

Planning Act 2008

Comments of Suffolk County Council

upon the

Statutory consultation held between 25 January and 21 March 2022

by

National Grid Electricity Transmission

upon

Proposals to build a new 400kV electricity line between Bramford and Twinstead

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Key Issues

Overview

- 1.1 Suffolk County Council (the Council) recognises the importance of the Bramford to Twinstead Reinforcement (B to T) proposals as part of the nationally required infrastructure to connect energy developments that will reduce carbon emissions, to decarbonise the grid, improve energy supply resilience, and help to meet the challenges of climate change. However, the Council considers that there are significant shortcomings within the submitted proposals which need to be addressed.
- 1.2 The Council adopted its Energy Infrastructure Policy in February 2021, setting out its overall stance on projects required to deliver the UK's Net Zero ambitions. The policy is relevant for the Council's position on the B to T proposals, and states:

“Suffolk County Council has declared a Climate Emergency and is therefore predisposed to supporting projects that are necessary to deliver Net-Zero Carbon for the UK. However, projects will not be supported unless the harms of the project alone, as well as cumulatively and in combination with other projects, are adequately recognised, assessed, appropriately mitigated, and, if necessary, compensated for.”¹
- 1.3 The Council will follow this approach in this Representation, and throughout the DCO process.
- 1.4 The Council continues to be willing to work with National Grid Electricity Transmission (NGET) through the issues, towards improvement of the proposals and required mitigations, and looks forward to further engagement over the coming months.
- 1.5 This representation sets out in the first section the Council's key issues, with the second part (in Appendix A) providing detailed technical comments. Appendix A explains where those technical comments have derived from the Council's in-house staff and where they have involved input from external bodies. Given the extent and nature of the matters of concern to the Council it was not practical for them to be expressed using the format of NGET's consultation feedback form.

Public engagement

- 1.6 The Council acknowledges NGET's imperative to proceed quickly to support the UK's net-zero ambitions, but firmly considers that this should not be at expense of proper engagement and communication, allowing for thorough consideration of the proposal and its impacts by all stakeholders. Last year NGET consulted upon their Statement of Community Consultation. It is noted that the method of engagement had to change depending upon Government rules in respect of Covid-19. NGET have now offered public exhibitions and drop-in sessions as well as other forms of online engagement, which the Council welcomes.
- 1.7 In addition to the NGET programme of engagement as part of the consultation, the Council also requested NGET to attend a public meeting at Nayland Hotel, with two alternative dates being discussed. However, NGET declined to attend

¹ See SCC Energy and Infrastructure Policy:
<https://www.suffolk.gov.uk/assets/suffolk.gov.uk/strategic-electricity-networks/SCC-Energy-Policy-230212.pdf>

such a public meeting. The Council wishes to express its disappointment about NGET's lack of willingness to engage in such a forum, and hopes that further, more interactive, engagement with local communities will be pursued by NGET in advance of their DCO submission.

Undergrounding

- 1.8 The Council welcomes NGET's proposals to partially underground the lines in the sections under the Dedham Vale AONB and the Stour Valley, as a way of reducing the visual and landscape impact of the Bramford to Twinstead proposed development. However, it will be important to ensure that the archaeological impacts are fully assessed within the ES by adequate prior evaluation. The Council also has some more detailed archaeological concerns over the route as a whole (as elaborated in Appendix A).

Need for a thorough assessment of Skills and Tourism impacts

- 1.9 The Council strongly objects to the suggestion that impacts upon skills and tourism can be screened out from the Preliminary Environmental Impact Assessment (PEIR). It is acknowledged that PINS' screening opinion accepted this. However, the Council consider this a serious omission in the light of the limited information presented in either the Scoping Report or the PEIR and expects that a full assessment of the impacts upon tourism and skills is undertaken. The Council considers that leaving these impacts unassessed in their own right and considered only to the extent that they may have cumulative effects (either intra-project or inter-projects) creates a real risk that likely significant effects will not be fully assessed. It also creates confusion for the public and other consultees if relevant information on the effects of the proposal on tourism and skills is presented in a piecemeal fashion. In any event, as set out further below, NGET's proposed approach to cumulative effects assessment is also inadequate and fails to provide assurance that cumulative effects will be properly addressed.
- 1.10 The Council anticipates that the proposed development, given its location which is located across the Dedham Vale AONB and other rural areas of South Suffolk of importance to the tourism economy, could have significant impacts upon visitor accommodation (in the construction phase), visitor perception, and ultimately visitor numbers, both during construction and during operation, hence it is not acceptable for this impact on tourism to remain unassessed.
- 1.11 In terms of Skills the County Council is seeking for NGET to foster the local skills base in energy related industries within an area which after-all is destined to host numerous energy related infrastructure projects. However, a failure to adequately assess the likely origins of the labour force (both local and non-local), especially in the context of other energy projects with potentially overlapping construction periods, is a serious shortcoming.

Reinstatement of Parkland in front of Hintlesham Hall

- 1.12 As the consultation states:

“Hintlesham Hall was historically set in an area of parkland with a tree lined avenue leading from the hall through the former parkland. The former parkland has largely been eroded and put over to agricultural use.”

- 1.13 The proposed mitigation is as follows:

“Mitigation planting could include planting thin strips of land adjacent to the driveway and strengthening planting around the pond to the north. In addition, enhancement planting along the historical avenue could help improve and enhance the parkland outside of the house to reflect the original design intent.”

- 1.14 Whilst the Council welcomes NGET’s recognition of the need for mitigation to offset the impacts of the adjacent new 400kV overhead line and 50m high pylons on Hintlesham Hall and its Parklands, we are disappointed with such modest proposals which fall short of previously discussed levels of reinstatement of the Parkland between the house and the A1071.

Re-routeing of the proposed overhead lines through Hintlesham Woods

- 1.15 NGET have proposed alternative routes either to the west of Hintlesham Woods or parallel to the existing 400kV overhead powerlines through the woodland.
- 1.16 The option of a parallel line through the woodland would involve the coppicing a wider band of the woodland than is currently required for the existing line. Pylons would not need to be placed within the woodland itself, by the use of slightly taller towers so that the requisite clearance can be achieved, but there would still be an impact in respect of the woodland which is a designated Site of Special Scientific Interest (SSSI).
- 1.17 The benefits of the through the woodland option would be the avoidance of the need to suspend the transmission of power down the existing line during the swapping of those lines between the existing and new pylons to the west (which would be limited to periods of planned outages and so extend the construction period) and the likely avoidance of the bird nesting season for works. Importantly, it would also reduce the number of residential properties that would be affected by the proposals in comparison to the option of an alternative route to the west of Hintlesham Woods.
- 1.18 However, the Council reserves its judgement at the present time until more detailed information is available in respect of ecology. In particular, details are needed of the NGET experience relied on in the PEIR of traversing SSSIs elsewhere to understand whether they are comparable and also whether long term monitoring of the effects on the relevant SSSI has been undertaken and if so the outcomes achieved.

Cable Sealing End Compounds

- 1.19 The Council acknowledges that, in their proposals for the siting of the Sealing End Compounds, NGET have sought to address the impact of visibility off the Sealing In Compounds from the AONB or the Stour Valley, so that although there would be some visibility from these areas there would potentially not be a significant detrimental impact.
- 1.20 Reference within the Statutory Consultation material is made to the use of Full Tension Gantries which the Council welcomes in principle as they would offer less of an impact than a more traditional pylon type arrangement. Further mitigation including some limited additional undergrounding if the Cable Sealing End Compounds need moving might be required.
- 1.21 However, the Council reserves its judgement at the present time until more detailed information is available.

Environmental and Biodiversity Net Gain

- 1.22 The Council welcomes that NGET endorse the principle of Environmental and Biodiversity Net Gain, with environmental net gain being the concept of ensuring that infrastructure developers leave the environment in a measurably better state compared to the pre-development baseline, and Biodiversity net gain a narrower measurement that refers only to habitats and is a requirement for achieving environmental net gain.
- 1.23 The Council notes that NGET's proposals are relying on works within the order limits to achieve environmental and biodiversity net gain, which could be self-limiting in its impacts. Much of this effort would be concentrated around the Cable End Sealing In Compounds.
- 1.24 The Council therefore reserves its judgement of the specific proposals at the present time until more detailed information is available.

Cumulative Impacts

- 1.25 The Council considers that in relation to socio-economic impacts of the proposals (including tourism and skills), having regard to the limited degree of information presented in the Scoping Report and the uncertainties and limitations of proposed mitigation, these topics should be assessed in their own right because of their potential to give rise to likely significant effects, and not be relegated only to consideration as potential intra-project effects. The Council also remains concerned about the cumulative impacts with other development within the area, and the superficial nature of the 'sifting' exercise undertaken to identify inter-project effects. For example, in Appendix 15.4 of the PEIR the only likely significant effects of other developments that have been considered are traffic, landscape, and visual matters. This has led to major energy projects that are currently being proposed (including Scottish Power Renewables East Anglia One North and East Anglia Two offshore windfarms, EDF's Sizewell C nuclear power station, and Sunnica Ltd's Sunnica Energy Farm) being discounted from further assessment, notwithstanding their scale and their significant socio-economic impacts on large parts of the Suffolk economy and skills base (including tourism). This is a serious omission. In addition, the Council is concerned at the intended approach for cumulative effects assessment of NGET's East Anglia Green Norwich to Tilbury proposals. As NGET are aware, the Council requested for details of the East Anglia Green proposals to be published in time for the Statutory Consultation upon B to T. Whilst the Council recognises the pressure on NGET to progress with B to T, it is unfortunate that NGET were unable to wait with this consultation for East Anglia Green to progress to the stage where such details are available.
- 1.26 It is understood that a non-statutory consultation in respect of East Anglia Green will take place in April 2022 and details of the route will be made available at that point.
- 1.27 The Council expects that NGET will, as part of the East Anglia Green consultations and the Environmental Statement for Bramford to Twinstead, undertake a comprehensive cumulative impact assessment between the two projects.

- 1.28 As at this stage it is impossible to consider these cumulative impacts, the Council has to reserve its judgement at this stage. The Council intends to provide full commentary on cumulative impacts at the Relevant Representations stage following the submission of the B to T DCO application later this year.

Mitigation

- 1.29 The project proposals will have permanent residual impacts on the local landscape and sense of place. Residual adverse impacts that cannot be dealt with within the project red line, should therefore be addressed through a s106 agreement, and if required, relevant landowners should be party to that agreement, to ensure delivery of necessary mitigation strategies, based on the approach used in National Grid's Landscape Enhancement Initiative.
- 1.30 The Council would normally anticipate, in addition to a s106 mitigation strategy, funding by the project promoter, outside consideration in the planning balance, of a community benefit scheme. However, it is understood by the Council, that as a business regulated by Ofgem, National Grid's community benefits are included as part of the current RIIO2 settlement 2021 – 2026, and delivered through National Grid's corporate Community Grant Programme. Notwithstanding this scheme, the Council considers that an additional community benefit scheme for this project, (in combination with other NGET transmission projects in Suffolk), should be provided, specifically to alleviate fuel poverty and support energy efficiency, in communities hosting new transmission infrastructure. It is recognised that such a scheme would be likely to require the agreement of the regulator. However, we believe that such a scheme would be fair and reasonable, and consistent with both national and local policies and priorities.

Appendix A – Detailed technical comments

Introduction

- 1.1 Suffolk County Council has been liaising with Babergh & Mid Suffolk District Councils, Essex County Council and Braintree District Council, as well as the Dedham Vale Area of Outstanding Beauty Project in gathering the technical information below.
- 1.2 As part of this activity Essex Place Services have been instructed to provide a response to archaeology, ecology, landscape and built heritage aspects. Where EPS contributions have been provided this has been identified and SCC specifically adopts those contributions in relation to archaeology and generally endorses the EPS contributions on other matters. SCC in-house staff have also made strategic comments on ecology and landscape.
- 1.3 The Clinical Commissioning Group were consulted by SCC so that impacts upon non fire service blue light services could be considered and are included below.
- 1.4 The full list of technical comments is as follows:
 2. EPS Archaeology
 3. Clinical Commissioning Group
 4. Ecology
 5. EPS Ecology
 6. Economic Development
 7. Emergency Planning
 8. Floods
 9. Highways
 10. EPS Historic Environment
 11. SCC Landscape
 12. EPS Landscape
 13. Public Health
 14. Public Rights of Way
 15. County Planning Authority

2. EPS Archaeology

Comments in relation to Archaeology within PEIR Vol 1 Main report

- 2.1 The proposed development between Bramford and Twinstead will require the construction of 55 new pylons and approximately 10 km of underground cables, along with 4 cable end sealing end compounds and a new grid supply point substation at Butlers Wood. The impact on the archaeological deposits are dealt with in chapter 8 (Historic Environment) within the main Preliminary Environment report Vol 1 supported by Appendix 8.2 Archaeological Framework Strategy.
- 2.2 The most significant impacts to archaeological deposits is likely to be the undergrounding sections where the working width of 100m is the equivalent of a six lane highway be excavated in 2 main sections with a total length of c. 10km. The nature of the development within this corridor will have the impact of damaging/destroying those deposits present. Because of this level of impact, the completion of an appropriate level of evaluation is essential to understand the impact of the development for the ES.

Chapter 8 Historic Environment

- 2.3 **8.5.18** There is concern that the ES will be too reliant on geophysical survey. In the majority of cases where geophysics is used there is uncertainty of results until the areas have been ground truthed by trial trenching. To avoid significant archaeological deposits being missed or their significance not identified until a later date, it has been recommended that a programme of trial trenching should occur on as much of the below grounding. This is to provide an understanding of the extent and significance of the deposits present, identify opportunities to minimise impact on those significant deposits present and to be able to design the mitigation for a meaningful archaeological strategy. It will also inform project timescales and implications that may be relevant for other ES topic areas.
- 2.4 **8.5.21** There is concern that the interpretation of the majority of the non designated assets is defined as negligible to low. Further assessment should be considered on those assets directly impacted by the development, where mitigation of assets identified as of local and regional interest would likely be appropriate.
- 2.5 **8.6.5** The good practice measures should extend to known archaeological sites being protected by appropriate fencing, matting, reduction of corridor width etc
- 2.6 **8.6.7** The completion of a palaeo-environmental evaluation within the valley is particularly important as if heritage assets are identified there will be a high potential of waterlogged deposits being present and as such the deposits are likely to be of medium to high significance. It is stated within other matters in this document that this work is being completed.
- 2.7 **8.6.18** The impact of the removal of hedgerows etc on protected lanes or historic hedgerows themselves should be assessed within the ES, which should establish if directional drilling is an alternative to the damage or destruction of a heritage asset. This would only be relevant where there is a direct impact on the protected lane or hedgerow.

- 2.8 **8.6.48** In the original proposal in 2012 there were discussions regarding the need to straighten lengths of lane to facilitate access for large lorries. It is unclear if this still the case in the present application.
- 2.9 **8.6.60** The impact on the protected lane is described as being not significant , however, as this protected lane is described as providing access to the CSE compound the impact of the increase of traffic and type of traffic needs to be considered, not just the impact on the setting of the lane.
- 2.10 **8.6.75** It is pleasing to see that the impact to the non-designated archaeological remains is identified as a key impact, however, this summary does not clarify the serious impact this will have. This development will damage or destroy any archaeological deposits within the undergrounding section of the application.

Volume 2 Appendices

Appendix 4.1 Outline CoCP

- 2.11 The outline Code of Construction Practice needs to link to the Archaeological Framework Strategy and the proposed WSI's from the archaeological contractors working on site. It is recommended that separate sections should be added into the CoCP to deal with this.
- 2.12 HO2 should be off-set by appropriate archaeological evaluation undertaken in advance of construction although there is still the potential this could happen.
- 2.13 A separate point should be included stating that each of the archaeological areas will be signed off by the Local Authority archaeologist prior to construction commencing.
- 2.14 The above comments on the outline CoCP should be linked into the CEMP as it is developed.

Appendix 8.2 Archaeological Framework Strategy

- 2.15 It is understood that this document has recently been updated, however, the revised version has not been included here or seen by the specialists. The following comments relate to the submitted Archaeological Framework Strategy as part of the PEIR appendices.
- 2.16 **Under 1.3.4**, open area excavation should be included in this section as this will form the most appropriate method to record the sites identified through the initial DBA, geophysics and trial trenching.
- 2.17 **2.4** Walk over survey. Considering it is 8 years since the last walk over survey it should be considered whether there would have been changes in this period. Are other assessments such as google earth being used to assess changing landscape uses since the original walkover.
- 2.18 **2.5** Geoarchaeological and palaeoenvironmental survey. There should be consideration for targeted bore holes by Geoarchaeological and palaeoenvironmental specialists with the potential for C14 dates to support any future mitigation strategies on these deposits once the present draft results are received.
- 2.19 **2.5.3** Deposit models across the two valley floors will be important to define potential locations for waterlogged deposits as well as higher ground suitable for settlement.

- 2.20 **2.6 Archaeological Trial Trenching:** Throughout the discussions on this scheme trial trenching in the underground section has been recommended to support the ES. Without a considerable proportion of the trial trenching completed for the ES the applicants will not have a full understanding of the significance of the archaeological deposits present or the impact of the scheme and thus will not be able to prepare a detailed mitigation strategy.
- 2.21 **3.3. Archaeological Work:** As stated above (1.3.4) it is essential that a section is included here on open area excavation as this is likely to be the most frequent method used to preserve archaeological deposits by record if the scheme is appropriately assessed. Strip Map and Sample should be used on those areas with widely dispersed features where no defined concentrations of features have been identified. If the evaluation is completed to an appropriate standard the excavation and SMS should be sufficient to mitigate those deposits that are threatened by the scheme.
- 2.22 **3.4 Archaeological Watching brief:** If the evaluation has been completed to a good enough standard it should facilitate the majority of areas with no archaeology being signed off prior to construction and allow the creation of a mitigation strategy which will minimise any archaeological work during the construction programme.
- 2.23 **5- Post Excavation, Publication and Archive Deposition:** The Eastern region has the East Anglian Archaeology monograph series which would be an appropriate route for publication for a scheme such as this which is likely to identify, and impact known and unknown archaeology. This should at least be identified as a potential route for publication. There should also be a clear section on the potential for outreach, considering the landscape this development is planning to cut through there will be significant interest in the results.

3. Suffolk & North East Essex (SNEE) Clinical Commissioning Group

- 3.1 This incorporates responses from:
- East Suffolk & North East Essex Foundation Trust
 - West Suffolk Hospital Foundation Trust
 - Norfolk & Suffolk Foundation Trust (Mental Health)
 - Essex Partnership University Foundation Trust (Mental Health)
 - East of England Ambulance Service NHS Trust
- 3.2 The main health related impacts of concern identified from a review of the consultation material fall into two main areas.

Route impacts

- 3.3 Firstly, potential changes to routes for ambulances (emergency and routine), health workers and patients to all healthcare settings (acute, primary and care homes) both during the setup and the daily operational working periods of the scheme. Temporary and permanent changes to existing routes could result in delays in transferring patients to hospitals, disrupt medical staff moving between settings and impact patients attending appointments.
- 3.4 Opportunities to improve routes for ambulances, health workers and patients should be considered in the design of the finished scheme as well as the construction phase. It might be possible to shorten some routes or reintroduce bus stops to assist patient movement
- 3.5 There is an absence of information addressing these concerns in the documentation provided. The applicant is, therefore, asked to demonstrate how the routes of ambulances, healthcare workers and patients have been considered, shows what impacts have been identified and what mitigation is proposed. Representatives from SNEE will be happy to assist by providing a list of key facilities that may be impacted and identifying particular facilities of concern.

Construction workforce impacts

- 3.6 The second main issue is the burden on health services of construction workers introduced to the area, including the cumulative impact of workers for this scheme in combination with those for other major infrastructure projects and major housing developments. Additional construction activity in the area and the presence of workers who do not normally reside in the area will bring greater demands to emergency, acute and primary care services.
- 3.7 There is a lack of information about the numbers, location and timing of workers, any assessment of their impact and proposals to mitigate. Each of these variables will affect the impact of the proposed development on healthcare services and should be thoroughly explained and explored. The applicant is, therefore, asked to provide information about the number of workers needed

through the different phases of construction of the scheme, the location of these people at work and their residences, the impact of this in isolation and in combination with other major construction projects planned in the area, and proposals to mitigate the impacts identified.

- 3.8 Representatives from SNEE would welcome the opportunity to engage direct with the applicant to ensure that the impacts on healthcare services are properly considered.

4. SCC Ecology

4.1 Notwithstanding the potential benefits, at the present time the proposal (in Option 2) to route the new cables through Hintlesham Woods is a major concern due to the site being a Site of Special Scientific Interest (SSSI) and the potential impacts on Protected Species such as Bats, which will use the woods for commuting, foraging and possibly roosting. More information is needed on the examples elsewhere relied on by NGET to show that traversing Ancient Woodland (and SSSI) can be successfully accomplished and that the case studies relied on are comparable. Evidence of monitoring of successful outcomes would also be helpful. Habitat fragmentation is bad from a biodiversity point of view as it can isolate species from other areas of suitable habitat and is also difficult to mitigate and compensate for. Substantial mitigation and compensation measures would be required if this was to be considered further.

Use of the Mitigation Hierarchy:

4.2 It is essential that any work, including cutting back or removal of ecological features (such as – but not limited to - trees and hedgerows) follows the following protocol:

- Avoidance
- Mitigation
- Compensation
- Enhancement

4.3 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.

4.4 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 habitat, 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.

4.5 The application must explain how mitigation will address the likely impacts of the proposal and identify key timing issues to protect biodiversity that may constrain the development. Mitigation proposals must be robust and should be effective.

4.6 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).

4.7 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.

4.8 Enhancement: It is a SCC requirement that all projects and developments deliver Biodiversity Net Gain. The site must be surveyed to establish a baseline (and all data sent to Suffolk Biodiversity Information Service, SBIS) 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).

- 4.9 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.

Biodiversity Net Gain

- 4.10 The numerous areas of land set aside specifically for biodiversity enhancements will help the project to achieve an overall net gain for biodiversity (as stated in the Environment Act 2021). Before any plans for these sites are set in stone, an ecological baseline for these areas must be gathered (along with appropriate mitigation and compensation measures) in order to avoid having a negative impact on any protected species and habitats present, or that may use these sites for foraging and/or commuting.

Conclusion/Recommendations:

- 4.11 It is essential that the mitigation hierarchy protocol is followed, to protect and enhance biodiversity. It is essential an ecological baseline is gathered via the relevant surveys and that appropriate mitigation and enhancement measures are implemented, in order to avoid/minimise harm to protected species and habitats present within the footprint of the works.
- 4.12 We fully expect any proposed development to be compliant with all relevant legislation and to result in a Biodiversity Net Gain as stated in Section 15 of the National Planning Policy Framework (HM Government, July 2021) and the Environment Act (2021).

5. EPS Ecology

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5.1 We have reviewed the PEIR and its appendices and figures and welcome the amendments that have been made to the Biodiversity chapter of the PEIR, since the EIA Scoping Opinion consultation. This includes the inclusion of the Technical Guidance Note 02-21: Assessing landscape value outside national designations (May 2021).

Table 1: Ecology

Document Ref	Topic	Comment
Chapter 4 Para 4.4.32	Overhead line sections through woodland	We note that within the new 400kV overhead line sections would have a 20m swathe felled to ground level (no removal of roots) to facilitate construction activities. The trees would be graduated cut for an additional 12.5m on either side of the 20m swathe to accommodate construction activities and conductor swing.
Hintlesham Woods Options 1 & 2 Figure 4.1	The works on-site and near to Hintlesham Woods' new section of overhead line.	<p>Whilst two options are presented to seek feedback on what happens at this location, we consider that there is currently insufficient ecological information available to comment on a preferred option at this stage to inform which will be assessed in the ES.</p> <p>We note that ecological surveys are being undertaken at Hintlesham Woods SSSI to help inform the designs and construction method at this location. It is reassuring to know that National Grid is working with Natural England and the Royal Society for the Protection of Birds (RSPB) to understand the potential effects on SSSI interest features. We highlight that the mapping of Ancient Woodland within the SSSI particularly under the existing pylon route which needs clearance where it overshadows the SSSI. It will be important to agree how impacts are evaluated in relation to habitats and their functionality.</p> <p>However, there are potential impacts on protected species which are not linked to the SSSI designation. We would therefore welcome discussions with National Grid alongside RSPB and Natural England on survey methodologies for bats particularly Barbastelle (Appendix II species under both Bonn and Berne Conventions as well as European Protected Species) which are known to roost at this SSSI.</p>

<p>Table 4.2: Preliminary Environmental Areas Identified for Mitigation and Enhancement: ENV02 Hintlesham Hall</p>	<p>Hintlesham Hall Mitigation measures</p>	<p>Whilst we welcome the mitigation planting concepts for Hintlesham Hall, we support our landscape colleague's advice that further consideration is given to grassland and tree planting to re-create Priority habitat wood pasture and parkland as part of BNG target for the project.</p>
<p>Table 4.2: Preliminary Environmental Areas Identified for Mitigation and Enhancement: ENV14 GSP Substation</p>	<p>GSP Substation Mitigation measures</p>	<p>We welcome the proposed enhancement woodland planting at the GSP substation to be sited between Butler's Wood and Waldegrave Wood, both of which are ancient woodland and Essex LoWS. We share our landscape colleague's comments for discussion on design and choice of species etc with other disciplines to inform a shared design for new woodland.</p>
<p>Chapter 7 Para 7.1.1 and Appendix 7.1 Para 1.1.3 and sections 5-15</p>	<p>Non-significant impacts to protected and priority species and habitats, and appropriate mitigation and compensation measures</p>	<p>We note that the Inspectorate scoped in impacts on Priority habitats for assessment in the EIA and Para 7.1.1 now includes reference to Priority habitats. Although Priority species were scoped out of the ES, we note this has been included in the glossary and stated in Table 3.5 that the ES will report on likely significant effects.</p> <p>We highlight that all non-significant effects on Priority habitats and species in a non-EIA chapter or Addendum for non-significant impacts so that all the LPAs and SoS can demonstrate their s40 biodiversity duty.</p> <p>Paragraph 5.3.3. of NPS EN-1 states, "Where the development is subject to EIA the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance on protected species and on habitats and other species of principal importance for the conservation of biodiversity" Please note that Notable has a very specific definition which does not match the status of Priority species.</p>
<p>Para 7.5.1</p>	<p>Stour & Orwell Estuaries SPA and Ramsar</p>	<p>As these Habitats sites are hydrologically connected to the project, we would like to be involved in discussions on HRA to inform the shadow report to support the DCO.</p>
<p>Para 7.5.2-7.5.4</p>	<p>Non-statutory designated sites</p>	<p>As included in comments at Scoping stage, please note that these sites in Essex should be referenced as LoWS.</p>
<p>Para 7.3.4 and Table 7.2</p>	<p>European Protected Species (Great Crested Newt, Dormouse & bats</p>	<p>We welcome confirmation that National Grid has agree with Natural England to apply to District Level Licensing for Gt crested newt (GCN) instead of surveys and that a countersigned IACPC will be needed to support the DCO. We acknowledge that GCN are therefore now scoped out from further assessment in the ES.</p> <p>However, as indicated in our EIA scoping comments, it is</p>

		<p>for potential impacts on other mobile species, such as Priority amphibians, reptiles and hedgehog, during the construction phase.</p> <p>We welcome the inclusion of LAs and Essex & Suffolk Dormouse Group in consultation on survey methodology and note that existing baseline data will be used to create a Habitat Suitability Map based on presence/absence records of bats. We highlight that an absence of records is not a record of absence so the HSM will need scrutiny to deliver an appropriate level of information for route choice and mitigation needed to minimise impacts. Although we note that bat activity surveys are proposed for the route, we highlight that static detector surveys will be needed to inform the HSM around Hintlesham Woods.</p> <p>Based on experience from other linear projects, we suggest that where hedge crossings or removals are necessary to retain connectivity during construction, an alternative to dead hedging (referenced in the outline CoCP measure B07) is the use of Heras fencing with camouflage netting attached. We can provide more information on request. This temporary measure will be needed to enable Barbastelle bats to continue to use their network of hedgerows.</p>
<p>Para 7.3.7</p>	<p>Biodiversity Net Gain and Natural Capital benefits</p>	<p>We note that there is a requirement included in the Ofgem RII0-2 determination under the incentives to deliver Net Gain and other Natural Capital benefits to enhance biodiversity and natural capital. We would therefore welcome confirmation that these targets will be met for this project. We note that the Government’s biodiversity metric will be used and seek feedback on the evaluation process to deliver natural capital benefits –clarification on whether the project will be using National Grid’s own evaluation process or a similar metric would be helpful.</p>

Other matters

5.2 We share our landscape colleague’s concerns that more information is needed to understand the impacts on hedgerows along the route, particular those that could be important for bat foraging and commuting routes for Barbastelle bats. We seek to inform choices on species options for restoration planting schemes as well as securing temporary mitigation measures during construction.

6. SCC Economic Development

- 6.1 At this point in the process workforce numbers are currently unconfirmed, as was acknowledged in the Scoping Report (15.6.4), and therefore we cannot understand or support the decision to scope out socio economic effects. In addition, the origins of the workforce are not known (PEIR, 12.4.17) and the split between local/non-local is not evidenced or justified. It is also the case that since the Scoping Report, where an unconfirmed 'estimate' of 300 workers was put forward as a 'peak' (15.6.5), the PEIR now estimates a 'peak' of 700 workers in parts of 2027 and 420 workers in parts of 2024 and 2025 (4.4.13). These are clearly material changes to the position that was presented at the scoping stage and which formed the basis for the Scoping Opinion. Because of a decision at that stage to 'scope out' socio-economic effects, the PEIR provides no assessment of the implications of this substantial uplift in workforce requirements. This is a significant omission. Any and all 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 to Planning and Development During Construction
 - Effects to Community Services During Construction and Operation
 - Effects on Tourism and Recreation During Construction
- 6.2 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.
- 6.3 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, this is consistent with SCC corporate objectives as set out in our Energy Policy and the applicants own corporate objectives.
- 6.4 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 the construction of Sizewell C. In the context of such large-scale construction projects taking place in Suffolk, with overlapping construction periods, it cannot be assumed that NGET's experiences elsewhere of labour force sourcing or workforce accommodation demands are relevant or applicable because the demands of these other projects will exert their own pressures on a constrained supply of both workforce and accommodation.

- 6.5 It is acknowledged that the anticipated demands on the workforce and the supply chain are likely to be less than those of other infrastructure projects in the region (albeit a peak demand for 700 workers would make the project one of the largest local employers). 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

- 6.6 A large proportion of tourist trips are likely to be associated with the natural and historic beauty of the area as a whole. We have seen growth in for outdoor countryside and leisure activity in recent years (confirming national trends seen in Active Lives surveys (DCMS). In Visit East of England's consumer sentiment survey 2021 the "countryside"(59%) was ranked 2nd as most liked visitor aspect of Suffolk, and "good walking and cycling landscape" (45%) ranked 4th. . Note also uptick in glamping, camping planning applications 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 and revisit the area.
- 6.7 Although it is proposed by NGET to scope out tourism in terms of likely significant impact as a topic area in its own right, SCC maintains that this is not a sound approach. There has been insufficient assessment of the effects of the proposal on tourism, which is a key economic sector in Suffolk, to support it being scoped out. In any event, 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
- 6.8 Tourism and the visitor economy cannot be scoped out at this stage, particularly due to the fact that the location extent, and duration of construction impacts and the interaction with the construction of other projects is not sufficiently understood. In addition, during the operational period, the impacts of the pylons and lines on visitor perceptions need to be assessed and understood. Furthermore, this project is likely to undermine the perception of both the AONB, South Suffolk and Suffolk more widely as a designation and a destination.
- 6.9 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. The District Council may have breakdown of accommodation, but anecdotally not too much in terms of budget hotel offer for contractors in this area.

- 6.10 East Suffolk Council has been through a similar process with the proposed Sizewell C development. The Suffolk Coast DMO (Destination Management Organisation) led a piece of work which examined the impact (or perceived impact) on the visitor economy. There is no DMO which covers the Bramford-Twinstead area and, while we feel that these issues need to be addressed, there is, at present, no existing assessment of these effects. It is NGET's responsibility to provide an adequate assessment of all the likely significant effects of its proposals, including the effects on the receiving (human) population and this requires an assessment of socio-economic effects (including tourism).
- 6.11 We are keen to establish the effects or perceived effects of this work on the Bramford to Twinstead would be, as well as the cumulative effects on adjoining areas. It may well be that work will affect visitor figures in other parts of the county- particularly as the Sizewell work could be taking place at the same time. There are a number of large-scale developments planned for the county including Valley Ridge and significant public investments in facilities from NALEP, NHLF, and the Arts Council; for example Gainsborough's House in Sudbury is a £10million development and national centre. These investments have been based on business plans linked with expected growth of visitors to the South Suffolk/North Essex area, so it would be good to understand what the effects of the work would be.
- 6.12 We consider that it would require baseline data and an evidence base to assess this. The AONB will have its own Volume and Value data which can be fed into this alongside broader district and Suffolk data.
- 6.13 It is important that a mapping exercise is carried out, which will help to establish the potential scale of the issue, range and types of businesses potentially effected and what mitigation measures may need to be put in place. Suffolk Growth have done some modelling reflecting the impacts of COVID on the visitor economy, based on Visit England forecasting and consumer behaviour surveys. This approach could be used to model potential impact. Current forecasts indicate that the UK visitor economy may not fully return to 2019 levels until 2025. It would be important to see what impact this development would have in this area of the county and understand impact in terms of a "recovering" sector.
- 6.14 SCC considers that this approach to Socio-Economics, Recreation and Tourism is entirely consistent with their experience of infrastructure projects in similar sensitive landscapes where the visitor economy is economically significant.

7. SCC Emergency Planning

- 7.1 There is no change to the previous submission with no comment or observations from an emergency planning perspective.

8. SCC Floods

Subject: Bramford to Twinstead Reinforcement Statutory Consultation – LLFA Reply

Subject to provision of satisfactory information addressing the matters set out below and the securing of all required mitigation measures in the DCO, the LLFA does not have any objection to the proposals that are proposed within Suffolk.

A site-specific flood risk assessment is to be submitted and the applicant will need to demonstrate that they have a viable surface water drainage strategy for any permanent above ground structures within Suffolk.

The applicant will be required to submit the following documents as minimum depending on the application type.

Table 2: Floods

Document Submitted	Document Description	Outline	Full
Flood Risk Assessment (FZ3 or Site >1Ha)	Evaluation of flood risk (fluvial, pluvial & groundwater) to the site – will guide layout and location of open spaces. (SCC may require modelling of ordinary watercourse if EA Flood Maps not available)	✓	✓
Drainage Strategy/Statement (less detail required for Outline)	Document that explains how the site is to be drained using SuDS principles. Shall include information on:- <ul style="list-style-type: none"> • Existing drainage (inc adjacent roads) • Impermeable Area (Pre and Post Development) • Proposed SuDS • Hydraulic Calculations (see below) • Treatment Design (i.e. interception, pollution indices) • Adoption/Maintenance Details • Exceedance Paths 	✓	✓
Contour Plan	Assessment of topography/flow paths/blue corridors	✓	✓
Impermeable Areas Plan	Plan to illustrate new impervious surfaces	✓	✓

Preliminary Layout Drawings (including landscaping details)	Indicative drawings of layout, properties, open space and drainage infrastructure including:- <ul style="list-style-type: none"> • Discharge location (outfall) • Conveyance network • Form of SuDS and location on the site 	✓	
Preliminary Site Investigation Report	3 or more trial pits to BRE 365 and associated exploratory logs (check for groundwater)	✓	
Preliminary hydraulic calculations	<ul style="list-style-type: none"> • Discharge Rates (using suitable method i.e. FEH, IH124 (ICPSUDS) or modified rational method (brownfield sites) • Storage Volume • Long Term Storage (if required) 	✓	
Evidence of any third party agreements to discharge to their system (i.e. Anglian Water agreement or adjacent landowner)	Evidence of any permissions or permits being obtained.	✓	✓
Detailed Development Layout and SuDS Provision Plan (including landscaping details)	Dimensioned plans showing the detailed development layout including SuDS components, open spaces and exceedance corridors.		✓
Full SI Report	Detailed assessment of ground conditions – leading on from initial testing <ul style="list-style-type: none"> • Widespread coverage of trial pits to BRE 365 • Contamination/Pollution check • Groundwater Monitoring 		✓
Detailed Drainage Scheme Plan	Dimensioned plan showing main aspects of the drainage infrastructure. Plans should ref:- <ul style="list-style-type: none"> • SuDS details (size/volume) • Pipe Numbers/Sizes/Levels • Outfall & Permitted Discharge (if applicable) 		✓
Detailed SuDS Drawings (Open SuDS)	Dimensioned plans of proposed SuDS components i.e. scaled cross sections/long sections		✓

Full hydraulic calculations (MicroDrainage “Network” output)	At this stage, SCC require simulations of the drainage network inc SuDS components. MicroDrainage Network should be submitted for 1,30 and 100yr+CC storms. (Source Control files are useful but not enough on their own)		✓
Discharge Agreements	Evidence of any permissions or permits being obtained.		✓
Health and Safety Risk Assessment	Where deep open SuDS (water level >0.5m) are proposed a H&S file will be required.		
Surface Water Construction Plan	Plan of how surface water runoff is to be attenuated and treated during the construction phase. Including plans of any temporary drainage.		

Due to the number of potential crossings of ordinary watercourses, we’d expect a full list of any crossing points and whether these are permanent or temporary crossings. These crossing points may require written consent under the Land Drainage Act, as amended by the Flood and Water Management Act 2010.

Key Points

- Cables shall not be laid through a watercourse without written Land Drainage Act consent.
- Direct drilling will not require Land Drainage Act consent if cables as laid below the bed of the watercourse.
- Cables laid below an ordinary watercourse shall be at least 1m below bed depth.
- Single span bridges are preferred to culverts
- Any culverts (temporary or permanent) in the ordinary watercourse will require Land Drainage Act consent.

Useful Links

- [Land Drainage Act consent, SCC LLFA](#)
- [Guidance on development and flood risk, SCC LLFA](#)

9. SCC Highways

Scoping

9.1 Table 4.3 sets out the summary of decommissioning assessment with regards to traffic and transport it is identified works are likely to involve a smaller workforce than construction and that there are unlikely to be any significant effects. The Applicant should commit to a decommissioning management plan to provide details of the impacts of decommissioning prior to it taking place.

DCO Schedules: Traffic Regulation Orders

9.2 It is unclear if temporary traffic regulation orders for any closures will be included within the DCO schedules or if the applicant will rely on the LHA's powers to raise these (4.4.8) but SCC would welcome discussion on how these can best be implemented.

DCO: Management Plans

9.3 The DCO 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 managing and monitoring workforce numbers and traffic to/from the site, as well as encouraging and enabling sustainable travel practices. The Applicant is referred to SCC's Travel Plan Guidance (<https://www.suffolk.gov.uk/planning-waste-and-environment/planning-and-development-advice/travel-plans/>)
- An Access Management Plan: to set out details of the proposed access arrangements.
- An updated version of the Code of Construction Practice

9.4 At this stage, 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 managed in order for it to be ensured it is a worst case.

9.5 Referring to 4.4.46 and 4.6.5, the Applicant's attention is drawn to recent DCO's where access and road crossings have been agreed between SCC and other Applicants (Sizewell C, EA1(N) and EA2). The Construction Access Management Plan provides, in the LHA's view, an acceptable level of detail to assess the feasibility and deliverability at each location. A subtle difference may be a requirement for large cranes to access this project which was not the case for the Scottish Power Renewables' projects.

Environmental Assessment: Methodology

9.6 SCC welcomes that the Applicant seeking to agree assessment methods with LHA and the following comments are intended to help future discussions.

- 9.7 Table 3.8 sets out the Applicant's response to comments raised in consultation regarding Traffic and Transport, and in response to SCC comments regarding the use of LA112, the Applicant maintains its position that it plans to use the methodology. SCC disagree with this conclusion, as for highways, excluding rights of way, in the case of this project one major purpose of the assessment is to determine the impact of construction traffic and not the impact of an additional piece of infrastructure on severance (e.g. which would reflect a new road). LA112 is for highway projects and, as an example, the assessment of severance generally involves the introduction of severance rather than the assessment of quality of experience as a result of additional traffic.
- 9.8 LA112 reports on severance only, this is because the document is designed for new trunk roads, and so generally is not testing the increase of traffic on existing routes, but the severance caused by a new strategic route. This is why the assessment focuses on public rights of way and the loss of land.
- 9.9 The Guidelines for the Environmental Assessment of Road Traffic (GEART) produced by the Institute of Environmental Assessment include a number of metrics for assessment including:
- Driver Severance and delay
 - Pedestrian Severance and Delay
 - Pedestrian Amenity and Fear and Intimidation
 - Accidents and safety
 - Hazardous and dangerous loads
- 9.10 The GEART assessment sets out thresholds of change for severance and amenity, and the Council would disagree with these being used without a thorough understanding of the locality, but it presents a wider assessment of impacts than is currently understood to be proposed to be being undertaken. The assessment is also based on changes in HGV traffic in particular, which is important for this project but does not appear to form as integral a part of the LA112 assessment method.
- 9.11 The Council recognise the age of GEART guidance has its limitations (for instance there is limited reference to cyclists and horse riders) and does not believe that they should be used without serious consideration of place and environment but believes that they undertake a more thorough assessment of impacts, and at the very least should be used in combination with LA112, with consideration of the appropriateness of each method of assessment. GEART methodology was used recently in the assessment of EA1N and EA2 windfarms and their associated cable corridors, as well as Sizewell C. We welcome further discussion with the Applicant on this issue.
- 9.12 While supporting the Applicant's receptor-based approach (5.2.5) care will be required to correctly identify such receptors and their sensitivity recognising variability of these factors between different communities / locations.
- 9.13 Paragraph 12.6.6 identifies that a preliminary indication of the sensitivity of receptors is provided in Table 12.4; this only covers a few links and for posterity is not agreed. A plan should be submitted highlighting the sensitivity of links for discussion with the relevant highway authority.

- 9.14 The assessment also recommends consideration of the period during which the absolute level of an impact is at its peak, as well as the hour at which the greatest level of change is likely. The Applicant should set out how they plan to consider these peak hourly impacts.
- 9.15 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.
- 9.16 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; then impacts need to be understood during those hours when vulnerable road users would be utilising the road network.
- 9.17 Locations where small changes in traffic flows would result in a different categorisation of impact, which subsequently present a risk to the conclusions of the assessment.
- 9.18 Paragraph 12.5.6 sets out that the Sudbury Branch Line is indicated to be a high sensitivity receptor as it is mainly used for tourism and recreation, but also for commuting traffic. SCC would query if the assessment of the railway line is being treated differently to the highway and PROW, as they also provide these functions, and often to a greater number of people.
- 9.19 Paragraph 12.4.12 and 13 provide information on the assessment of HGV movements; further details of the programme and subsequent assessment, including calculations should be provided with the ES.
- 9.20 SCC would expect assumptions to be evidenced. The use of ‘Professional Judgement’ has been a matter of dispute in recent DCO examinations, particularly when used in the absence of evidence, for example, the application of professional judgment to determine the sensitivity of a highway or public right of way without evidence such as user surveys or detailed local knowledge would not be appropriate.
- 9.21 Where mitigation, embedded in the project or otherwise (5.6.1, 12.6.2, 12.6.3) is required or proposed by the Applicant SCC would expect this to be secured within the DCO as Requirements or within supporting documents so that the authority and local community have confidence in the robustness of such measures. Suitable monitoring (5.9.1), reporting and enforcement should also be secured within the DCO or supporting documents.
- 9.22 SCC cannot comment on the Applicant’s position that no mitigation is considered necessary for this project (12.6.20) until such time as the method of assessment, its application and outcomes are agreed with the authority. While the ES may not identify mitigation the nature of the local road and public rights of way network is likely to require mitigation such as localised widening, road safety or improvements.

Construction Programme

9.23 It is stated in 4.4.4 that the construction phase is expected to last for six years between 2022 to 2030. This is likely to coincide with a number of large projects including the peak year for Sizewell (if consented).

Construction Traffic and the Transport Assessment

9.24 In paragraph 4.4.16 the number of vehicles is estimated to peak at 300 (220 HGV, 80 LGV) but exclusive of workers. Evidence is requested to confirm this figure includes peaks such as construction / removal of haul roads or concentrated activities such as large concrete pours.

9.25 Averaging construction vehicles over a month (as in 12.4.23) is likely to dismiss peaks such as concrete pours. Nor is an even profile of construction movement over the working day considered reasonable s evidence from other projects (EA1(N), EA2 and Sizewell C) indicate more trips occur in the morning than the afternoon.

9.26 Confirmation is sought as to whether these are vehicles or movements (i.e. two way) and would request that future documents clearly define what data is being quoted. Paragraph 12.4.23 identifies the conversion of monthly figures to daily figures. Information is sought on the potential for fluctuation of flows across a monthly period or whether the 12.5% uplift is considered appropriate for addressing this issue. That being said, if appropriate monitoring and controls are included in relevant management plans, then there is less concerns over the assessment method.

9.27 Paragraph 5.1.2 sets out the details of the coverage of the CTMP. It is expected that the CTMP would include details on monitoring, reporting and enforcement of vehicle movements associated with the project, including routeing of HGVs, controls on numbers of HGVs able to utilise relevant links and measures to encourage sustainable transport and to ensure compliance with the environmental assessment and transport assessment. Once full details of vehicle movements is known it may be required that controls are put on vehicle movements during the network peak hours. This could involve surveying of movements at accesses or GPS data through an appropriate delivery management system. The reporting system should include appropriate communication with the highway authorities and should make all reports publicly available.

9.28 Although the access points (12.6.4) are dispersed the construction traffic will be concentrated onto a small number of routes and junctions, for example the A1071. The daily or hourly peak is of greater concern than the monthly peak. The monthly peak of 17858 calculates to a daily average of 595 trips (17858/30) which appears to be almost identical to the daily peak. This suggests that the peak flows will very consistent and of at least a month's duration.

9.29 The LHA notes that the geographical scope of the assessment (5.3.1) does not include any areas on the local or regional highway network and as such there is an assumption that the applicant has not identified a requirement for any mitigation on these routes. This is a matter that has yet to be discussed with the Applicant.

9.30 SCC has reservations in scoping construction traffic out of a TA (Table 12.1 ID 4.7.1) for the Strategic Road Network (SRN). The slip roads between Stratford

St Mary and Capel St Mary are non-compliant with modern design standards, the short on and off slips making it difficult for all vehicles but specifically HGVs to join or leave the SRN. Capacity and safety issues have also been identified by National Highways at the A12/A14 Copdock Interchange resulting in the listing of this site as a potential RIS3 scheme. Early stages of consultation have been undertaken by National Highways ([A14 Junction 55 Copdock Interchange - Highways England \(nationalhighways.co.uk\)](https://www.nationalhighways.co.uk)). While the A12 south of Ipswich and the A14 are SRN and not SCCs responsibility it is concerned that problems on the SN lead to traffic diverting onto the local network.

- 9.31 SCC has concerns regarding the acceptability of other parts of the local highway network for significant volumes of construction traffic and would welcome discussions on these matters.
- 9.32 It is not possible to comment on effectiveness of the OCTMP to embed mitigation without seeing a draft (12.6.2).

Data Collection and Modelling

- 9.33 The 2013 data probably referred to in paragraph 12.5.9 is considered dated. SCC is concerned that in paragraph 12.5.10 the sensitivity is based on this data and in 12.6.17 the impacts are dismissed, particularly stating that that some PRow routes have no users.
- 9.34 SCC welcome the commitment to collect further baseline data in early 2022. SCC has a number of semi-permanent traffic counters that may provide useful information when looking at changes in traffic flows since the original surveys were undertaken.
- 9.35 We accept that the baseline traffic flow surveys taken in 2021 (5.3.6) were likely to be affected by the COVID 19 Pandemic. The Applicant recognises this in 12.4.3. The LHA would welcome discussions with the Applicant to agree an acceptable methodology to quantify the baseline.
- 9.36 If development peaks are before or after 0800 and 1800, as indicated by core hours of 0700 to 1900, then it is strongly recommended that traffic surveys are extended to include both the network peak and development peak hours. This also includes use of the public highway and PRow by non-motorised users (12.5.9). The alternative of adjusting survey data introduces additional uncertainty in the assessment.
- 9.37 The LHA would expect the Applicant to share any data obtained from other projects and used as evidence within the assessment. This would also be the case where evidence such as the programme for individual components of the project would be necessary to show that all peaks do occur within three months either side of the forecast peak (12.4.12). Risks such as delays to the programme and consequential impact on the cumulative peak movements needs to be clearly explained so that there is confidence that the values assessed in the ES and TA are indeed a robust maximum. Alternatively this could be managed through comprehensive monitoring and controls.

Construction Workers and Travel Plan

- 9.38 Paragraph 4.4.11 sets out the core working hours for the development. These are between 0700 and 1900, 0800 to 1700 Saturdays, Sundays and Bank

Holidays with no apparent rest days and potentially activities outside the hours (4.4.12).

- 9.39 Further information is sought on whether these shift patterns are likely to be seasonal, and whether this has resulted in the Applicant undertaking an assessment of the hour of greatest change, as per paragraph 3.8 to 3.10 of GEART. Consideration is also needed on whether this has affected the assessment of vulnerable road users and residents, particularly in view of the unbroken nature of the transport impacts.
- 9.40 The number of workers is stated in paragraph 4.4.13 as being up to 700 workers at peak in November 2027. Further details are needed on this workforce profile and indication of how these movements have been translated into vehicle movements, including any assumptions around car sharing, and sustainable travel. Consideration should be given at this early stage to potential ways to bus/mini-bus workers into site (particularly during those months where the number of workers is higher) to reduce impacts on the highway.
- 9.41 The proportion of workers who would be sourced from the local labour market is set out in paragraph 4.4.14; further details are needed as to how this has affected assessment of the origin of the workforce for the assessment of traffic impacts.
- 9.42 Paragraph 12.4.17 provides high level information on the staff forecasts, it is expected that origin destination data would be consistent with any socio-economic assessment and take into consideration implications of workforce of other major schemes occurring in the area. However, due to a decision to 'scope out' socio economic matters in the Scoping Report (a decision SCC considers was misguided), it is unclear what socio economic data will be provided.
- 9.43 It is identified that census travel to work dataset is used to estimate construction staff mode share and to distribute car trips. Information is sought on whether this assessment method is appropriate for a transitory population, as indicated at paragraph 4.4.14. If the workforce is transitory it cannot be assumed, without further evidence, that they distribute in the same manner as the resident population. Evidence should be submitted to verify these assumptions. SCC considers this should be done via a socio-economic assessment to inform the relevant parts of the ES.
- 9.44 Within 5.1.2 SCC would expect a Construction Workers Travel Plan to support the CTMP particularly in respect of minimising vehicular trips generated by workers travelling to / from and within the site. While the LHA recognises the limitations associated with applying good travel behaviour to a long linear scheme in a rural location it is not considered that this justifies absence of such measures. A Construction Workers Travel Plan will ensure that workforce vehicle movements to/from the site will be monitored, reported and enforced that to ensure compliance with the environmental assessment as has been the case for similar projects.

Construction Routes and Access

- 9.45 Concerning paragraphs 4.6.4 for the construction access points and routes and paragraph 12.4.27 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. Specifically, paragraph 4.3.6 sets out details of alternate access arrangements for works in Hintlesham Wood, SCC would

expect further clarity around the access arrangements and assessment of these movements within the Transport Assessment.

- 9.46 As the highway authority we 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 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 so that it is clear how permanent and temporary restrictions on the highway (including rights of way) are to be implemented.
- 9.47 SCC would welcome the proposal in 4.4.8 to use of haul roads to reduce HGVs on local roads although noting the additional material haulage required to do so. Whilst the LHA would support the use of suitable recycle aggregate in haul roads (4.4.9) it notes that if all proposed NSIPs are consented there will be a significant demand for such materials at the time this project is forecast to be constructed.
- 9.48 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 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 trafficking of mud and debris or the flow of water onto the public highway.
- 9.49 SCC would strongly encourage the Applicant to engage in early discussion on the proposed location and layout of accesses, both new ones (4.4.25) and existing (4.6.5). In particular experience of other projects has identified tension between visibility necessary for safe access and removal of significant lengths of hedge or mature trees on narrow rural roads. The limitations of the highway network as diversion routes during road closures would also be a matter that can benefit from early dialogue between the Applicant and the LHA. The Applicant's attention is drawn to the use of rural lanes by pedestrians, cyclists and horse riders, their key role connecting PRow and the SCC intuitive to better protect users through the implementation of Quiet Lanes (<https://sites.google.com/view/quietlanessuffolk/status>).
- 9.50 The LHA's agreement will be required for construction of cables and protective scaffolding above the public highway together with any associated traffic management (4.4.39). It is unusual to require police presence to support roadworks provided that the relevant orders and methods of working are put in place.
- 9.51 Permanent alterations to the public highway such as the accesses for the CSE compounds 4.6.14 must be agreed with the highway authority through appropriate agreements (eg Highways Act: 1980 s278)
- 9.52 Paragraph 4.8.8 identifies the potential need to temporary access arrangements, including that from the public highway, for maintenance of the cables during operation. These will also require agreement with the Highway Authority although it may be possible to use simplified processes.

Local Highway Network (see also comments on Figure 12.1)

- 9.53 SCC would welcome early discussions with the Applicant regarding the suitability or otherwise of the local highway network.
- 9.54 Figure 12.1 includes a number of links that have a narrow width with limited opportunities for passing slow moving vehicles or pedestrian facilities, and so these can have a disproportionate impact on the local highway network.
- 9.55 The Applicant should note that B class roads can be narrow which may prevent the half and half method proposed in 4.4.47. The Applicant should note SCC's requirement for trenchless construction under major (A and B) roads.
- 9.56 Care should be taken relying on Ordnance Survey plans to assess physical constraints on the highway network. Experience has shown that these plans are not of sufficient accuracy for use in swept path analysis and do not show constraints such as vegetation.
- 9.57 Table 12/4 could be made clearer by including county (or district), road number and parish. Link IDs with a supporting plan may also aid comprehension of this information. The proportion of construction vehicles would be useful in this table.

Vulnerable Road Users

- 9.58 SCC notes recent changes in hierarchy of users in the Highway Code and LTN 1/20 and expects that these will be reflected in the Applicant's application.

Public Rights of Way (PROW)

- 9.59 PROW should be scoped into the ES, preferably in the transport section and not fragmented across a number of disciplines.
- 9.60 SCC has a strong preference to keep PROW open by implementing suitable safe operating procedures. Permissive routes will need to be secured by requirements or other suitable methods to avoid removal and, wherever possible, should not be of lower amenity than the PROW being replaced.
- 9.61 SCC considers that paragraph 12.4.9 should be altered to include all PROW routes within, *passing through or immediately adjacent* to the order limits.

Abnormal Indivisible Loads

- 9.62 Early identification of structures on the Applicant's proposed AIL routes (12.4.27) is strongly recommended, particularly as the local highway network in this area is not frequently used by such vehicles. SCC would expect a formal arrangement to be reached with the Applicant to facilitate this.
- 9.63 The routing of AILs in 12.6.12 refers to those destined for the southern part of the project. Is it anticipated that any AILs will originate from the Port of Ipswich or Felixstowe to serve the northern end of the Scheme and Bramford Substation? The DfT preferred heavy load route from the M25 to Bramford has been superseded by use of the Port of Ipswich to comply with NPS guidance to maximise use of waterborne methods of transport.

Road Condition Assessment

- 9.64 In 4.4.18 it is stated that road condition assessment is being undertaken to identify suitability of road network to accommodate AILs and HGV. SCC not consulted on the scope of this assessment nor any discussions on this matter since 2013.

Committed Development

9.65 SCC welcome opportunity to is work with the applicant and planning authorities to agree a realistic scale of committed development in Suffolk as stated in 12.5.12, particularly as the area has had some unplanned growth in recent years.

9.66 SCC considers that Snoasis can be regarded as a committed development.

Air Quality

9.67 It is noted that no construction traffic will be routed through the Cross Street AQMA in Sudbury (13.6.8). This would be an example of embedded mitigation that should be included in the OCTMP together with acceptable monitoring, reporting and enforcement.

9.68 Controls and monitoring will be needed within the OCTMP to ensure that the HGV fleet is compliant with EURO VI standards.

Noise and Vibration

9.69 The authority is concerned that proposed core working hours for the project (4.4.11 and 14.4.19) will result in construction traffic being present on the local highways 7 days a week including bank holidays. Potentially local residents would not enjoy any respite from traffic noise and vibration for the duration of the project.

9.70 The Applicants consideration of Noise Important Areas (14.5.4) is welcomed as some of these locations may be subject to construction traffic originating from this project.

9.71 As the LHA SCC has not had the opportunity to examine the data underpinning the construction traffic noise assessment and cannot comment whether the impacts are negligible, with the two exceptions indicated in 14.6.18.

Cumulative Impacts

9.72 SCC notes that a study area of 50km to identify NSIPs would include Sizewell C (@40km), EA1(N) and EA2 (34km to proposed Friston Substation). Sizewell C in particular may have cumulative transport impacts with 85% of HGVs being routed via to the A14 at Seven Hills and hence the majority to the A14/A14 Copdock Interchange. These are not included as inter-project cumulative impacts (15.6.7) nor reasons provided for scoping them out. While not referred to in the main text these NSIPs have been taken forward to stage 2 (Appendix 15.3). Sunnica is now at examination stage (not pre-application as stated in appendix 15.3)

9.73 SCC considers that there is also a potential intra project impact on regional users of the highway network during the construction phase (15.6.4) through additional traffic on the network, closures, diversions and delays.

Comments on 'Typical Bellmouth Detail' (3.3.9)

9.74 While noting that this is a very basic layout SCC as LHA would make the following comments:

9.75 A minimum of 15m paved area measured away from the edge of the carriageway is necessary to prevent mud and debris being carried onto the public highway

- 9.76 An engineered subbase is likely to be required to carry HGVs rather than a capping material proposed
- 9.77 A stepped edge of granular material against bituminous surfacing is unlikely to be durable. The LHA would recommend edge restraint such as kerbing.
- 9.78 The radii and width of the junction will depend on the likely use and existing highway layout (i.e. larger bellmouths may be necessary where existing roads are narrow. Many of the unclassified and C class roads are much less than the 6m width suggested.
- 9.79 Land drainage consent is likely to be needed for temporary culverting of ditches

Figure 12.1 Traffic and Transport

9.80 SCC makes the following comments on the figures provided:

- AP1, AP1A, AP2 all served from CR21 which are minor roads which are not suitable for significant numbers of HGVs
- AP3 on the A1071 appears to be located on a sharp bend
- C1081/9 includes a narrow section immediately west of Burstall Bridge where two HGVs have difficulty passing.
- CR11 serving AP15 and AP16 is narrow beyond the entrance to the quarry.
- CR19 Clay Lane is narrow with a tight turn from Pond Hall Road.
- AP13 and AP14 are served via CR B1070/5, the B1070 which has a number of narrow pinch points. Note that Benton Street, Hadleigh is narrow and unsuitable for any additional construction traffic. And has a 7.5tonne weight limit restriction.

9.81 The highway network around Polstead and Polstead Heath proposed as construction routes CR7, CR8 and CR9 are typically formed of narrow lanes well below the width of 5.5m recommended for two HGVs to pass in Manual for Streets (noting that this is in any case a design guide for residential, low speed roads). Around Assington the lanes proposed as construction routes CR5, CR6 are similarly constrained and pass through the village.

9.82 It is unclear if CR5 is accessed through Assington or from the B1508 (CR B1508/2). The B1508 has, in the past, had a poor safety record resulting in the lowering of the speed limit and other initiatives. However, the road remains narrow and bendy with narrow pinch points, for example in Bures.

Figure 12.2 Estimated Peak Construction Traffic Flows

9.83 It is not clear if these are single way movements i.e. deliveries or the sum of journeys to and from the site accesses.

9.84 While the form of presentation is useful it is not clear that the values presented appear to make sense. For example, 25 vehicles pass through Assington on CR6, but the total on the A134 (CR134/4 and CR A134/5) are the same, 82 total movements.

10. **EPS Historic Environment**

RE: Statutory Consultation, Bramford to Twinstead Tee 400Kv Connection

10.1 The following advice related to the Bramford to Twinstead Statutory Consultation, which is currently underway, running from 25th January to 21st March 2022. The Statutory Consultation follows the submission of a Scoping Report, which comments were also provided by Place Services working on behalf of Suffolk County Council. This response identifies areas of concern in relation to the impacts of the scheme upon built heritage assets within Suffolk County Council's administrative boundary.

A description of the proposals is as follows:

- 10.2 NGET proposes to reinforce the electricity transmission network between the existing Bramford Substation in Suffolk, and Twinstead Tee in Essex. This would be achieved by the construction and operation of a new 400 kilovolt (kV) electricity transmission line over a distance of approximately 29 km.
- 10.3 The reinforcement would comprise approximately 19 km of overhead line (consisting of approximately 55 new pylons and conductors) and 10 km of underground cable system (consisting of 20 cables with associated joint bays and above ground link pillars).
- 10.4 Four cable sealing end compounds would be required to facilitate the transition between the overhead and underground cable technology.
- 10.5 It is proposed that approximately 27.5 km of existing overhead line and associated pylons would be removed as part of the proposals (25 km of existing 132 kV overhead line between Burstall Bridge and Twinstead Tee, and 2.5 km of the existing 400 kV overhead line to the south of Twinstead Tee).
- 10.6 To facilitate the overhead line removal, a new grid supply point substation is required at Butler's Wood, east of Wickham St Paul, in Essex.
- 10.7 Two options are proposed for the new 400 kV overhead line in the vicinity of Hintlesham Woods.
- 10.8 Option 1 would utilise the alignment and pylons of the exiting 400kV overhead line through the woods, whilst the existing 400kV overhead line would be re-routed to the north and west of Hintlesham
- 10.9 Woods. Option 2 would parallel the existing 400kV overhead line to the south, with pylons located outside of the woodland and the conductors crossing the woods.
- 10.10 Built heritage assets within Suffolk which will be affected by the proposals were identified as part of the Primary Environmental Information Report (PEIR) which forms part of the documents prepared for this public consultation. Section 8 of the PEIR relates to the Historic Environment, with Built Heritage Assets identified in Appendix 8.1, shown in Figure 8.1.
- 10.11 EPS largely agree with the statements provided within the PEIR relating to built heritage assets, namely: no direct impact is anticipated to identified built heritage assets, with no works occurring to their fabric, however there will be a change to their setting which could result in harm to their significance. As stated in the previous response, due consideration should also be given to potential

indirect effects upon these buildings during the works, caused by vibrations, noise or other construction related activities. Sections 8.6.6 -8.6.13 of the PEIR are reassuring, suggesting that the potential impact of the construction phase would not result in any permanent physical harm to any built heritage assets.

- 10.12 It is also reassuring to read in section 8.6.12 that buildings in particular proximity to the draft order limits/ZTV will be assessed further, to understand the potential impact of the proposals on the settings and physical fabric of these buildings.
- 10.13 The potential for non-designated built heritage assets to be affected by the works remains high. Within the next stages of the scheme, a thorough survey must be undertaken to identify any non-designated buildings of heritage interest which will be affected by the scheme, through a change to their setting.
- 10.14 This should have been addressed within sections 8.6.14 - 8.6.20, as per Table 8.2, ID 4.3.6 and ID 4.3.10. EPS understand that no demolition of existing structures or buildings will occur as part of the proposed network upgrade, however this should be clarified, particularly in the areas where the cabling will be routed underground.
- 10.15 A feedback form was provided by NGET, my comments below follow the format provided within the feedback form, answering the relevant questions but only in terms of Historic Environment matters.
- 1) Neutral (from the perspective of the Historic Environment only). The plans to use a mixture of both overhead lines and underground cables can be supported if the justification is provided, using the most appropriate method for each section of the network.
 - 2) For the purpose of this response, which relates to Suffolk only, Sections AB - G are relevant.
 - 3) The response is provided on behalf of Suffolk County Council.
 - 4) Concerns are: disruption to land use, removal of vegetation, the potential to encounter archaeology or historic features, traffic and transportation, noise.
 - 5) National Grid have listened to feedback but further change is required.
 - 6) Neither agree nor disagree.
 - 7) Preference for option Two (from the perspective of Historic Environment only). The existing power line does affect the setting of College Farmhouse, however the additional line will not greatly increase the existing impact the powerline has upon the setting of this building. The proposed Option One, would however affect the setting of Grade II listed Old Hall House in a way that the current arrangement of pylons does not. Further assessment of this impact must be provided, should Option One be taken forward as the preferred arrangement.
 - 8) The impact upon the setting of built heritage assets.
 - 9) Views and the impact of the increased height of pylons should be explored, perhaps through comparative images.
 - 10) Neither agree nor disagree. The proposed location of the cable sealing end compound will have a limited affect upon the setting of the closest listed building, GII listed White Hall (list entry number: 1037077), which faces away from the proposed compound and has limited relationship with the site. Further analysis of this impact would be beneficial.

- 11) The potential impact upon the significance of any non-designated built heritage assets should be considered, with a survey undertaken to identify the heritage value of built form in this area. The residual effects of all construction and undergrounding works upon listed buildings, through vibrations etc also needs to be further understood, as per the PEIR document.
 - 12) As per previous sections, non-designated built heritage assets need to be considered, as well as the impact upon the setting of designated heritage assets. Wide views should also be taken into consideration, due to the topography of this area.
 - 13) Removing more of the existing 400 kV overhead line: Agree, this would be beneficial, helping to partially reinstate the historic appearance of the landscape. Relocating Stour Valley West cable sealing end compound: neither agree nor disagree. No comments, the relocation will not affect any built heritage assets. New alignment for the reinforcement through the Stour Valley: Neither agree nor disagree. More assessment needs to be conducted regarding the impact the route will have upon the setting of heritage assets.
- 10.16 To conclude, at this stage a great deal of information regarding the impact of the proposals upon built heritage remains to be provided. However, should the subsequent stages of the process follow the stages outlined in the PEIR document, EPS trust that this work will be conducted in due course.

Hintlesham Hall

- 10.17 The remainder of this response deals with the potential impact of the proposals upon the significance of Hintlesham Hall, a Grade I listed building (list entry number: 1036917) and its wider estate, which includes additional individually listed buildings and is located to the west of Ipswich, approximately six miles from the city centre.
- 10.18 Dating from the late sixteenth century, the core of Hintlesham Hall has been extensively altered and remodelled in various phases, most notably in 1725-40 by Richard Powys, giving the building its current Georgian external appearance. The core of the building is in a U shape, accessed via a courtyard in front of the main entrance which faces west. Rendered on its principal elevations, with rusticated detailing on the ground floor, the Hall features many classical elements, such as a columnated central doorway, pedimented windows and doors and a moulded cornice. It has a complex plan, featuring a 'double pile' roof arrangement to the rear which is evidential of its multi-phased construction. The building also features diaper patterned sixteenth century brickwork to rear, irregular gabled bays and impressive, incredibly large, chimney stacks. The building is roofed in red plain clay tiles, partially concealed by a parapet which extends across the majority of the building.
- 10.19 The building's significance is evidenced in its high listing grade and derived from its architectural, historic and archaeological interest. As an example of a country seat, it provides evidence regarding past land ownership and political practices; the house's owner Richard Powys, who extensively remodelled Hintlesham Hall, was a Principal Clerk to the Treasury. Currently operated as a hotel and venue, the building retains many historic architectural features.

- 10.20 To the north of the Hall, adjoining its northern elevation, are the building's associated service and stable ranges which are separately listed at Grade II* (list entry number: 1036918). As with the Hall, sections of these buildings date from the sixteenth century and have been altered in subsequent centuries. Built principally in brick, with elements of timber framing, these ranges feature arched windows and detailing also evidenced on the Hall.
- 10.21 Hintlesham Hall and its service ranges are principally accessed from the south, via an access route off Wilderness Hill, the A1071. At this southern entrance to the house there is a grade II listed Lodge (list entry number: 1351645) and grade II listed gatepiers, gate and railings (list entry number: 1036916) which frame the tree-lined avenue which leads to the Hall. The approach to the Hall via this route from the south is largely flat, with the access route shaded by mature trees and the Hall in a slightly elevated position. To the east of the access route the land is laid to lawn, with the field on the west of the access route currently in agricultural use. This field, west of the access road, separates Hintlesham Hall from the A1071, which leads north/south around the Hall's boundary and is directly overlooked by the Hall. Hintlesham Golf Club, a modern building with associated car parking, is north east of the Hall. The golf course extends across the landscape immediately east and south of the Hall, shielded in part by areas of shrub and woodland which prevent the appearance of the golf club overwhelming the outlook from the Hall's rear and eastern elevations. Hintlesham village, a small ribbon development along the route of the A1071, is south of the Hall complex.
- 10.22 As part of the proposed alterations to the existing power line that are the subject of the current statutory consultation, changes will occur to the existing power line which runs from the south west to the north east, within the setting of Hintlesham Hall. No assessment has, however, been undertaken at this stage to truly understand the impacts of the proposals upon the significance of the listed buildings, nor have any substantial mitigation strategies been suggested. At this stage, therefore, the suitability of any new power cables or routes cannot be fully assessed. This prevents the authorities from being able to suitably meet the requirements of section 195 of the NPPF at present, which states:
- 10.23 Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset's conservation and any aspect of the proposal.
- 10.24 EPS consider that the response provided by the local authorities in 2013 (See the document dated 7/5/2013 named Position Statement: Bramford to Twinstead Project, Detailed alignment options, Hintlesham Hall, Hintlesham, Suffolk) remains relevant. Whilst the options for the route have changed slightly (Options One and Two also appear to have swapped numbers between the 2013 and 2022 consultations), the observations made in this 2013 report regarding the lack of thorough assessment are still applicable to the 2022 scheme. Similarly, the mitigation proposed on Table 5.3, page 47 of document 4.1 Project Development Options Record, is incredibly minor and fails, as EPS understand, to replicate proposals discussed with the local authority in 2013, in

which much larger mitigation was proposed. The mitigation strategy outlined in document 4.1 should be pushed further, for example seeking to reinstate more of the parkland surrounding Hintlesham Hall, be that via a change of use of the field immediately opposite the hall or potential replanting of the now segmented avenue of trees that once led west from the Hall, to Hintlesham Wood. The latter option would, of course, be subject to mitigation of the visual prominence of the pylons located at Hintlesham Wood. EPS recommend that a thorough heritage assessment of the Hintlesham Hall Estate's setting is undertaken, with design proposals and mitigation strategies forming part of this report, identifying ways in which the buildings' setting could be enhanced. All proposals for enhancement should be informed by research into the Hall's former setting, including evidence of any planned or natural features of its estate that once existed but have been removed or eroded over time. This assessment should follow accepted guidance, including Historic England's document GPA3: The Setting of Heritage Assets.

- 10.25 In addition, the maps provided as part of this consultation (see Figure 8.1) are at an insufficient scale to comprehend how any changes to the existing cable corridor will affect the setting of the listed buildings, nor have sufficient visualisations been produced which highlight how the replacement of existing pylons with larger variants would affect the setting of Hintlesham Hall and its associated buildings and landscape. It is expected that these will be provided as part of the further consultation phases. EPS do, nevertheless, agree with the statement in section 4.6.3 of report 4.1, which states that Corridor 2B would have a negative affect on the setting of several nearby listed buildings.
- 10.26 To conclude, significant gaps remain in the analysis of the effects of the changes to the cable corridor to the setting of Hintlesham Hall. EPS understand National Grid are currently in talks with Historic England, and it would be beneficial if the local authorities could also be included in these discussions, be that regarding Hintlesham Hall or other aspects of the scheme which will affect built heritage assets.

11. SCC Landscape

Proposed mitigation

- 11.1 The Council notes the discussion of mitigation of the visual impacts of overhead lines set out in the PEIR at section 6.8 p126, and the references made to EN5 2011 para 2.8.11. The Council considers that it is of particular importance that such an approach is applied to mitigate, or offset, the impacts of the overhead lines on the setting of designated landscapes, or heritage assets, such as for example Hintlesham Hall, or those landscapes, such as the Stour Valley, for which the Secretary of State is anticipated by the project promoter, to consider that undergrounding is also necessary. (draft EN5 2021 para 2.11.20)
- 11.2 The principle that planting, or works in the wider landscape, can mitigate or offset the adverse impacts of overhead transmission lines is established in National grid's own Landscape Enhancement Initiative (<https://lei.nationalgrid.com/>) which is applied when it is not considered appropriate to underground existing lines in designated landscapes, through the Visual Impact Provision scheme (<https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/visual-impact-provision>).
- 11.3 The Council considers that, on this basis, the project promoter should develop a robust scheme of mitigation for the overhead sections of the project.

Landscape Baseline – Stour Valley

- 11.4 The Council considers that the landscape baseline for this area, as set out in Appendix 6.1, does not appear to have sufficient regard for the report, [Special Qualities of the Dedham Vale AONB Evaluation of Area Between Bures and Sudbury](#), and that this report provides important evidence to support the case for undergrounding in the Stour Valley.

12. EPS Landscape

Table 3: Landscape

Document Ref	Topic	Comment
Volume 1 Main Report		
Page 92	Methodology	We accept the categories of landscape and visual receptors to be included in the assessment.
Page 92	Methodology	We welcome the amendments that have been made to the Landscape and Visual Impact Assessment methodology since the EIA Scoping Opinion consultation. This includes the inclusion of the Technical Guidance Note 02-21: Assessing landscape value outside national designations (May 2021).
Table 3.4: Landscape and Visual Non-statutory Consultation	Assessment of effects	The Table makes reference to combined and sequential effects and how they will be considered within the ES as part of the landscape and visual assessment. However, this has not been reflected in the PEIR and we hope this comes forward soon in the assessment process.
Table 6.1: Summary of Aspects Scoped In/Out Based on Scoping Opinion	Night-time effects (construction and operation)	The Scoping Report and Planning Inspectorate report (ID 4.1.2) advise that lighting will be scoped out on the Environmental Statement. We are still of the judgement that given we are yet to receive information regarding the size and location of any construction laydown/compound areas, and the operating hours of these, night-time effects should be scoped in.
Para 3.3.4-5 Table 6.2: Other Matters from the Scoping Opinion	Stour Valley Project Area	<p>It is National Grids intention that if there is no change to the AONB boundary, the Stour Valley (or parts of it) will be considered as forming part of the setting of the AONB and the Stour Valley Special Landscape Area (SLA).</p> <p>Though this position has been agreed with Natural England, this stance is not supported, and we would agree with the Inspectorate (ID 4.1.13) in that the Stour Valley Project Area (AONB 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 designation. As such, the ES should include sensitivity testing against the Stour Valley Project Area as a landscape designation, separate to that of the Stour Valley SLA.</p>

		<p>We agree that it is not known which parts of the Stour Valley may become part of the Dedham Vale AONB in the future. However, we know that the Stour Valley Project Area has been subject to 5-year management plans endorsed by the LPA and has been under careful assessment and scrutiny (Valued Landscape Assessment Stour Valley Project Area (March 2020)) that has identified the distinct qualities it features and therefore</p>
<p>Landscape and Visual Non-statutory Consultation Table 3.4</p> <p>Landscape and Visual Baseline</p>	<p>Dedham Vale AONB and Stour Valley</p>	<p>Reference has been made to the Dedham Vale AONB and Stour Valley Management Plan, which is welcomed. However, there are also other reference/guidance documents that need to be considered and used as part of the assessment. This includes:</p> <ul style="list-style-type: none"> - Dedham Vale AONB Natural Beauty and Special Qualities and Perceived and Anticipated Risks (July - Managing a Masterpiece Evaluation Report (Dec 2013) - Valued Landscape Assessment Stour Valley Project Area (March 2020)
<p>Para 6.6.91</p>	<p>Removal of existing 132kV overhead line</p>	<p>We agree that the removal of the existing 132kV overhead line would directly and beneficially affect the special qualities and setting of the Dedham Vale AONB Stour Valley Project Area would also arise due to the removal of several spans of the existing 400kV overhead line from Twinstead Tee southwards.</p>
<p>Para 6.6.102</p>	<p>CSE Compounds - views</p>	<p>Based on the supporting information provided at this stage of the process we do not contest the judgements made on visual effects from CSE compounds such as the proposed Dedham Vale East CSE compound and Stour Valley East CSE compound and would welcome the opportunity to explore the potential for</p>
<p>6.6.144</p> <p>Underground cables landscape and visual effects during operation</p>	<p>Underground cable – replanting</p>	<p>The PEIR has judged that landscape and visual effects may arise because trees cannot be planted to replace those removed during construction if the replacement planting is above or close to the underground cables. Though there is an assumption that hedgerows could be replanted broadly perpendicular across cables, therefore the effects are judged as likely to not be significant.</p> <p>However, we are still of the judgement that given we are yet to receive information regarding the impacts on hedgerows and trees, the alignment of the cables in relation to hedgerows and the required easement areas and species restrictions, we don't have confidence that a 'not significant' effect can be determined at this stage, especially in regard to effects on landscape</p>
<p>Table 4.2: Preliminary Environmental Areas Identified for Mitigation and Enhancement: ENV02</p>	<p>Hintlesham Hall Mitigation measures</p>	<p>We welcome the mitigation planting concepts for Hintlesham Hall and would also advise that grassland habitat opportunities are also explored. For instance, a well-managed unimproved or semi-improved grassland maintained as a closely grazed turf interspersed with taller tussocks could help improve and enhance the parkland setting of the House.</p>

Hintlesham Hall		
Table 4.2: Preliminary Environmental Areas Identified for Mitigation and Enhancement: ENV14 GSP Substation	GSP Substation Mitigation measures	The GSP substation is situated between Butler’s Wood and Waldegrave Wood, both of which are ancient woodland and Essex CWS. Reference is made to enhancement planting that could provide an opportunity to reconnect the two woodlands. This is supported, and we would advise that a review of historical field patterns and local native species is undertaken to see how this can be considered as part of future landscape designs.
Table 3.6: Historic Environment Consultation		<p>We are still awaiting details in regard to impacts on hedgerows, particular those that could be deemed ‘important hedgerows’ under the Hedgerows Regulations 1997 (both in terms of wildlife and landscape, as well as archaeology and history) and how this would impact effects on landscape character and designations.</p> <p>This information is also integral as it can go on to inform species options for restoration planting schemes, which may need to differ given the restrictive options available above underground cables.</p>

13. SCC Public Health

- 13.1 We acknowledge the importance of this project to increase energy output and contributes to the national agenda - Net Zero Greenhouse Gas Emissions by 2050. As a general principal we support proposals which seek to reduce the potential for detrimental impacts upon local communities and the wider environment in which people live or visit.
- 13.2 The Bramford to Twinstead reinforcement includes:
NGET proposes to reinforce the electricity transmission network between the existing Bramford Substation in Suffolk, and Twinstead Tee in Essex. This would be achieved by the construction and operation of a new 400 kilovolt (kV) electricity transmission line over a distance of approximately 29 km.
- 13.3 The reinforcement would comprise approximately 19 km of overhead line (consisting of approximately 55 new pylons and conductors) and 10 km of underground cable system (consisting of 20 cables with associated joint bays and above ground link pillars).
- 13.4 Four cable sealing end compounds would be required to facilitate the transition between the overhead and underground cable technology.
- 13.5 It is proposed that approximately 27.5 km of existing overhead line and associated pylons would be removed as part of the proposals (25 km of existing 132 kV overhead line between Burstall Bridge and Twinstead Tee, and 2.5 km of the existing 400 kV overhead line to the south of Twinstead Tee). To facilitate the overhead line removal, a new grid supply point substation is required at Butler's Wood, east of Wickham St Paul, in Essex.
- 13.6 Two options are proposed for the new 400 kV overhead line in the vicinity of Hintlesham Woods. **Option 1** would utilise the alignment and pylons of the exiting 400kV overhead line through the woods, whilst the existing 400kV overhead line would be re-routed to the north and west of Hintlesham Woods. **Option 2** would parallel the existing 400kV overhead line to the south, with pylons located outside of the woodland and the conductors crossing the woods.
- 13.7 We have provided our response below on sections where new changes have been proposed in the consultation document.

Section AB – Bramford substation to Hintlesham

- 13.8 We would be minded to support Option 2 which seem to suggest this option will allow a better electrical configuration at the substation, more efficient construction, and reduce the number of pylons from with one new one. The pylons to be located outside of the woodland and the conductors crossing the woods. This section of the route include the Hintelsham Hall and Hintelsham Woods which require EIA and mitigation/compensation for land disturbance. We defer to SCC Ecology on whether adequate information has been provided to address ecological matters.

Section D – Polstead

- 13.9 We support this new location for following two reasons:
- i) It is 1km away from AONB boundaries between existing two blocks, thus existing woodland would be retained. This will reduce any potential effect on the setting of the AONB.
 - ii) Construction of both sections of underground cables using a ducted solution thus reduce the length of time that open trenches are required.

Section E- Dedham Vale AONB

- 13.10 We support building of underground cables. However, EIA will need to flag up mitigation measures to reduce the impact on Dedham Vale AONB with focus on sections 8,9 and 10 of environmental areas.

14. SCC PROW

- 14.1 The County Council Public Rights of Way and Access Team have welcomed early engagement and discussions on the impact and management of the Public Right of Way network. We also welcome additional user surveys of the rights of way network following initial surveys in 2013. The network usage has increased during that time, in particular over the last two years. We would seek clarification that the additional surveys carried out cover more than one specific day. It is noted that the Preliminary Environmental Information report does note this under 12.4.5 that surveys are being undertaken to provide a more up to date analysis.
- 14.2 The Project Development Options report details some mitigation measures under Table 5.3: Summary of the Preliminary Environmental Areas. These cover specific location areas and cover potential planting schemes to assist with screening and enhance the experience of users. It is noted that this includes improved PROW connectivity with the Hadleigh Railway Walk. This is welcomed and the Public Rights of Way and Access Team would welcome further discussions regarding the areas highlighted and potential further mitigation.
- 14.3 Within the Preliminary Environmental Information Report, under section 6 Landscape and Visual. The visual impact of both the construction and permanent impacts of the power cables is reviewed, in addition areas affecting certain Public Rights of Way are included within the photomontages. We welcome the detail provided for key areas and noting that a more significant impact is noted during the construction phase. With a lesser significant impact on completion and the permanent view. Potential mitigation measures have been noted within Table 5.3: Summary of the Preliminary Environmental Areas. However the photomontages are taken as a Summer view with full vegetation, this provides an interpretation for a short period of year with the power lines more visible during the autumn, winter and early spring months.
- 14.4 National Grid have set out the management of the Public Rights of Way network within section 4.4 of the Preliminary Environmental Information Report. This is appreciated and main points covered. Details are not fully known of each closure that is required, alternative routes or duration of restrictions. However the following should be considered.
- A pre and post condition survey must be carried out including identification and assessment of surface condition and with a scope of coverage and methodology to be agreed with Suffolk County Council (SCC) as Highway Authority. This should include pre-construction work where PROW might be used to gain access to the corridor and reinforcement works might be required prior to use by vehicles.
 - Where impacted by the works, any PROW will be restored to original condition or to a condition agreed with SCC - where there are existing defects, the applicant should agree restoration measures with the County Council and this should be included within a Code of Construction Practise.
 - Where PROW cross the cable corridor, haul road, access tracks and other sites, the surface must be kept in a safe and fit condition at all times for all users. Management measures should be included within the Construction Traffic Management Plan

- Pre-construction works must not obstruct or disturb any public rights of way (e.g. newt fencing, archaeology surveys etc) unless otherwise agreed with SCC. Management measures should be discussed and any temporary closures will need to be included in the DCO.
- Public rights of way that are used for any stage of construction access should remain open, safe, and fit for the public to use at all times with management measures put in place with the agreement of the County Council.
- Any temporary closure of a PRow must be agreed with the County Council and the duration kept to the minimum necessary, this must be included within the DCO.
- An alternative route must be provided for any public right of way that is to be temporarily closed prior to closure. The location of alternative routes to be agreed with the Council.
- Any alternative route must be safe and fit for the public to use at all times – suitable surface, gradient and distance with no additional road walking between the natural destination points.
- Any temporary closure and alternative route will be advertised in advance on site and in the local media, and to the local parish councils including a map showing the extent of the closure and alternative route. The closure and alternative should be signed accordingly.
- There will be no new gates or stiles erected on any public rights of way that are impacted by the cable corridor and any other associated site.

15. County Planning Authority

- 15.1 Suffolk County Council is the planning authority for minerals and waste planning matters within Suffolk as well as its own development which includes schools and some highways developments.
- 15.2 The Development Plan for the area directly affected by the scheme includes the Suffolk Minerals & Waste Local Plan, a number of different Plans produced by Babergh & Mid Suffolk District Councils, as well as a Neighbourhood Plan covering Assington (see Table 4 below).
- 15.3 The main concern in terms of minerals and waste development is the safeguarding of minerals resources and development and the safeguarding of waste development.
- 15.4 The relevant Suffolk Minerals & Waste Local Plan policies are MP10 for minerals and WP18 for waste.
- 15.5 Having considered the proposals there are no impacts in respect of existing or proposed mineral or waste facilities. The proposed development does cross the existing minerals processing area at Layout Quarry which is currently dormant. However the minerals operator does not object and there are ongoing discussions between National Grid and Brett Aggregates.
- 15.6 In terms of underlying minerals resources geological mapping indicates extensive spreads of sand and gravel resources. However, in terms of the relevant importance of these resources they are considered to be at most of regional significance compared to these grid reinforcement proposals which are of national significance. In addition significant parts of the route are within areas where in reality planning permission would not be granted because of the impact upon statutory landscape areas for example.
- 15.7 The County Council will defer to Babergh & Mid Suffolk District Councils and Assington Parish Council to make comments in respect of their own development plans.

Table 4: Development Plan

Item	Area	Subject	Comment
1	Suffolk	Suffolk Minerals & Waste Local Plan https://www.suffolk.gov.uk/planning-waste-and-environment/minerals-and-waste-policy/	Adopted July 2020
2	BDC	Core Strategy (Part 1 of new Local Plan) https://www.babergh.gov.uk/planning/planning-policy/	Adopted February 2014
3	BDC	Local Plan	Adopted 2006 (saved)
4	MSDC	Core Strategy	Adopted 2008
5	MSDC	Core Strategy Focused Review	Adopted 2012
6	MSDC	Local Plan	Adopted 1998 (saved)
7	MSDC	Local Plan Alteration (affordable housing)	Adopted 2006 (saved)
8	MSDC	Stowmarket Area Action Plan	Adopted February 2013
9	Assington	Assington Neighbourhood Plan	Made March 2022