access to the B1068 at Thorrington Street.
- The B1068 passes through the community of Higham, which has properties on either side of the road and either an absence of or narrow footways throughout.
- The carriageway narrows through Higham limiting two-way traffic flow, and there are a number of properties with frontages directly onto the carriageway.
- The B1068's junction with the A12 includes a short entry slip onto the A12, which does not conform to current design standards.

21.24 B1070

- There are restrictions, with exemptions, on the B1070 for HGVs over 7.5 tonnes into Layham and through Hadleigh.
- The slip roads joining the B1070 to the A12 do not comply with modern design standards.
- There are properties on either side of the B1070 and narrow or even an absence of footway provision through Holton St Mary, with a small number of properties that access directly onto the B1070 to the north of the community.
- The B1070 passes through the community of Raydon. There are properties on either side of the community with limited and sometimes no footway provision. There are a number of properties with frontages onto the B1070.
- The B1070 passes through the community of Upper Layham. There are properties on either side of the community with limited and sometimes no footway provision.
- The B1070 passes through Hadleigh, which is a built-up urban environment with on-street parking, pinch-points, crossing facilities, numerous turning points, and at points narrow footways. There are a number of properties with frontages onto the B1070. Benton Street, in particular, is a constrained environment with a history of complaints regarding vehicles mounting footways, non-compliance with the weight limit, delays and damage to listed buildings.

21.25 B1113

- From A14 junction, the B1113 passes through Great Blakenham, which is reasonably built-up and includes properties on both sides and the junction with Gipping Street (Hackney's Corner) into Great Blakenham with properties on both sides. There is a considerable commercial area to the south and east of Great Blakenham. There are generally footways provided on both sides of the road.
- The B1113 passes through Baylham, which includes a small number of residential properties and businesses.
- The B1113 passes through Needham Market, which is a built-up urban area with facilities on both sides of the road. Along the B1113, there are generally footways provided on both sides of the road, although these are sometimes narrow. There are bus stops and facilities on either side of the road. The B1113 connects to the B1078 at Needham Market.

21.26 B1078

- The B1078 passes through Needham Market. There are footways generally on the western side and at points both sides of the B1078 in Needham Market, with facilities on either side of the road, as well as on-street parking. There is a restriction, with exemptions, on HGVs over 7.5 tonnes north of the B1078's junction with Grinstead Hill. Grinstead Hill includes a footway along one side of the road with a small number of residential properties along it.
- The A14 and A140 can be accessed via the B1078, although this is constrained by a low bridge susceptible to vehicle strikes and flooding.
- The B1078 passes through the communities of Barking and Barking Tye. There are properties on either side of the community. At points, there is footway provision along one side of the road, with pedestrians required to walk on the verge for significant stretches. The communities include a small number of facilities.
- The B1078 causes severance to a small number of properties to the south of Ringshall.
- The B1078 passes through Nedging Tye. There are properties on either side of the community with a small number of properties with frontages onto the B1078, with narrow and limited footway provision.
- B1078 connects to the B1115 at Bildeston. The B1078 through Bildeston includes some footway provision, with properties on both sides of the road.

21.27 B1115

- The B1115 passes through Bildeston and includes properties on both sides. There is a footway on both sides of the road; however, they are often very narrow. There are a number of properties with frontages directly onto the B1115.
- The B1115 passes through Chelsworth, which has properties on both sides, with some properties with frontage directly onto the highway. There are no footways at points, and there are facilities along the route.
- The B1115 connects to the A1141 to the south of Bildeston.

21.28 A1141

- There are a small number of properties along the A1141 to the south of the B1115.
- The A1141 connects to the A1071 north of Hadleigh to the A134 and Bury St Edmunds to the north west. The A1141 passes through the medieval town of Lavenham via Water Street, which is narrow and flanked by a number of Grade 1 listed buildings.

Hazardous and Dangerous Loads

- 21.29 Further clarification is needed over the potential for and the number of Abnormal Indivisible Loads or abnormal loads that are expected to be generated by the proposed development. Including by relevant categorisation as follows:
- STGO Category 1
 - STGO Category 2
 - STGO Category 3
 - Special order movements.
- 21.30 Once vehicle numbers and routeing are known, any relevant junction capacity assessments should be agreed upon with the relevant highway authority.
- 21.31 Paragraph 12.6.9 sets out the Applicant's proposed method for determining those roads where the impacts of temporary road restrictions would be considered. This is not currently agreed as the scale of the impact on driver delay on a low traffic link might have a significant negative effect on the person using that link depending on the length of time it occurs for and may have an adverse quality of life impact.
- 21.32 As set out in paragraphs 12.6.16 and 12.6.17, the traffic impacts of operation are proposed to be scoped out; this is not agreed upon until further information and detail on the scale of these impacts is understood.

Assessment of Impacts

- 21.33 It is recognised that establishing a baseline for existing traffic movements is problematic during pandemic conditions, that it could be a significant period of time post-pandemic before traffic patterns return to 'normal' and that 'normal' might be very different to pre-pandemic conditions. However, historic traffic flows may be able to be used to inform a baseline, assuming that relevant assessment has been undertaken looking at general traffic trends since those surveys were undertaken. We would look for the best available information to be used to determine traffic baselines. It may be helpful to utilise the Suffolk Transport Model in the Transport Assessment to establish existing traffic flows and an acceptable trip distribution, as it may be difficult to gather suitable survey data in the current C-19 situation.
- 21.34 To note, concerning Paragraph 12.4.12, the Valley Ridge winter sports resort (formerly known as 'SnOasis') is committed development, and this should be included in the assessment, where relevant. In preparation for the Transport Assessment, the Applicant is encouraged to liaise with SCC, Mid Suffolk District Council and Babergh District Council (for sites within

Suffolk) to identify committed developments that should be included within the modelling.

- 21.35 The Applicant should be aware of the DCO submissions for EA1N, EA2 and Sizewell C and what impacts these might have on SRN junctions in particular, as well as workforce locations, and consideration needs to be given to whether these developments should be treated as committed or in a cumulative impact scenario. While located on the east coast, there is the potential for the cumulative impact of construction traffic to become relevant at key junctions such as the A12/A14 Copdock Interchange.
- 21.36 The Applicant is aware that Highways England is considering improvements to the A120 (between Braintree and the A12 at Marks Tey) and the A12/A14 Copdock Interchange outside Ipswich. The Applicant should discuss with Highways England whether any of these schemes should be treated as committed or within a cumulative assessment, and these impacts should be considered with regards to workforce availability and location, as well as transport impacts.
- 21.37 Concerning paragraph 12.7.5 for count data to be factored up to a 2019 baseline using growth factors derived from the DfT National Trip End Model. This method should be agreed with SCC & ECC as it will depend on the age of the data and what other potential data exists. For assessment of the development year, consideration needs to be given towards when the project could be delivered and what is the worst-case assessment on this basis.
- 21.38 With regards to paragraph 12.7.9, SCC would welcome early discussions concerning the extent of the study area, sensitivity of routes and the routing of construction vehicles, as we are yet to understand the full impact, so, therefore, are limited in the extent to which we can comment at this stage.
- 21.39 In terms of the scoping of affected roads in 12.3.3, this is caveated by consideration of AILs on the wider network and concentration of construction traffic at specific locations such as ports or quarries where not included within extant permissions or cumulative impacts in combination with permitted or proposed NSIPs.
- 21.40 While scoping out of the SRN (12.6.8) will primarily be a matter for Highways England as LHA, we would consider that the road safety impacts where the local road network interacts with the SRN should not be scoped out.
- 21.41 The Council would require clarification of the context of scoping out temporary road restrictions and traffic management (12.6.09). The wording implies this is in relation to the transport assessment, presumably also the environmental statement. The LHA would welcome discussion on this but makes it clear that the appropriateness and acceptability of road or rights of way closure is a matter of discussion once details are known. For example, significant closure of the A1071 would not be acceptable to the LHA. Likewise, SCC does not agree with the comments made regarding scoping out of public rights of way (12.6.14) until evidence is put forward to the authority to satisfy it that there are no adverse impacts.

- 21.42 The LHA would be interested to know the Applicant's definition of HGV. Recent DCO's (Sizewell C, EA1(N) and EA2) have classified all goods vehicles exceeding 3.5T as HGVs for assessment purposes. The LHA would also consider schools, care homes or other significant concentrations of vulnerable highway users as being of high sensitivity, along with uses that would encourage reasonable levels of local movement by vulnerable road users.
- 21.43 With regards to paragraph 12.7.9, the relevant highway authority should be consulted at as early an opportunity as possible regarding any identified requirements for physical changes to accommodate construction HGVs and AIL movements. As set out above, relevant caps and controls will need to be included in the Construction Traffic Management Plan and Construction Worker Travel Plan to ensure that the impacts assessed within the Environmental Statement and Transport Assessment are not exceeded during construction by the development.
- 21.44 With regards to paragraph 12.7.16, It is expected that potential traffic impacts will be minimised through encouraging construction workers to use appropriate traffic routes, and increasing vehicle occupancy, and promoting the use of sustainable transport, as per good practice and reflecting national policy on sustainable development.
- 21.45 Once additional information is available on development impacts, any locations where traffic impacts are scoped out should be agreed upon with the relevant highway authority.
- 21.46 Any mitigation measures that are identified (12.7.29) should be through discussion with the relevant highway authorities.
- 21.47 The categorisation of the sensitivity of links should be agreed upon with the relevant highway authority. This should include a plan showing the links identified for the assessment and the proposed sensitivity of these links. The proposed method for determining sensitivity is not agreed, as it reflects a highway scheme and not the traffic for a construction project and IEMA guidance should be used as a starting point, taking into consideration LA112, but it will require further discussion. Clearly, as indicated in the descriptions above, there are a number of highly sensitive locations in the immediate area. On that basis, potentially smaller impacts may have a disproportionate effect.
- 21.48 When assessing environmental impacts related to vulnerable road users; consideration should be given to:
- The public perception of the transport network, especially, but not limited to, when regarding impacts on severance.
 - The existing baseline use for HGVs, light vehicles and vulnerable road users.
 - The existing baseline facilities (e.g. presence and width of footways).
 - The in-combination effects of numerous impacts – especially with regards to noise, vibration, air quality, and rights of way.
 - If impacts on vulnerable road users are dismissed based on that, they are predicted to occur outside of an hour when vulnerable road users would be

utilising the road network. Impacts need to be understood during those hours when vulnerable road users would be utilising the road network.

- Locations where small changes in traffic flows would result in a different categorisation of impact, which subsequently presents a risk to the conclusions of the assessment.

21.49 The proposed methodology for assessing traffic impacts is not agreed upon, whilst LA112 is recognised as a document for assessing some environmental impacts of road schemes specifically, it is not considered appropriate for considering all of the environmental impacts of road traffic for a construction project, as an example, it does not consider amenity. The assessment method should include consideration of the Guidance of Environmental Assessment of Road Traffic, as well as other relevant literature and should have the aim of minimising the risk of failing to identify impacts; however, all metrics should be agreed with the relevant highway authority.

21.50 With regards to Paragraph 12.2.10, the assessment needs to identify both the hour of greatest congestion on the highway network for assessment of capacity and the hour of greatest change for assessing environmental effects. Consideration will need to be given to how relevant worker shift patterns might affect any conclusions.

21.51 With reference to paragraph 12.7.19, consideration of impacts should not just consider total vehicles but the proportional change in HGVs.

21.52 Comments are provided below regarding some specific areas for assessment.

Severance

21.53 The existing levels of severance on each link should be determined so that a baseline level of severance can be presented.

21.54 All areas where a 10% change in traffic flows occur should be identified, and those areas that require further assessment on this basis should be agreed upon with the highway authority.

21.55 Consideration needs to be given to how severance is assessed within DMRB document LA112 and in Guidance on Environmental Assessment of Road Traffic. For clarity, the changes between traffic flows that result in a low, medium, and high impact are not agreed, as they are limited and are assumed figures rather than having been tested.

21.56 The methodology should assess impacts on different groups that are present (e.g. young, disabled and elderly).

Driver Delay

21.57 Impacts on driver delay should be assessed with regards to impacts associated with:

21.58 Traffic management associated with the scheme, including diversion of utility apparatus.

21.59 Highway capacity.

21.60 Increase in large numbers of slow-moving vehicles.

Pedestrian and Cycle Delay

21.61 The baseline level of pedestrian and cycle movement should be determined.

Pedestrian and Cycle Amenity

21.62 Justification will be needed for the method for assessing impacts on pedestrian and cycle amenity and how the method will actually assess the relative pleasantness of any journey that is affected by the development. Consideration should also include rights of way where increases in traffic may impact routes crossing roads used by construction traffic.

Fear and Intimidation

21.63 Consideration should be given to the baseline characteristics and the existing level of fear and intimidation based on existing traffic flows.

Cumulative Impact Assessment

21.64 The Project's study area is 10km from the site; for the majority of environmental assessment areas, this may be applicable; however, for transport effects, major developments outside of this area can still have cumulative effects, especially at major transport interchanges, such as A14/A12 Copdock, or on the availability (therefore origin and destination) of the workforce.

21.65 Consideration needs to be given as to what major developments needs to be considered on this basis, particularly in the light of the number of NSIP projects that are occurring on the East Suffolk coast and potential impacts on the available workforce within Ipswich, for example.

21.66 The issues identified with the assessment methodology above would apply to any cumulative assessment undertaken.

Requirements

21.67 Where SCC is the relevant Local Highway Authority, SCC will look to protect its role to enable it to discharge its legal duties and protect itself against future liabilities. This may be through a legal agreement with the applicant, planning obligations, DCO requirements, specific clauses of the management plans within the DCO or by the inclusion of protective provisions.

22. SCC Landscape

Baseline landscape character

22.1 In Suffolk, the principal landscape baseline is the [Suffolk Landscape Character Assessment \(2008/2011/2019\)](#). This has informed both the [BMSDC Landscape Guidance \(2015\)](#) and the Managing a Masterpiece

LCA prepared in 2009¹, which covers the entirety of the Dedham Vale AONB and Stour Valley Project Area.

- 22.2 Therefore, the assessment of the impact on the baseline character will need to be informed by these two Landscape character assessments and the BMSDC landscape Guidance. It is suggested that the Suffolk LCA provides the overarching framework and that understanding of the baseline is further informed by reference to the BMSDC Guidance and Managing a Masterpiece Study; this latter study provides significantly greater detail regarding the local character and historic development of the landscape, within the AONB and the Stour Valley project area.

Methodology

- 22.3 The following points are noted.
- 22.4 Para 6.8.7 identifies the additional sensitivity and expectations of viewers in the AONB; it is essential that this distinction is carried through to the assessment, although the distinction is not entirely clear in Table 6.2.
- 22.5 The methodology for LVIA does not systematically identify **receptor groups** and assign a sensitivity to them. Receptor Groups and their sensitivity will need to be agreed upon with relevant consultees prior to the EIA being undertaken. Likewise, the sensitivity of components of the receiving landscape is not systematically set out in the methodology for agreement. It would be preferable for these to be agreed, such that they can also inform the PEIR. See para-6.7.18.
- 22.6 Table 6.5 and para 6.6.14 scopes out significant effects on the project during construction and operation at night. Whilst this initially appears to be reasonable, in the absence of further information regarding the size and location of any construction laydown areas and the operating hours of these, particularly outside of the summer, when **lighting** may be required in the morning and afternoon for safe operations, additional assessment of construction lighting may be required in due course.
- 22.7 Para 6.9.2, Meeting 3rd March 2021 regarding Scope of LVIA; Suffolk CC was not invited to this technical meeting; furthermore, subsequent comments by SCC and discussions around these issues are not reflected in this scoping document nor, it would appear, are any post-meeting comments of the other participants that may have been made.
- 22.8 Table 6.5 **Views - road users** - The proposal to scope out road users assumes both that road users equate to car users, cyclists and horse riders are not considered, nor is it considered that parts of the road network are identified as a promoted route, *Quiet Lane, restricted Byway or Byway Open to All Traffic* etc.
- 22.9 Furthermore, whilst it is accepted that car drivers, and perhaps passengers, have lower sensitivity than other road users, the approach proposed here to scope these out entirely is not consistent with the approach outlined at

¹ https://suffolklandscape.org.uk/wp-content/uploads/2020/09/Core_Document_MaM_LandscapeCharacterStudy.pdf and https://suffolklandscape.org.uk/wp-content/uploads/2020/09/Stour_Valley_Historic_Landscape_Study.pdf

para 6.8.7, “*many receptors experiencing views from locations within Dedham Vale AONB may be defined as ‘high’*”. It is suggested that car drivers, particularly visitors to the AONB, will be more sensitive and cannot, therefore, be reasonably included within visual effects on communities, as set out at para 6.6.20. Therefore, the proposal to consider road users solely as part of a communities receptor group is not acceptable.

- 22.10 Likewise, in terms of scoping out the **rail users**, at para 6.6.21, of the Sudbury Branch line, it should be noted that this line is marketed as the *Gainsborough Line*, <https://www.scenicrailbritain.com/lines/gainsborough-line> and promoted by the Community Rail Network <https://communityrail.org.uk/> as a scenic route, with funding from the UK Government. Therefore, it would not be reasonable to scope rail users out.
- 22.11 See also appendix 6.3 para 5.2.2 of the applicant’s scoping report; furthermore, the proposed approach to road and rail users does not appear to be consistent with para-6.16 of GLIVIA 3.
- 22.12 **Sequential visual effects** (see, for example, table 7.1 p131 GLIVIA3) do not appear to be specifically considered in the proposed methodology. Given the scale and repetitive nature of this project in its design and layout, combined and sequential visual effects are likely to occur on some routes and in some locations. These will need to be identified and assessed.

Visualisations

- 22.13 The approach to visualisations as set out in appendix 6.4 appears likely to be broadly acceptable; however, there is a lack of detail in some areas. It is noted, for example, that the proposed enlargement factor is not set out. Furthermore, although SCC understands it has been discussed elsewhere, the approach to annotated viewpoint photography, as opposed to photomontages, is also not clear.
- 22.14 Therefore, In the absence of the provision of samples and/or further clarifications, the PEIR visualisations will be reviewed and any technical issues identified. These will need to be resolved prior to the preparation of the EIA.

Viewpoint selection

- 22.15 6.7.13 - 6.7.15 It is noted that the proposal set out here is to select and agree on **representative viewpoints** to inform the assessment of effects on receptor groups. However, it is considered that in accordance with para 6.19 of GLIVIA3, both **specific and illustrative viewpoints** will also need to be agreed, with the Local Authorities and other relevant consultees. This will ensure that particular issues are properly identified and assessed by the LVIA, in addition to the more general representative views and receptor groups.
- 22.16 Therefore, whilst the emerging approach to viewpoint selection is acceptable for the s42 (PEIR) consultation, SCC reserve the right to ask for further or amended viewpoints prior to preparation of the EIA that will support the DCO application.

- 22.17 It is noted that photographs for viewpoints/ photomontages will need to be reshot in winter to ensure the reasonable worst case is illustrated and assessed in the EIA.

Management of impacts on the fabric of the landscape

- 22.18 Appendix 6.5 is noted in respect of Arboricultural issues and BS5837. This requires a detailed review by the relevant LPA tree officers. However, in addition based on the experience of similar projects elsewhere in Suffolk, a comprehensive approach to important hedgerows under the Hedgerow Regulations 1997 will be required. This should identify all hedgerows along the routes that are important under the various historic, ecological and designation related criteria under the regulations as set out in [Section 3](#) and [Schedule 1 of the Regulations](#). Furthermore, all hedgerows along the route to be removed to facilitate construction should be surveyed in detail in advance to inform specific and appropriate planting schemes for their restoration as well as mitigation for the adverse ecological impacts caused by their temporary loss as mature features in the landscape.
- 22.19 Additional impacts are also anticipated due to the creation of construction access and laydown areas, so these areas will also need to be considered.
- 22.20 In addition, the overhead lines are expected to create localised adverse impacts on canopy cover, veteran trees and expose retained trees to windthrow risks because of the need to facilitate required wayleaves. These effects and the permanent loss of trees from within the cable corridors is likely to leave visible and significant localised effects on the visual amenity of the landscape and its character that will require effective mitigation for both their landscape and ecological impacts.

Cultural sensitivity and significance of the receiving landscape

- 22.21 In addition to the specific cultural heritage receptors that will need to be considered as part of the EIA, the applicant will also need to consider the cultural significance of the AONB, the Stour Valley, and other locations within the study area such as, for example, the Brett Valley. It is notable that in 2013 NGET had committed to assessing the impacts on **cultural associations** as part of the LVIA. They have done so again in 2021 at para 8.7.3; however, this will form part of the Cultural Heritage Assessment.
- 22.22 It is considered that, in accordance with GLIVIA3 at para 5.20 bullet 5, findings of the cultural heritage assessment in respect of **cultural associations** should inform the LVIA in terms of Landscape Value. Therefore, the relevant landscape specialists will need to be closely engaged with this work.
- 22.23 Attention is drawn to the [2013 Scoping Report](#) in paragraph 5.6.2
- 22.24 *“An evaluation will be made of the importance or value of key features and character, including the consideration of cultural associations, the condition or quality of the landscape and also its capacity to accommodate a particular development without significantly affecting its character. An evaluation will also be made of the magnitude of effect that would be experienced by the landscape as a result of the proposed development.”*

- 22.25 It is SCC's preferred approach that these wider cultural associations form part of the LVIA as previously agreed. If not, then it is essential that landscape consultees understand how cultural associations will be researched and their significance assessed. Furthermore, a clear explanation is needed as to how these findings will inform the LVIA, given the importance cultural associations have to the significance and value of the landscape of the study area.
- 22.26 In respect of the role of Cultural Associations in determining landscape value, the publication on the 26th May 2021 of [TGN 02-21 Assessing the Value of Landscapes Outside National Designations](#) is noted. This appears likely to allow the effective incorporation of cultural associations into consideration of landscape value, which would be consistent with the approach previously agreed with the applicant in 2013.

Treatment of designated landscapes

- 22.27 In addition to consideration of the landscape and visual effects on the AONB and the relevant cultural associations, the applicant should also consider and assess the impact of the proposed development on the Natural Beauty and Special Qualities of the AONB as set out in <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Natural-Beauty-and-Special-Qualities-and-Perceived-and-Anticipated-Risks-Final-Report-July-2016-1.pdf>.
- 22.28 In addition, the applicant should also consider issues of setting, including with reference to <https://www.dedhamvalestourvalley.org/wp-content/uploads/2020/12/Development-of-Setting-of-Dedham-Vale-AONB-Revised-2016.pdf>.
- 22.29 Finally, it is suggested that there should be consideration of the extent to which the proposal may undermine the statutory purposes of designation, that is, for "Conserving and Enhancing the Natural Beauty" of the AONB. As set out in s82 of the CROW Act 2006 <https://www.legislation.gov.uk/ukpga/2000/37/section/82>.

Treatment of candidate landscape designations

- 22.30 At para 5.4.3 of the scoping report, the applicant has inadvertently misrepresented the discussion of designated landscapes in GLVIA3, stating that; "*GLVIA3 recognises that designated landscapes do not necessarily have high sensitivity, particularly if they lie to the edge of a designated area.*"
- 22.31 What GLVIA3 says, at para 5.4.7, is that "on the margin of, or adjacent to such a designated area, thought may be given to the extent it represents the characteristics and qualities that have led to the designation of the area".
- 22.32 In this instance, it is considered that areas at and beyond the margin of the designated area of the AONB do indeed represent the characteristics and qualities of the designated area. This is set out in detail in [Special](#)

[Qualities of the Dedham Vale AONB Evaluation of Area Between Bures and Sudbury](#) 2016.

- 22.33 It is suggested that this nominated AONB extension area and its setting should be treated for the purposes of LVIA and EIA more generally, in a way that is consistent with the treatment of the Nominated World Heritage site in the Lake District. In the scoping report for the proposed [North West Coast Connections Project](#), it is stated, at para 3.58, “The applicant should assess the potential effect on the nominated Lake District WHS”. SCC is strongly of the view that the AONB nominated area, with its supporting evidence, is appropriate for similar consideration.
- 22.34 The value and sensitivity of the Stour Valley project area as a whole can also be usefully understood by reference to, *Valued Landscape Assessment Stour Valley Project Area*, (March 2020) <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Final-Report-Stour-Valley-Project-Area-Valued-Landscapes-Assessment.pdf>

Cumulative landscape and visual effects

- 22.35 Potential cumulative landscape and visual effects, particularly at and around the Bramford substation site, with a suite of other energy connection and generation projects, has not been considered. Details of these projects are available from BMSDC, the Local Planning Authority and are set out in the [Network Options Assessment 2021](#), specifically the projects identified as AENC and ATNC therein.

23. SCC Property

- 23.1 No comments were received at the time of writing.

24. SCC PROW

- 24.1 SCC PROW section comments are as follows:
- Confirmation of accurate GIS data detailing the Public Right of Way network will be required from the County Council’s Definitive Map team to ensure all routes are identified correctly.
 - Clarification is required of the management of the Public Right of Way network during the construction phase. Details are required of construction access that affects the Public Rights of Way network and the potential impact on the use of the network by construction traffic.
 - If closures to the Rights of Way network are essential, then alternative routes should be provided. To ensure the network is available for the majority of the construction of the scheme, a phased approach to any closures should be adopted, and routes should only be closed for a minimum period when works require it.
 - There is an increase in the use of the Rights of Way network since original assessments were undertaken. With an increase in use by approximately 75% over the last 14 months by the public. This has resulted in greater demand on the network, with more people utilising the asset for health and well-being. Consideration needs to be given to the impact of the development on the local community and non-motorised access between

settlements. Enhancements should also be sought to areas of high use, particularly close to village centres, connecting settlements and within the AONB.

25. SCC Public Health

Comments on specific chapters of the EIA scoping report

- 25.1 Important wider determinants of health include the quality of the environments we live in, access to services and socioeconomic factors such as employment. We have therefore provided general comments on all chapters in the scoping document relevant to human health, in addition to the approach and methods chapter. Where relevant, we have included references to specific paragraphs in the document below.

Environmental Impact Assessment Approach and Methods

- 25.2 We would expect Public Health England (PHE) to be consulted on the proposed methodology for the EIA. We would recommend a review of the document *Health in Environmental Assessment, a primer for a proportionate approach*² and using this to help present the information on the determinants of health relevant to the project.
- 25.3 5.5.1: Given reporting of the direct and indirect significant effects on population and human health are outlined as a specific section of the EIA regulation 2017, we would expect to see a chapter in the Environmental Statement (ES) on Human Health in addition to an assessment on the impact on human health for each of the other topic chapters within the ES

Landscape and Visual

- 25.4 6.6.18 and 6.6.19. Given the importance of access to nature and green space on human health, it is welcome that the ES will include an assessment of the impact on views for both local residents and visitors to the area. We would suggest a reference to health and wellbeing are included in this chapter of the ES, including as assessment of any disruption to residents and visitors accessing viewpoints and AONB. We would encourage that as far as possible, mitigations such as natural screening from tree planting are put in place to limit the impact on views of the natural landscape. Additionally, it is essential that access to Public Rights of Way to access viewpoints and AONB are maintained as far as possible or alternatives put in place during the construction phases of the project.

Biodiversity

- 25.5 As with access to green space, contact with nature and wildlife has been shown to significantly benefit human health and emotional wellbeing. We would therefore suggest that a reference to health is made in this chapter of the ES.

² Cave, B., Fothergill, J., Pyper, R., Gibson, G. and Saunders, P. (2017) *Health in Environmental Impact Assessment: A Primer for a Proportionate Approach*. Ben Cave Associates Ltd, IEMA and the Faculty of Public Health. Lincoln, England. Available: www.academia.edu/43935454/Health_in_Environmental_Impact_Assessment_A_Primer_for_a_Proportionate_Approach

Traffic and Transport

- 25.6 12.1.2 Given the importance of physical activity and outdoor leisure for health and wellbeing, temporary closures and diversions of PROW may negatively impact the health of local residents and visitors. It is crucial that safe, accessible diversions to PROW are put in place ahead of existing routes being closed for construction work, and these are advertised to the local population.
- 25.7 Table 12.2. We welcome the inclusion of vulnerable travellers in the assessment criteria for determining the sensitivity of receptors, and their needs should be taken into account when diversions etc., are put in place.
- 25.8 Table 12.4. Given the importance of physical activity and likely measures to increase population participation in walking, cycling and other outdoor leisure pursuits over the construction period, we would suggest that the impacts on PROWs are scoped into the ES.

Air quality

- 25.9 We welcome that sensitive receptors have been included in the proposed assessment methodology.
- 25.10 However, until the CEMP has been developed and reviewed, we consider all areas relating to Air Quality should be scoped into the EIA. This is particularly important for dust and other matter generated during construction, as during particularly dry spells as this could have an increased impact on surrounding areas.
- 25.11 Although Appendix 4.1 GG10 states, “Any activity carried out or equipment located within a construction compound that may produce a noticeable nuisance, including but not limited to dust, noise, vibration and lighting, will be located away from sensitive receptors such as residential properties or ecological sites where practicable”– Dust and other matter generated during construction can travel significant distances and when combined with current levels could pose a significant risk. Moving the issue away from an area is not a measure to manage it, and this will not be possible in every instance.
- 25.12 We would suggest that the proposed scope of the assessment does include the operational vehicle emissions, construction generators and construction dust in order to better inform the cumulative assessment with other projects in the area.

Noise and vibration:

- 25.13 We would expect to see a report of baseline noise levels in the local area in order to be able to assess the impact of increased noise levels as a result of the project.
- 25.14 We would expect to see an assessment of the impact of noise on sensitive receptors in the surrounding area and suggested mitigation for negative impacts.

Socio-economics, recreation and tourism

- 25.15 Given the importance of this area for outdoor leisure and tourism activities, we would suggest the ES sets out plans to mitigate negative impacts on access routes.
- 25.16 15.5.3 Given the potential negative impacts on the local community of this project during construction and the health impacts of perceived risk (see below), we would encourage that the environmental statement includes details of the plans to communicate construction works and PRow's closures to the local population to mitigate against this impact.
- 25.17 If socio-economics, tourism and recreation are not to be included as a chapter within the ES, we would suggest that access to green space is a focus of the 'Health and Wellbeing' chapter of the document.

Health and wellbeing including electric and magnetic fields (EMF)

- 25.18 PHE released guidance in 2013 regarding the health effects of exposure to electric and magnetic fields, and we would suggest this is reviewed and references in the ES ³.
- 25.19 Given the scale of the project, we would expect the EIA to include a chapter covering human health, the content of which we have outlined under 'proposed scope of the assessment' below; some of the content of this chapter has previously been included in the 'Socio-economic tourism and recreation' chapter of the EIA.
- 25.20 For topics discussed in the human health chapter, we would expect an assessment of whether there is any effect on human health, whether the effect is significant, and if adverse effects are identified, mitigation methods outlined.

Proposed scope of the assessment

- 25.21 We would expect to see a human health chapter including the following background information:
- Summary of local population size and demographics, and any projected changes in population size over the course of the construction and operation
 - Mapping of sensitive receptors and community assets
 - Inclusion of baseline health data, including factors that influence population sensitivity: inequalities, access to resources, health status, age structure
 - A reference to health priorities for the local area as outlined in the Suffolk JSNA⁴, and an assessment of whether the project impacts on these priorities.
 - Summary of the impact on factors that influence health, including physical activity, journey times and/or reduced access, employment

³ Public Health England, 2013 <https://www.gov.uk/government/collections/electromagnetic-fields>

⁴ Suffolk County Council 2019. Suffolk JSNA, State of Suffolk 2019 Report. <https://www.healthysuffolk.org.uk/jsna/state-of-suffolk-report>

- PHE has determined that perception of risk can influence health outcomes, including mental health and emotional wellbeing. We would therefore expect to see the perception of risk as a topic included in a health chapter of the environmental statement and mitigation outlined. Factors influencing the perception of risk include uncertainty, clear communications and engagement with the local population by providing information in accessible formats.
- Following an assessment on the impacts of health, we would expect to see conclusions of the impact on health for the general population in the areas and any relevant sub-populations

Cumulative effects

25.22 We welcome the intention to include an assessment of the cumulative effects on health from this project and others.

Conclusion

25.23 As stated above, we would expect to see a chapter on human health and wellbeing within the EIA, to include some of the content of the 'Socio-economic, tourism and recreation' chapter of the scoping report.

26. SCC as Planning Authority

26.1 Comments upon Scoping Report Volume 1: Scoping Report

- Paragraph 1.5.1 outlines the potential for "Transboundary Effects" and identifies none. However, the implications of the grid with continental interconnectors has not been considered.
- Paragraph 10.6.15 "Effect of Minerals Deposits" noted in respect of Layham Quarry but should also refer to Minerals Consultation Areas as defined in the Suffolk Minerals & Waste Local Plan.
- Section 19 Environmental Management and Mitigation refer to the post consent period. During this period, requirements will need to be discharged, and SCC would expect to discharge those requirements that refer to Highways, Public Rights of Way, Archaeology and Floods in accordance with the statutory responsibilities.

26.2 Comments upon Scoping Report Volume 2: Appendices

- Appendix 1.1 the transboundary implications of the grid with continental interconnectors has not been considered.
- Appendix 2.2 Local Planning Policy paragraph 2.1.3 reference site M5 Layham Quarry and Policy MP10 are noted.
- Appendix 18.1 Cumulative Effects Assessment Long List Table – Large projects beyond the 10km Zone of Influence have the potential to have cumulative effects in terms of electricity grid links, highways, skills and tourism, for example. This would include all DCO and non-DCO energy projects as well as other large projects including potable water pipelines and urban developments within 50km.

26.3 Comments upon Scoping Report Volume 3: Figures

- n/a

Appendix B – AONB Response



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Dedham Vale AONB & Stour Valley Team response: Bramford to Twinstead Scoping Report Consultation (Issue number: BT-JAC-020631-550-0002-EIA) Views endorsed by AONB Chair.

Thank you for consulting the Dedham Vale Area of Outstanding Natural Beauty (AONB) and Stour Valley team on the Environment Impact Assessment (EIA) Scoping Report for the reinforcement of the transmission network between Bramford to Twinstead.

The AONB team response has been prepared jointly by Beverley McClean (AONB Planning Officer) with the support of Simon Amstutz (AONB Manager) and endorsed by the AONB Chair, Cllr Nigel Chapman.

The response focuses mainly on sections 6 (Landscape), 7 (Biodiversity), 8 (Historic Environment), 15 (Socio economics, Recreation and Tourism) and 19 Environmental Management and Mitigation of the Scoping Consultation report. Sections are reviewed below.

This response is summarised as:

- The Scoping report largely describes the project, its access arrangements and associated developments accurately.
- That the scope of the assessment in relation to the historic environment, impacts on local economy and wildlife could be widened, particularly in relation to the Stour Valley project area..
- The proposed methodologies of assessing impacts are broadly acceptable but some further engagement with the AONB would be welcome.
- The evidence base should be widened to include elements suggested in the AONB Partnership's response to the non-statutory consultation.
- That the AONB Partnership, despite not being a statutory consultee, should be further engaged in any future works relating to assess the impacts and

development of proposals to minimise the impacts on the AONB and Stour Valley project area.

The Proposal

The AONB team generally consider the description of the project, as described in the Scoping Report as accurate. It is the AONB teams understanding that the project consists of the elements listed below.

The Development Consent proposal will involve the reinforcement of the network with a new 400 kilovolt (kV) electricity transmission line over a distance of 27km (16.7 miles), the majority of which will follow the general alignment of the existing overhead line network.

The reinforcement will be a combination of overhead line (conductors) and underground cable. It is proposed that approximately 25km of existing overhead line could be removed (25km of existing 132kV overhead line between Burstall Bridge and Twinstead Tee, and 1.5km of the existing Bramford-Braintree-Rayleigh 400kV overhead line to the south of Twinstead). To facilitate the overhead line removal a new grid supply point (GSP) substation is proposed at Butler's Wood, south of Sudbury, in Essex.

The Indicative Alignment runs roughly parallel to the existing Bramford to Pelham 400kV overhead line and follows the existing 132kV line for the majority of the route.

Approximately 25km of the existing 132kV overhead line would be removed as part of the project, including approximately 3km within the Dedham Vale AONB and a further 5.4km within the Stour Valley.

The project comprises the following principal components:

Construction and operation of a 400kV electricity transmission reinforcement between Bramford Substation and Twinstead Tee comprising:

- Installation of c.19km of 400kV overhead line.
- Installation of c.56 new steel lattice pylons (c.50m tall); and
- Installation of c.8km of 400kV underground cables.
- The realignment of the existing 400kV overhead line to the north and west of Hintlesham Woods, to facilitate the use of the existing swathe through the woods by the new 400kV line.
- Construction and operation of four CSE compounds (including permanent access roads), namely CSE Compound Dedham Vale East, CSE Compound Dedham Vale West, CSE Compound Stour Valley East and CSE Compound Stour Valley West.
- The removal of approximately 25km of the existing 132kV overhead line and supporting pylons between Burstall Bridge and Twinstead Tee.

- The removal of approximately 1.5km of the existing 400kV overhead line and supporting pylons between Twinstead Tee and the proposed CSE compound at Stour Valley West.
- Construction and operation of a new 400/132kV GSP substation (including
- Permanent access road) at Butler's Wood, to the west of Twinstead, and associated works (including new underground cables) to tie this into the existing 400kV and 132kV networks.
- Temporary overhead line diversion from 4YLA005 – 4YLA003 to allow the building of the proposed CSE compound at Stour Valley West.
- Temporary land to facilitate construction, which would include construction compounds, haul routes and laydown areas.
- Temporary minor amendments to the existing highway network to facilitate construction vehicles.
- Environmental mitigation and enhancement, including tree planting.

The AONB team acknowledge that the current alignment under consideration is indicative only at this stage and may be subject to change.

Geographical Scope

Paragraph 1.3.4 states

‘The Scoping Boundary includes parts of the Dedham Vale Area of Outstanding Natural Beauty (AONB), which is designated as an exceptional example of a lowland river valley. The landscape comprises a broadly flat plateau dissected by several river valleys. These give rise to lower-lying valley areas surrounded by areas of higher ground. The river valleys run in a broadly northwest–southeast direction and include the Rivers Brett, Box and Stour.’

Paragraph 1.3.4 of the Scoping Report makes no reference to the Stour Valley project area that abuts the Dedham Vale AONB. The Stour Valley project area extends upstream of the AONB, following the River Stour, forming the boundary between Essex and Suffolk. The Stour Valley project area is a well-established recognisable area and has been subject to local authority funding for over 30 years and subject to a management plan agreed by a wide range of partners from around 2001.

The Stour Valley project area covers 302 square kilometres (around 181 square miles) from the AONB boundary at Wormingford, it extends westwards towards Steeple Bumpstead and Haverhill and northwards towards the Great Bradley on the Cambridgeshire border. It extends 3-4 km kilometres either side of the River Stour with extensions along the Bumpstead Brook, Belchamp Brook and River Glem.

The Stour Valley project area does not benefit from the same level of statutory protection as the Dedham Vale AONB, however as recognised in the Dedham Vale AONB and Stour Valley Management Plan 2016-21 (and soon to be published 2021-

26 version). Parts of it exhibit many of the similar characteristics as the neighbouring nationally designated landscape.

The AONB Partnership, a grouping of around 25 organisations with the purpose to act as a champion for the area, has had an aspiration to include part of the Stour Valley project area within an extension to the Dedham Vale AONB since 2009. This is discussed further under Section 6 of this response.

The Stour Valley project area is also considered to be a Valued Landscape.

Paragraph 170(a) of the National Planning Policy Framework states that planning policies and decisions should contribute to and enhance the natural and local environment by: 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).

The AONB Partnership commissioned a Valued Landscape Assessment Report for the Stour Valley project area (Farmer 2019) to provide evidence about the special qualities that make it a Valued Landscape.

The Scoping Boundary includes land within the potential AONB extension area and the Stour Valley project area, both of which could be directly or indirectly impacted by the reinforcement of the network between Bramford to Twinstead.

Section 1.3 of the Scoping Report should therefore be amended to reference the Stour Valley project area for accuracy.

2. Regulatory and Planning Policy Context

The AONB team broadly concurs with the Legislation, Policy and Guidance included in section 2.2 of the Scoping Report (paragraphs 2.2.1 - 2.5 2.5.9) but makes the following points.

2.4 Countryside and Rights of Way Act (2000)

The AONB team welcome the reference to the Countryside and Rights of Way Act (2000) in paragraph 2.4 of the Scoping Report.

Section 85 of the Countryside and Rights of Way Act (2000) places an explicit duty on relevant authorities to have regard to the purpose of conserving and enhancing the natural beauty of an AONB when exercising or performing any function in relation to or so as to affect an AONB. The AONB team considers that this includes National Grid as a statutory undertaker.

This Section 85 Duty of Regard applies to all functions, not just those relating to planning and is applicable whether a function is statutory or permissive. It is applicable to land outside as well as within an AONB, where an activity may have an impact on an AONB. The requirement is to 'conserve and enhance' and both aspects are required to be addressed.

In relation to planning, the Duty of Regard applies in respect of both plan making and decision taking. It is good practice to consider the Duty of Regard at several points in the decision-making process.

National Grid should therefore provide written evidence in the Environmental Statement and in any other relevant documents to demonstrate how they have met or will meet their Section 85 obligations.

2.5 National Planning Policy Framework

The National Planning Policy Framework is referenced in paragraph 2.5 9 but there is no reference to the Planning Practice Guidance in section 2 of the Scoping Report.

It is acknowledged that the application for the Bramford to Twinstead project will be determined by the Planning Inspectorate, under the Nationally Significant Infrastructure Projects process, the AONB team consider that the Planning Practice Guidance, should be a material consideration in the Development Consent Order process, and what it has to say about development within the setting of nationally designated landscape.

The national Planning Practice Guidance published by Government provides amplification on the National Planning Policy Framework and explains key issues in implementing the policy Framework. The guidance regarding AONBs was updated in 2019. It recognises that where poorly located or designed, development within the settings of AONBs can do significant harm.

The Planning Practice Guidance (Paragraph: 042 Reference ID: 8-042-20190721) states:

‘Land within the setting of these areas often makes an important contribution to maintaining their natural beauty, and where poorly located or designed development can do significant harm. This is especially the case where long views from or to the designated landscape are identified as important, or where the landscape character of land within and adjoining the designated area is complementary. Development within the settings of these areas will therefore need sensitive handling that takes these potential impacts into account.’

National Grid must consider the full impacts on land within the setting to the AONB when developing proposals for the reinforcement of the power network between Bramford to Twinstead.

Dedham Vale AONB and Stour Valley Management Plan 2016-21

The Scoping Report makes no reference to the Dedham Vale AONB and Stour Valley Management Plan 2016-21, or any subsequent revisions as appropriate in section 2 of the Scoping Report

Section 89 of the Countryside & Rights of Way Act 2000 requires a Management Plan to be produced for each AONB. AONB Management Plans are statutory documents and should be given significant weight in decision making.

The Statement of Significance relating to the AONB in Dedham Vale AONB and Stour Valley Management Plan 2016-21 states:

'the area retains a rural charm and tranquillity and is largely free of infrastructure associated with modern life'

With regards the Stour Valley project area, the Statement of Significance States

'Much of the Stour Valley project area shares similar characteristics to the Dedham Vale AONB, particularly the area nearest the existing AONB'

Objective 3.2.6 of the Dedham Vale AONB and Stour Valley Management Plan 2016-2021 seeks to ensure that:

'Infrastructure is fit for purpose and does not detract from the qualities of the area including its relative tranquillity.

The AONB team consider that National Grid should give great weight to all the relevant objectives in the Dedham Vale AONB and Stour Valley Management Plan 2016-21 (and subsequent plans) when developing proposals for the reinforcement of the power network between Bramford to Twinstead.

The AONB team considers that if the above considerations are met then the applicant has considered the required regulatory and planning policy context in respect of the AONB.

Section 6. Landscape and Visual Impact (LVIA)

The AONB team consider that the LVIA should follow good practice as set out in GLVIA version 3.

In addition to assessing effects on the landscape (the landscape effects); and effects on views and visual amenity as experienced by people (the visual effects), the LVIA must also consider impacts on natural beauty, especially where the proposed route passes through the AONB.

Natural Beauty encompasses the following factors - landscape quality, scenic quality, relative wildness relative tranquillity, natural heritage features and cultural Heritage. The Dedham Vale's defined natural beauty and special qualities were assessed by a report commissioned by the AONB Partnership in 2016⁵. An assessment of the impact on the proposals on these indicators must be completed as part of the LVIA /EIA.

⁵ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Natural-Beauty-and-Special-Qualities-and-Perceived-and-Anticipated-Risks-Final-Report-July-2016-1.pdf>

As poorly located or designed development within the settings of AONBs can do significant harm (PPG 2019), the AONB team consider that National Grid should consider the full impacts on land within the setting to the AONB when developing proposals for the application.

The AONB team has produced a Position Statement on Development within the Setting of the Dedham Vale AONB. It does not define what constitutes setting in terms of physical distance from the AONB boundary.

In this instance the AONB team consider that the proposed 5km and 10km selected respectively for the Study Area and Zone of Theoretical Visibility mapping for the LVIA are appropriate to enable impacts within the AONB and within its setting and within the Stour Valley project area to be properly considered.

Paragraph 6.4.12 references the proposal to extend the Dedham Vale AONB.

The AONB Partnership has a long-held aspiration, communicated to Natural England as body that can recommend a boundary review to the Secretary of State in 2009 to include part of the Stour Valley project area within an extension to the Dedham Vale AONB.

The AONB Partnership commissioned a number of studies to support the extension to the AONB. This included the Special Qualities of the Dedham Vale AONB Evaluation of area between Bures and Sudbury Area⁶ (Alison Farmer Associates, 2016). This study identified an area that in the opinion of the consultant met the criteria for designation as AONB. The organisation with responsibility to develop AONB boundary reviews for consideration by the Secretary of State, Natural England, confirmed in March 2021 that the proposal for boundary variation was registered.

Lord Gardiner of Kimble, Parliamentary Under Secretary of State with responsibility for AONBs wrote to the President of the Dedham Vale Society (4 May 2021) and noted:

...proposals for the extension of the Dedham Vale AONB have not been formally assessed and that an extension has not, therefore, been ruled out for the future. I have also been assured that Natural England will communicate further with local proposers of National Park and AONB designations or variations in due course.

For these reasons, the AONB team urge, National Grid to take a precautionary approach and seek to meet corporate and social responsibility by treating the potential extension area as an AONB. As such, the EIA should assess the impacts of proposals on the natural beauty within the proposed AONB extension area.

⁶ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Special-Qualities-of-the-Dedham-Vale-AONB-Evaluation-of-Area-Between-Bures-and-Sudbury-Final-Report-July-2016.pdf>

The AONB team consider that the factors outlined above need to be considered in the scope of any assessment relating to the Bramford to Twinstead project.

Overview and Environment Baseline

The AONB team concur with the landscape designated information, landscape character descriptions and the information on Existing Environment and Views for the each of the sections defined within the project Section AB: Hintlesham, Section C: Brett Valley, D Polstead, E: Dedham Vale Area of Outstanding Natural Beauty (AONB) F: Leavenheath/Assington and G: Stour Valley.

The AONB team welcome some of the embedded measures set out in paragraph in 6.5.1 of the Scoping Report particularly proposals to underground the overhead cables in both the Dedham Vale AONB and the part of the Stour Valley project area that has been proposed as an extension to the AONB.

As outlined in the response to the non-statutory consultation (May 2021), the Dedham Vale AONB and Stour Valley Partnership understand current proposals include the following:

Polstead Heath: a new overhead line alignment to the south of the existing line (referred to as sec D)

Dedham Vale: a new underground cable section from Heath Road, Polstead Heath to Leavenheath (approximately 4km) (referred to as section E).

Leavenheath and Assington: a new overhead line alignment to the south of the existing line (referred to as section F)

Stour Valley an underground cable section from west of Dorking Tye to the Bramford-Braintree-Rayleigh overhead line south of Twinstead Tee (approximately 4km) Referred to as section G)

The AONB team supports the proposal to underground the new 400kV line where it crosses or negatively impacts the nationally designated landscape as overhead lines do not contribute to the statutory purpose of AONBs. The AONB team recognise that hidden archaeology as a defined feature of the AONB, namely part of its cultural heritage. Any proposals to underground transmission lines needs minimise any adverse impacts by selecting a route and method to minimise those negative impacts.

As undergrounding in the AONB and Stour Valley project area was already considered as appropriate before the project was paused, the AONB team does not consider there has been any material change to alter that decision, indeed further evidence has emerged for part of the Stour Valley project area meeting the criteria for AONB status.

The AONB team welcomes the ambition to minimise impacts from the transition infrastructure on the defined qualities of the AONB and Stour Valley project area as

per the Valued Landscape Assessment Stour Valley project area⁷ (Farmer, March 2020)

Transitions between underground cable and overhead lines in the setting of the AONB should not negatively impact on the purpose of the AONB.

The AONB team considers that the EIA should include an assessment of the overhead line between Leavenheath and Assington (section F) to determine if the undergrounding of this section would benefit the AONB through lessening visual impacts of lines viewed from the AONB and potential impacts of the Cable Sealing End Compounds.

The team also welcome that further measures will be embedded into the design of the scheme as the proposals for access roads, construction areas and compounds, new above ground infrastructure e.g. pylons, the proposed CSE (4) compounds and GSP substation are progressed.

To assist this please find a link to the Selection and Use of Colour in Development for the Dedham Vale AONB (Waygood, 2019)⁸ which will be useful when materials and colour finishes are being decided for equipment, security fencing etc.

The AONB team consider that with the addition of points outlined above, and the evidence base included in the AONB Partnership's response to the non-statutory consultation in May 2021⁹ the proposed baseline environmental considerations are acceptable.

Landscape-Related Designations

Paragraph 6.5.4 lists some key commitments to good practice in relation to the LVIA.

GG20 states 'Construction lighting will be of the lowest luminosity necessary to safely perform each task. It will be designed, positioned and directed to reduce the intrusion into adjacent properties, protected species and habitats.

The Scoping Report concludes (paragraphs 6.6.8 & 6.6.14) that lighting will be scoped out on the Environmental Statement. There is no anticipation of significant effects from lighting on designated landscapes or Landscape Character at night during the construction or operational phases of the project. This is because good practice measures have been embedded into the scheme design to manage light spill and because operational lighting required at the proposed GSP substation and CSE compounds will only be switched on when needed.

⁷ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Final-Report-Stour-Valley-Project-Area-Valued-Landscapes-Assessment.pdf>

⁸ <https://www.dedhamvalestourvalley.org/wp-content/uploads/2020/12/Dedham-Vale-Use-of-Colour-Guidance.pdf>

⁹ [AONB-Partnership-Response-Bramford-Twinstead-Non-Statutory-Consultation-May-2021.pdf](https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/05/AONB-Partnership-Response-Bramford-Twinstead-Non-Statutory-Consultation-May-2021.pdf) (dedhamvalestourvalley.org)

There is an aspiration to secure Dark Sky status for the Dedham Vale AONB. Construction and operational lighting must also be designed, positioned and directed to reduce light spillage negatively impacting the nationally designated landscape.

The proposal to scope in an assessment of both construction and operation landscape effects on the Dedham Vale AONB and its setting (paragraph 6.6.3) is considered appropriate.

Paragraph 6.6.5 proposes assessing the construction and operation landscape effects on the Stour Valley Special Landscape Area, Brett Valley Special Landscape Area, and Gipping Valley Special Landscape Area.

Babergh and Braintree Local Planning Authorities are moving away from Special Landscape Area designations and are relying more on Landscape Character Assessments as evidence. Any assessment of landscape effects on the Special Landscape Areas should draw on evidence from the relevant Landscape Character Assessments that cover each of the Special Landscape Areas.

Paragraph 6.6.4 proposes that the landscape and visual impacts on the Stour Valley project area will be scoped in and assessed under landscape character in the ES.

While it is acknowledged that the Stour Valley project area has no statutory protection, parts of it are considered to be a Valued Landscape and the Dedham Vale AONB and Stour Valley management plan 2021-26. The AONB team recommends that a precautionary approach is taken regards the assessment of the Stour Valley project area within the Scoping Boundary to ensure compliance with paragraph 170(a) of the NPPF.

The Valued Landscape Assessment Report for the Stour Valley project area is a high-level assessment. The study however offers a suitable methodology and the AONB recommend that this is used as a basis for completing a finer grain Valued Landscape Assessment of the project area that fall within the Scoping Boundary.

Table 6.5 summarises the Proposed Scope of the LVIA Assessment. The AONB team broadly concur with the issues identified to be scoped in and out of the Environmental Assessment.

Landscape Character

Paragraph 6.6.9 concludes that the construction and operation of the different elements of the project i.e. proposed 400kV overhead line, underground cables, CSE compounds, and GSP substation have the potential to impact on landscape character along the proposed alignment route.

The assessment of impacts on landscape character during the construction and operation is therefore scoped into the Environmental Statement, which is considered appropriate.

Views

The conclusions in paragraphs 6.6.14- 6.6.17 to scope out visual effects at night, impacts on views for all receptors outside the ZTV and visual effects on private views is considered appropriate.

Paragraph 6.6.18 concluded that the project has the potential to impact on the visual amenity of people living and moving around the area (communities).

One of the special qualities of the AONB is ‘the surprisingly long views from higher ground along the valley in an associated with large skies’

Proposals to scope in the construction and operation impacts on views from the community and from recreational receptors is considered appropriate. The proposed approach will need to ensure that impacts on the important long views referenced above are appropriately assessed.

6.7 Proposed Assessment Methodology

Site-Based Assessment Viewpoints

With regards to the selection of viewpoints (paragraphs 6.7.12- 6.7 -19), the AONB team would like the opportunity to review and comment on viewpoints being considered for use within the LVIA. This would enable the AONB team to ensure it considered the method acceptable.

Wireframes and Photomontages (paragraphs 6.7.20- 6.7 21)

The AONB team fully supports the proposal to include Wireframes and Photomontages in the LVIA. The team request that visualisations are also produced of transition infrastructure and towers to improve understanding around visual impacts. While lighting has been scoped out of the EIA, it would be helpful if a couple of night time images could be included just to evidence that light pollution from the development will not be significant or harmful to the AONB and Stour Valley.

Sections 7 & 8 Biodiversity & Historic Environment

Regulatory and Planning Policy Context

Para 8.2.1

Paragraphs 5.8.12 and 5.8.14 from Overarching National Policy Statement EN-1 have been considered. We consider that the following are also relevant and should be taken into account:

- Para. 5.8.11: In considering applications, the IPC should seek to identify and assess the particular significance of any heritage asset that may be affected by the proposed development, including by development affecting the setting of a heritage asset.
- Para. 5.8.13: The IPC should take into account the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the

contribution of their settings and the positive contribution they can make to sustainable communities and economic vitality. The IPC should take into account the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials and use.

- Para. 5.8.15: Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss.
- Para. 5.8.18: When considering applications for development affecting the setting of a designated heritage asset, the IPC should treat favourably applications that preserve those elements of the setting that make a positive contribution to, or better reveal the significance of, the asset. When considering applications that do not do this, the IPC should weigh any negative effects against the wider benefits of the application. The greater the negative impact on the significance of the designated heritage asset, the greater the benefits that will be needed to justify approval.

NPS EN-5 Electricity Networks Infrastructure also makes additional specific references to heritage assets and archaeology, including para 2.2.6 on factors influencing site/route selection by applicants for electricity networks NSIPs:

- Para. 2.2.6: As well as having duties under section 9 of the Electricity Act 1989, (in relation to developing and maintaining an economical and efficient network), developers will be influenced by 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.” Depending on the location of the proposed development, statutory duties under section 85 of the Countryside and Rights of Way Act 2000 and section 11A of the National Parks and Access to the Countryside Act 1949 may be relevant.

8.4 Existing Baselines

Data Sources

Para 8.4.1 The revised Design Manual for Roads and Bridges (2020) [8c51c51b-579b-405b-b583-9b584e996c80 \(standardsforhighways.co.uk\)](https://standardsforhighways.co.uk/8c51c51b-579b-405b-b583-9b584e996c80) states under Baseline scenario:

3.9 Where desk-based studies suggest that available information is inadequate for the purpose of the assessment, field surveys shall be undertaken to enhance the data CIFA Standards [Ref 1.], CIFA Field evaluation [Ref 3.] and CIFA Geophysics [Ref 4.].

3.9.1 In addition to national registers and local cultural heritage records, historical maps and aerial photographs, relevant books, journals, previous reports, LiDAR and geotechnical data may be consulted.

The NG Scoping Opinion Existing Baseline Data Sources listed at 8.4.1 call for the Suffolk HER and statutory list of listed buildings to be consulted but many of the other documents referred to are only available for Essex (Aerial Photographic Assessment and protected lanes). Babergh District Council does not have a district wide local list or adopted criteria, and therefore a more comprehensive set of documents to include Neighbourhood Plans should be included to ensure that the Suffolk section is not disadvantaged when preparing the baseline data.

The Dedham Vale and Stour Valley AONB Management Plan and the Alison Farmer Associates Valued Landscape Assessment Stour Valley Project Area (March 2020) should also be included as sources of information on cultural heritage.

8.6 Likely significant effects

Effects on the Setting of Historic Buildings during construction and operation

To be consistent with National Planning Policy Framework terminology (NPPF paras 193 – 196) an assessment of any ‘harm’ to the significance of the heritage asset should be recorded as either ‘substantial’ or ‘less than substantial’.

The AONB team does not wish to comment specifically on the detail of the proposed scope of the Ecological Impact Assessment for the project or the detailed methodology for assessing impacts on the Historic Environment.

The Dedham Vale AONB Management Plan 2016-2021 lists the following habitats and features as contributing to the special qualities of the Dedham Vale AONB

- Valley bottom grazing marshes with associated drainage ditches and wildlife
- Naturally functioning River Stour with associated tributaries, meres and historic river management features
- Semi natural ancient woodlands on valley sides with associated wildlife
- Traditional field boundaries intact and well managed

Areas of Outstanding Natural Beauty should be places of rich, diverse and abundant wildlife. Nature recovery is central to the conservation and enhancement of natural beauty.

The AONB team is fully committed to significantly increasing the scale and pace of nature conservation activity within the designated landscape.

In 2019, the 34 English Areas of Outstanding Natural Beauty made a collective Declaration on Nature in Colchester in 2019, known as the Colchester Declaration 2019¹⁰

The Colchester Declaration is a collective Declaration on Nature across AONBs, that sets out a strategy for change. It includes targets for nature recovery to redress the declines in species and habitats within the context of a wider response to climate change.

Included within the short-term targets are for each AONB to produce a Nature Recovery Plan but also some ambitious longer-term targets to aim for by 2030. These include:

- 200,000 hectares of SSSI's in AONBs – in favourable condition.
- 100,000 hectares of wildlife-rich habitat outside of protected sites will have been created / restored in AONBs.
- 36,000 hectares of new woodland will have been planted or allowed to regenerate in AONBs.
- Improve the conservation status of at least 30 species relevant to AONBs.

The Dedham Vale AONB Nature Recovery Plan

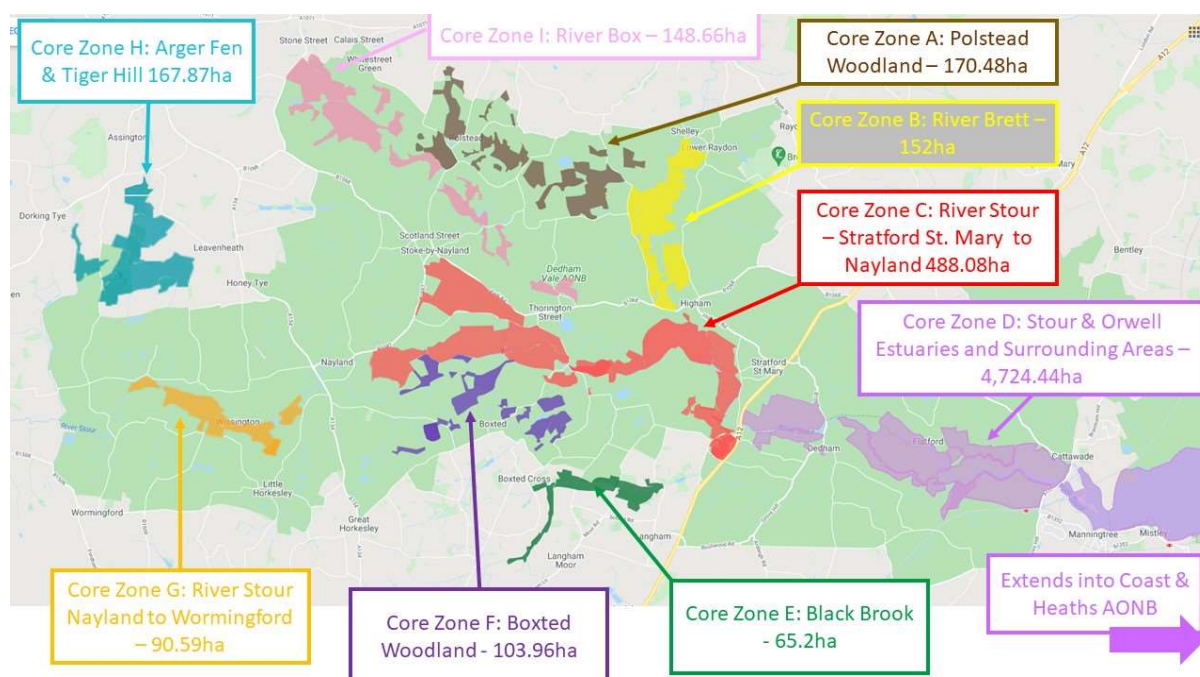
The developing plan has nine Nature Recovery Core Zones that have been identified. These core zones are made up of the largest connected expanses (in some cases fragmented) of wildlife rich sites and priority habitats within and connected to the AONB.

Four of the Nature Recovery Zones fall within or close to the current Scoping Boundary for the project and include Polstead (Zone A), River Brett (Zone B), Agar Fen and Tyger Hill (Zone 3) and River Box (Zone I).

These are shown in the Figure 1 below

¹⁰ <https://landscapesforlife.org.uk/projects/colchester-declaration>

Figure 1 – Nature Recovery Zones



As part of this work, Hazel Dormouse has also been chosen as the flagship recovery species for the Dedham Vale AONB.

Proposals should seek to prioritise avoiding damage to the key habitats and species that help define the character of and underpin the designation as AONB. Where they are impacted measures must be secured to mitigate any damage or loss. The AONB team welcome that National Grid will seek to deliver 10% Biodiversity Net Gain

Biodiversity mitigation measures should seek to support and deliver against the objectives of the Dedham Vale AONB Nature Recovery Plan and contribute to meeting targets in the Colchester Declaration 2019.

The AONB team considers that the impacts of the proposals should consider the impacts on wildlife and in particular the developing AONB nature recovery plan.

Historic Environment

With regards the Historic Environment the special qualities of the AONB are summarised in the Dedham Vale AONB & Stour Valley 2021-26 Management Plan as:

- Historic villages with timber framed housing and prominent churches
- Apparent and buried archaeology indicating millennia of human activity

In terms of Cultural Heritage, the special quality of the AONB is summarised as

- Iconic lowland river valley associated with the artist John Constable RA, the views he painted are still recognisable today

Many other artists are associated with the area. Thomas Gainsborough is particularly associated with areas of the Stour Valley.

Proposals should not adversely impact on these defining qualities and should seek to conserve and enhance them.

The AONB team consider that the scoping report should consider further the impacts on cultural heritage.

Section 15. Socio Economic, Recreation and Tourism

The Scoping Report concludes that the proposed project could cause direct effects to the local economy and local businesses, through severance or disruption to the accesses to businesses or due to traffic congestion caused by construction vehicles and potentially indirect effects due to loss of business.

A standalone socioeconomics, recreation and tourism chapter is not proposed for inclusion within the ES. This is because many of the contributory factors affecting socioeconomics, recreation and tourism during construction (visual, noise, dust and traffic) will already be considered within other chapters within the Scoping Report.

Also, given the type, temporary duration and level of potential construction phase effects, and recognising that any likely significant effects from the various topics will already be reported within separate chapters, it is not considered that additional separate reporting is required in the ES.

The Dedham Vale AONB and Stour Valley is a place to enjoy. The area offers many tourism, leisure, recreational and educational opportunities. The tourism industry relies on these opportunities which are vital to the local economy.

The identified tourism within the Dedham Vale AONB is worth £68M and supports 1,490 jobs (Volume and Value study 2020).

The landscape of the Stour Valley project area is recognised as making a significant contribution to the visitor economy in the area. It is worth £49M and supports 1,283 jobs. These figures are expected to grow substantially in future due to:

Significant investment in the attractions of the Gainsborough's House Arts Centre in Sudbury.

Increase in domestic holidays including visitors wishing to visit areas of cultural importance such as visit the Stour Valley which inspired Thomas Gainsborough,

John Constable and many other artists.

- EU LEADER funding in the Stour Valley to enhance the visitor facilities in the area.
- Recognition of the importance of enhancing personal health and well-being by undertaking informal recreation
- Increasing populations in surrounding towns, leading to larger potential audiences.

There has been a resurgence in interest in the Stour Valley landscape that has seen significant National Lottery Heritage Fund investment in Gainsborough's House museum which will contribute to further interest in the Stour Valley project area in terms of landscape quality and value to tourism. This follows on from LEADER funded work to enhance the Stour Valley for visitors. Both projects will contribute to the value of the Stour Valley for the visitor economy at a time when the domestic visitor economy is recognised as becoming more important.

The AONB team's primary concern is that more National Grid infrastructure within the AONB (Sealing End Compounds) and its setting, and across the Stour Valley project area (overhead 400kv overhead line and substations) will reduce the attraction of the area and the numbers of visitors.

In its response to the non-statutory consultation in May 2021 the Dedham Vale Area of Outstanding Natural Beauty (AONB) and Stour Valley Partnership identified a need for an assessment into what impacts the visitor economy. This need for such an assessment is re-iterated in this team response.

The AONB team considers that further assessment of the impacts on socio economic, recreation and tourism factors of the proposals are required to fully understand the impacts of the proposals.

Section 19. Environmental Management and Mitigation

While the EIA will embed good practice measures and mitigation for

the various subjects to be scoped into the EIA, the AONB team wish to inform National Grid about work already being supported within the AONB.

The Landscape Enhancement Initiative (LEI) funding is retrospective mitigation for existing National Grid infrastructure impacting on the AONB. The scheme seeks to support landscape-scale projects which reduce visual impact, improve visual amenity and enhance landscape character, generally within 3km of the National Grid lines.

In Dedham Vale, the team is currently working with the Stour Valley Farmer Cluster on a £600k funding application. Projects put forward in the Expression of Interest include enhancements to hedges, woodlands, pollards and orchards – fencing & water provision to support traditional grazing on pasture and grazing marsh – as well as works to some vernacular buildings.

Proposals coming forward through the Bramford - Twinstead should not undermine or compromise the work being implemented through the LEI scheme and should complement the LEI enhancements and enhancements that will be delivered through the Colchester Declaration and Nature Recovery Plan for the Dedham Vale AONB.

Within the Stour Valley project area, mitigations should also be informed by opportunities for enhancements included in the Valued Landscape Assessment Report for the Stour Valley project area.

The AONB team considers that further assessment of impacts in the Stour Valley project area could draw on the findings of this Valued Landscape Assessment.

Appendix C – County Councillor response

Dear Graham and Phil,

I attach below a copy of the email and previous correspondence back in 2021 re the National Grid Power line route though Boxford Fruit Farms sent to Bruton Knowles by Susanna Rendall today. The letter outlines the magnitude of the costs which could be incurred by the owner if NG decide to go through the fruit farm and not the diversion as indicated on the map. !!!

I would appreciate that the NG Environmental Scope Consultation document which SCC submits does make reference to this type of scenario and an indication of the additional potential costs incurred by NG if they do not by-pass the top fruit area and any future top fruit orchards planned by the Group.

Yours

James

James Finch

Suffolk County Councillor - Stour Valley Division



Dear Andrew,

Further to our conversation last week, I am attaching the plan sent to us by Patrick Irvine of Fisher German LLP in May 2013 . By the time that the National grid had suspended their development of the Bramford to Twinstead line, they had proposed their new route around our land to the south as their preferred option. I also enclose our letter commenting on this proposed routing in 2012.

To assist with this decision, the National Grid had also commissioned a report on the merits of going further north or south of our land either above or below ground, and the conclusion was that as we were in an AONB and with the huge costs associated with going directly through our land, it was better to reroute underground to the south as indicated in the plan.

Since this feasibility study was undertaken, the costs of taking the line across our land would now be much greater. I have outlined in red on the plan the northern boundary of additional land purchased since 2012. There would have to be a minor amendment following a re-survey of this. In addition there are now approximately 27 to 30 Hectares of new intensive planting not in existence in its current form in 2012, and new orchards planted since this plan was made on our existing land, that would now be effected. There has also been an increase in establishment costs of over 35% against those used in the study and an increase in yields . In addition the AD plant in existence in 2012 has now doubled in size with over 100% more in costs spent on the build , and income generated. In addition to this there

is the additional growth in the business undertaken by the Copella factory on the same site, with a commensurate increase in rental income to take into account.

There is also the consideration of the replacement of these orchards and businesses elsewhere. Unless the farmland is contiguous, with the necessary water required, an acceptable soil structure, located in a frost free area and close to main roads, it would be virtually impossible to replicate the productivity of the existing intensive plantations. Being located in an isolated area away from the existing core business would be totally counterproductive in all areas. Securing water licences on land that hasn't already got existing licences is virtually impossible. We have been in horticultural production here on this site for 80 years, so there is no reason that the infra structure involved in all these intensive orchards shouldn't last for at least another 40 years. The cost implications of this were not taken into account in the last study and therefore the costs of compensation would rise exponentially.

The National grid report should be on file, but I could send this to you if appropriate. This study would need updating should there be any thoughts about a further change of route to the one seen on this attachment.

I look forward to hearing from you with regard to the next steps in this process and sincerely hope that there will be no change to the proposed route sent in the attachment above.

Kind Regards,

Susanna
Susanna Rendall

Boxford (Suffolk) Holdings Ltd

Martin Davies
Lead Project Manager
Freepost
National Grid Connections

9 July 2012

Dear Mr Davies

Subject: Bramford to Twinstead Tee Connection Project

Further to your letter of 29 May seeking feedback on National Grid's Connection Options Report ('the Report') and the proposals for the new 400,000 volt connection between Bramford and Twinstead Tee, we are writing to provide our comments as the Shareholders and the Managers of The Boxford Group Limited who's subsidiaries include Boxford (Suffolk) Farms Ltd and The Stoke By Nayland Club Ltd, and also as residents in the area.

As owner/managers of a tourism business (The Stoke By Nayland Club Ltd) in the local area we would support, as previously written on this matter, the whole of the route being underground. However we acknowledge that given all the issues this is unlikely to be possible. Accordingly, we have instead focussed on the Study Areas which directly impact on our businesses, and personally, which are

- **Study Area E – Dedham Vale AONB; and**
- **Study Area F – Leavenheath/Assington**

and more specifically on proposed route (the Interim Alignment, per Figure 12 in the Report) between the compound locations immediate west of Boxford Fruit Farm (Location 3 on Figure 12) and to the south east of Sprott's Farm and east of the AONB boundary (Location 4 on Figure 12).

In summary we welcome the proposed route (between these locations) as this will avoid the significant disruption, uncertainty and cost, which might have otherwise arisen under the other proposed routes, to:

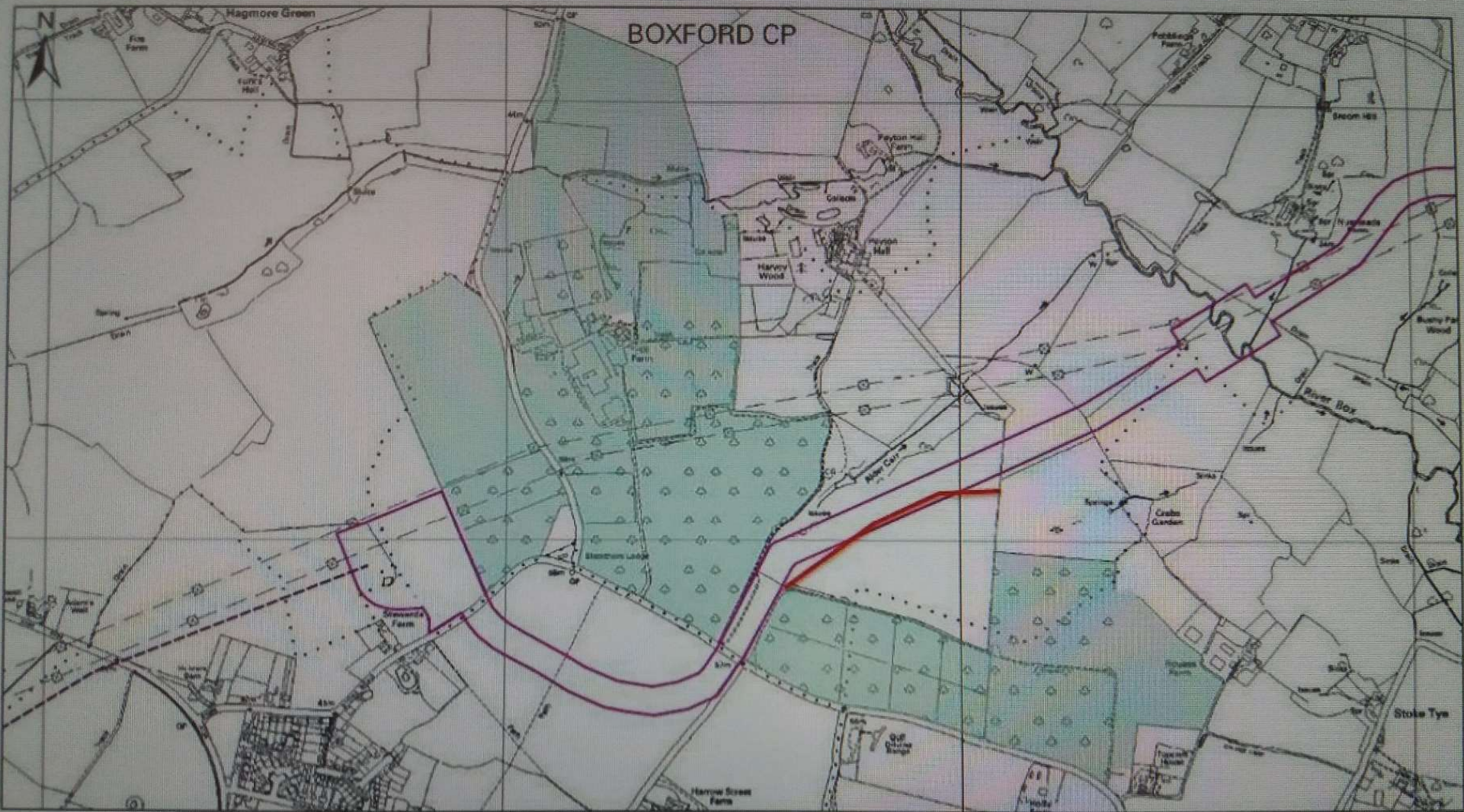
- **our own orchard and soft fruits farming business, and**
- **one of our main customers, the Copella fruit juice business, which holds a lease on our land.**

Further we also welcome the proposed undergrounding of this part of the route as this should appropriately conserve the Dedham Vale AONB's landscape between Locations 3 and 4. We recommend further consideration be given to extending the undergrounding of the route between Locations 2 and 3 on Figure 12 thereby

preserving the landscape and reducing any visual impact; along with avoiding the costly and unsightly infrastructure required to transfer the cables from below to above ground and vice versa.

Yours sincerely






Susanna Rendall
Group Managing Director



nationalgrid

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Legend:

-  Construction Vehicle Access Route
-  Survey Access Route
-  Owner
-  Overhead Alignment
-  Underground Alignment

Bramstead to Twinstead Project

Date: 09/04/2013

NOT TO SCALE

NGET Ref: 15/001810.1/ & 10/001810.2 & 10/001810.3
 LR Title: SK234866 & SK178582 & SK228698
 Tenure: Absolute Freehold
 Land Known as: Land at Hill Farm, Boxford & Langlands
 Proprietor: Boxford (Suffolk) Holdings Limited
 Address 1: Hill Farm
 Address 2: Boxford
 Address 3: Sudbury
 Address 4:
 County: Suffolk
 Postcode: CO10 5NY

Signed: _____
 (On behalf of interested party)
 Print Name: _____

Signed: _____
 (On behalf of interested party)
 Print Name: _____

Dated: _____
 I/We confirm that I/we hold the legal interest above,
 and that the boundary as shown on the plan is correct.

Feekins-Bate, Laura

From: DC Admin Planning <dcadmin.planning@tendringdc.gov.uk>
Sent: 13 May 2021 11:27
To: BramfordtoTwinstead
Subject: RE: EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

Dear Laura Feekins-Bate

Thank you for your recent email, I can confirm that this site is not within the Tendring district.

Kind Regards

Elliott Harwood-Bee

Planning Support Officer

Tendring District Council

From: BramfordtoTwinstead <BramfordtoTwinstead@planninginspectorate.gov.uk>
Sent: 11 May 2021 17:54
Cc: BramfordtoTwinstead <BramfordtoTwinstead@planninginspectorate.gov.uk>
Subject: EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

FAO Head of Planning

Dear Sir/ Madam

Please see attached correspondence on the proposed Bramford to Twinstead overhead line project.

Please note the deadline for consultation responses is **08 June 2021**, and is a statutory requirement that cannot be extended.

Kind regards
Laura

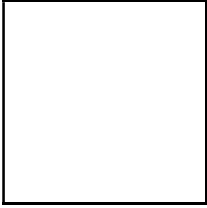
Laura Feekins-Bate
EIA Advisor
Environmental Services
Direct line: [REDACTED]
Mobile: [REDACTED]
Email: [REDACTED]@planninginspectorate.gov.uk

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

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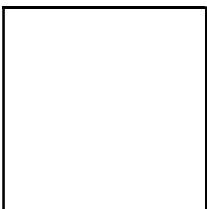


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Tendring District Council does not accept service of legal documents by e-mail.

Feekins-Bate, Laura

From: Jarvis, Neil [REDACTED]@forestrycommission.gov.uk>
Sent: 26 May 2021 11:28
To: Feekins-Bate, Laura
Subject: EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

Dear Ms Feekins-Bate,

Thank you for consulting the Forestry Commission with regard the Bramford to Twinstead Overhead Line Project. I have looked through the Scoping Reports and can confirm the Commission has no comment to make.

Yours sincerely,

Neil Jarvis

Neil Jarvis
Local Partnership Advisor
East and East Midlands
Mobile number [REDACTED]

My working days are Monday, Tuesday and Wednesday.

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This email has been scanned for viruses and malware.


Feekins-Bate, Laura

From: Planning Policy <planningpolicy@uttlesford.gov.uk>
Sent: 13 May 2021 08:13
To: BramfordtoTwinstead
Cc: Gordon Glenday
Subject: FW: [External] EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation
Attachments: EN020002 - Statutory Consultation Letter.pdf


Dear Sirs,
Thank you for consulting Uttlesford District Council.

The overhead line does not lie within Uttlesford District and is some distance from the border between Braintree and Uttlesford Districts. The council does not have any comments to make on the Scoping Opinion.

Yours faithfully

Sarah Nicholas
Senior Planning Officer
Uttlesford District Council

www.uttlesford.gov.uk

In line with government advice relating to the COVID-19 pandemic, from 27th March 2020 the Uttlesford District Council Planning Service is working remotely, away from the office for the foreseeable future. This is a challenging time, and as a service we are adapting where possible. This means staff are working flexibly throughout the day, some of them also having to work around caring responsibilities and/or have been redeployed to support critical council services. While we will aim to deliver our services as best we can, there may inevitably be some delays in some areas due to the ongoing coronavirus situation. Thank you for your patience and understanding.

From: Planning <planning@uttlesford.gov.uk>
Sent: 11 May 2021 18:12
To: Gordon Glenday @uttlesford.gov.uk>; Planning Policy <planningpolicy@uttlesford.gov.uk>
Subject: FW: [External] EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

From: BramfordtoTwinstead <BramfordtoTwinstead@planninginspectorate.gov.uk>
Sent: 11 May 2021 17:54
Cc: BramfordtoTwinstead <BramfordtoTwinstead@planninginspectorate.gov.uk>
Subject: [External] EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

FAO Head of Planning

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Please note the deadline for consultation responses is **08 June 2021**, and is a statutory requirement that cannot be extended.

Kind regards
Laura

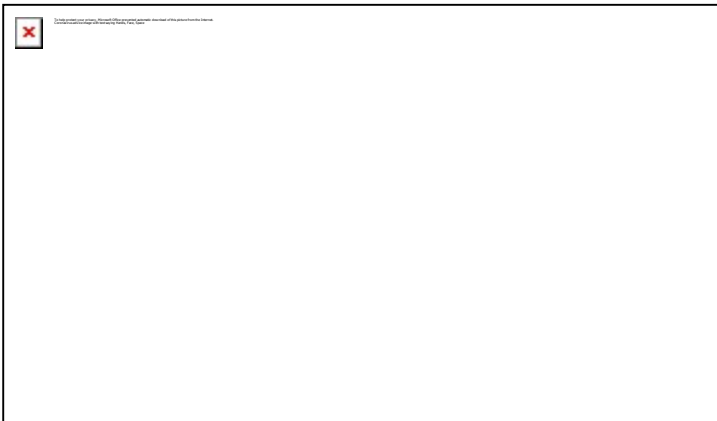
Laura Feekins-Bate
EIA Advisor
Environmental Services
Direct line: [REDACTED]
Mobile: [REDACTED]
Email: [REDACTED]@planninginspectorate.gov.uk

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: @PINSgov

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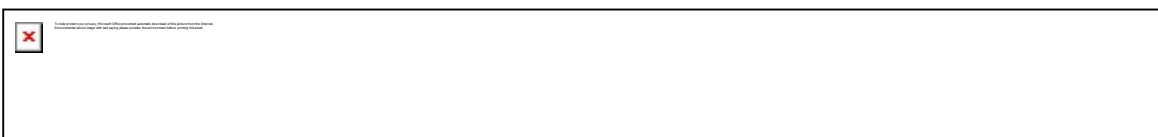


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DPC:76616c646f72



Feekins-Bate, Laura

From: planning.technical <planning.technical@westsuffolk.gov.uk>
Sent: 12 May 2021 12:28
To: Feekins-Bate, Laura
Subject: RE: VG EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

Good afternoon,

Thank you for your email.

We have no comments to make.

Regards,

Victoria Gross
Technical Support (Planning and LLC)
Systems & Technical Support
Direct dial: [REDACTED]
Email: [REDACTED]@westsuffolk.gov.uk
www.westsuffolk.gov.uk
West Suffolk Council
#TeamWestSuffolk

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From: BramfordtoTwinstead <BramfordtoTwinstead@planninginspectorate.gov.uk>
Sent: 11 May 2021 17:54
Cc: BramfordtoTwinstead <BramfordtoTwinstead@planninginspectorate.gov.uk>
Subject: VG EN020002 - Bramford to Twinstead Overhead Line Project - EIA Scoping Notification and Consultation

[THIS IS AN EXTERNAL EMAIL]

FAO Head of Planning

Dear Sir/ Madam

Please see attached correspondence on the proposed Bramford to Twinstead overhead line project.

Please note the deadline for consultation responses is **08 June 2021**, and is a statutory requirement that cannot be extended.

Kind regards
Laura

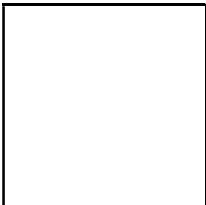
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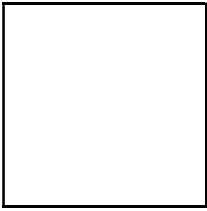


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