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Dear Mr Pepper

Planning Act 2008: Norwich to Tilbury Project

South Norfolk Council's Response to the Statutory Consultation, under Section 42 of the Planning Act, between 10 April and 26 July 2024 undertaken by National Grid Electricity Transmission (NGET) for the proposed Norwich to Tilbury (NT) Nationally Significant Infrastructure Project (NSIP).

This is the response from South Norfolk Council who maintains its Objection to the proposed project.

Introduction

The Council has previously responded to National Grid on two non-statutory consultations in June 2022 and August 2023, the concerns raised in our previous comments still stand and this response adds to those comments.

South Norfolk Council recognises the need for increased capacity to the existing electricity transmission networks across the Eastern Region in order to cope with the additional new energy generation from offshore windfarms, nuclear power and interconnection with other countries and particularly the significant amount of energy generation above current capacity connecting into Norwich Main and Necton.

The Council equally understands that the project would assist in meeting the UK's energy ambition to achieve net zero carbon emissions by 2050 and the Governments Clean Energy target of 20230.

However, our understanding of the need to change doesn't mean that we should accept the single option presented to us. Whilst the energy will pass through our district to other areas, we are impacted by proposals for which we receive little local benefit. The significant harmful and potentially devastating impact on our district from the proposed project as presented in this Statutory consultation is of substantial concern.

Overview of the project

The proposals are for a new 400kV electricity overhead transmission line in East Anglia running from Norwich (National Grid's Norwich Main substation) to Tilbury in Essex, approximately 184 km in overall length. Comprising of :

- 159 km of new overhead lines supported on 510 steel lattice pylons of 50m in height (some of which are gantries typically 15m in height)
- 25 km of underground cabling located through the Dedham Vale National Landscape
- 6 new Cable Sealing End compounds, each with a permanent access
- New Substation in Tendring
- Substation extension works at the existing Norwich Main, and Bramford substations and works within the existing Tilbury substation
- Temporary works associated with the construction of the project

Alternative design at the Waveney Valley is also being considered. If this design alteration is taken forward it would result in the installation of approximately 157 km of new 400 kV overhead line.

The reinforcement in South Norfolk will consist of 30 km overhead lines supported by approximately 89 standard steel lattice pylons. It will start at Norwich Main substation, running to the west of the district, crossing the River Waveney into Suffolk.

The key differences for South Norfolk compared to the previous consultation:

- The potential for undergrounding (2km) of part of the route to the west of Diss under the River Waveney with two CSE compounds which will increase the number of CSE compounds from 6 to 8;

A series of alignment changes, such as:

- South of Norwich Main – adjusted the preferred draft alignment to avoid the battery storage facility;
- Between Swainsthorpe and Mulbarton – to avoid Bloy's Grove Solar farm and archaeological site;
- Tacolneston - minor realignment of overhead line near South Norfolk Model Flying Club;
- Bunwell - Moved pylon RG44 and repositioning RG43 to provide better screening from existing woodland;
- Between Bunwell and Tibenham – moved further east reduce effects on woodland.

Summary of our Position

Whilst recognising the potential importance of the Norwich to Tilbury project, in meeting the need to increase capacity to the electricity network, the Council maintains our objection to the proposed project as it stands, as agreed by South Norfolk Council's Cabinet at its meeting on Monday, 13 June 2022, when we considered the first non-statutory consultation.

As submitted, noting the changes from the 2023 preferred route corridor, the project presented still proposes standard lattice pylons through South Norfolk, with the exception of a possible alternative undergrounding at the Waveney Valley. It is considered therefore, that the Norwich to Tilbury would continue to have a significant detrimental impact on the environment of South Norfolk. The Council maintains its stance that we are not satisfied that the project in its present form, with its proposed overhead lines and standard lattice pylons is the most appropriate solution to National Grid's need for increased capacity.

The Council has concerns that the findings of the recent Study (March 2024) undertaken by the Electricity Systems Operator (ESO) relating to a series of alternative transmission options

across East Anglia has not been adequately considered by National Grid. Following the Independent Review commissioned by Norfolk, Suffolk and Essex County Council's which suggested that the delivery is not needed until 2035, we also have concerns regarding the timing of the proposal. In view of the above it is considered that National Grid have not adequately addresses the alternative transmission options set out in the ESO Study nor findings of the Independent Report commissioned by Norfolk County Council together with Suffolk and Essex County Council's.

As the Council has set out in its previous consultation responses, we still consider that a coordinated, **Offshore approach** would be our preferred solution, to minimise onshore infrastructure. If this is proven to be undeliverable then the Council considers that support should be given to the **Undergrounding** the whole route.

The Council considers in view of the above that a **pause** to the scheme is necessary to enable potential alternative options to be fully considered and consulted upon.

Notwithstanding the above South Norfolk Council will continue to engage with National Grid to seek to minimise the impact of the development on its communities and environment in a constructive and respectful manner.

Main Technical Issues/considerations

The Project is classified as 'EIA development' under the Infrastructure Planning (EIA) Regulations 2017. As such National Grid is required to undertake an EIA for the Project, which for an NSIP requires an EIA Scoping Report which defines and agrees the scope of the Environmental Statement with the Planning Inspectorate – the Scoping Opinion was issued in December 2022 by the Planning Inspectorate; and a Preliminary Environmental Information Report (PEIR) prepared to provide preliminary details of the environmental information and preliminary findings of the EIA undertaken.

The PEIR has been published as part of this Statutory consultation for review and comments. Below are the Council's technical comments in respect of the PEIR, which are made on a without prejudice basis to the comments set out above and the Council wishes to reserve the right to make further comments, at the formal submission stage of the Development Consent Order and in its Local Impact Report. Equally, the technical comments should be taken together with the formal comments the Council provided under the first and second non-statutory consultation.

Impact on Landscape, Trees and Hedgerows

The Council's Landscape Architect has commented as follows and this should be taken together with the previous comments made:

I have reviewed the PEIR submission in the context of my remit; the sections/chapters that appear to be most pertinent are:

- Chapter 4: Project Description
- Chapter 5: EIA Approach and method
- Chapter 13: Landscape and Visual
- Appendix 4.1 – Draft Outline Code of Construction Practice (CoCP)
- 13.1.2 of the PEIR (Volume I – main Text) notes that there are relationships between the potential landscape and visual effects and other environmental topics, namely:
 - Chapter 8: Ecology and Biodiversity

- Chapter 10: Health and Wellbeing
- Chapter 11: Historic Environment
- Chapter 15: Socio-economics, Recreation and Tourism
- Chapter 16: Traffic and Transport

Note that there is no specific chapter on arboricultural matters, but some matters relating to these are included in the Landscape and Visual Chapter.

Chapter 4: Project Description

4.8.18 and 4.8.39 outline the parameters for vegetation and clearance required. As there has yet to be a full tree survey, it would be helpful to be clear as to what is the minimum extent a survey will cover in order to provide data against which the design(s) can be assessed. It is considered essential that the tree and hedgerow survey covers the maximum potential extent of vegetation clearance and management (including the extents of haul roads and LoD (Limits of Deviation) margins).

Whilst vegetation clearance is an explicit operation, vegetation management (as outlined here) is less quantifiable, as the electrical clearances are seemingly not provided. Whilst it is understood that there will be variations along the route (for example, dependent on the distance between pylons and related curvature of the cabling) that prevent an explicit parameter, is there an anticipated generalisation against which the likely impacts can be understood?

4.8.20 proposes: Appendix 4.1: Draft Outline CoCP in Volume III include[s] a commitment that following detailed design and prior to construction all vegetation would be subject to a full tree / vegetation survey and site-specific assessment where vegetation removal may be reduced further than the generalised approach assessed in the PEIR and ES. It is not considered acceptable that the full survey is left to such a late stage. It is expected that the design be informed by the survey and the locations of notable arboricultural constraints, such as veteran trees, are understood.

It is not clear from 4.8.18 either whether existing hedgerows will be able to be retained where they pass under the overhead cabling. It is requested that this be addressed explicitly within the CoCP (and elsewhere as appropriate).

4.8.21 and 4.8.22 - At what point will the crossing protection scaffolding measures be detailed? We can envisage that there could be further vegetation loss as a consequence of these, so would expect this to be addressed by the arboricultural assessment and LVIA.

4.8.48 states: *The haul road would be typically 8 m wide to allow for a two-way running track for construction vehicles. The typical cross section of the haul road would be 21 m wide, to allow for topsoil and subsoil storage, drainage, and demarcation fencing.* The information at 4.8.57, however, does not refer to the 21m typical cross section but does mention the LoD; clarification is sought regarding this.

Why does the width need to be continuous? Could there be passing places instead, especially where there is conflict with existing hedgerows and trees?

4.8.69 states that the temporary haul roads will be retained if the landowner wants them. It is considered that this option has the potential to conflict with landscape reinstatement, especially in areas where there is no ongoing need for vegetation absence for operational reasons. It is considered that the default situation should be that any vegetation removed solely for the provision of a temporary haul road should be reinstated, unless otherwise agreed by the DCO or

– subsequently - with the local planning authority.

4.9.4 The current design assumes standard steel lattice pylons which would be approximately 50 m in height (compared to approximately 30 m for the existing 132 kV pylons in the area and would be of a similar size to the existing 275 / 400 kV pylons in the area). Pylon extensions would be required in some locations to allow extra height to clear existing features and maintaining electrical clearance to the ground.

Will it be explicit where these extended pylons are to be? Does extending them enable more existing vegetation to be retained?

Table 4.7 – Decommissioning

In the event of the scheme, either all or in part, is decommissioned, the restrictions to reinstatement/replanting of trees will no longer apply. Could there, therefore, be an obligation to do this unless there are new subsequent constraints – approved development or otherwise – that preclude it. Replacement could be based on tree removal plans consented by the DCO.

Chapter 5: EIA Approach and method

No comments.

Chapter 13: Landscape and Visual

The landscape and visual impact assessment is being produced with reference to industry guidelines and recognised best practice. South Norfolk Council has been involved (as invited to do so) with the process as described within the chapter, in particular discussions about the acceptability of the viewpoints within the district.

It is noted that the chapter is a preliminary assessment of the potential effects of the Project on the Landscape and on Visual amenity. However, what is already clear is that this scheme will have negative implications for both the landscape character and visual amenity for a not inconsiderable swathe of the district.

The preliminary assessment confirms that there will be significant negative landscape effects and significant visual effects. These will be, unsurprisingly, generally linked to proximity of the receptors to the scheme.

13.8.9 notes that there will be significant negative direct and indirect landscape effects due to the proposals at construction stages experienced from all the host landscape character areas (that is, those through which the scheme passes) within a range of approximately 1km. The Waveney Valley Alternative (which would replace a section of overground cabling with an underground section) would also have significant negative landscape effects for its host landscape.

13.8.24 notes that there will be significant negative direct and indirect long-term effects due to the proposals during operation (and maintenance) experienced from all the host landscape character areas within a range of approximately 1km. 13.8.27 notes that the Waveney Valley Alternative (which would replace a section of overground cabling with an underground section) would also result in a significant negative landscape effect for its host landscape in South Norfolk.

13.8.12 notes that there will be significant negative effects on views and visual amenity along

the route due to the proposals during the construction. These are likely to be most pertinent in views and experiences closer to the proposed route. 13.8.21 sets out that there will be significant negative effects from the Waveney valley Alternative too and that these are expected to be greater than for the overhead option.

13.8.28 notes that there will be significant effects on views and visual amenity during operation (and maintenance) and these are predicted to be experienced within approximately 1 km to 2 km of the Project. Significant negative effects are likely to be experienced by a range of visual receptors including residents, road users and recreational receptors. The Waveney Valley Alternative (13.8.38) would result there being some reduced visual effects in comparison to the overhead line, however some significant visual effects would prevail.

South Norfolk Council is concerned about the long-term significant landscape and visual effects that would result from this proposal.

Some observations about the Landscape and Visual chapter:

- Welcome the precautionary approach at 13.5.12 in that “*a realistic worst-case scenario is assessed*” and request that this be applied to the assessment of the implications for trees and hedgerows too.
- The information as presented considers only the Key Characteristics of the landscape character areas. It would be useful to have commentary against the published Sensitivities and Vulnerabilities, Landscape Strategy and Development Considerations also.
- 13.8.5 Vegetation clearance – this has already been covered in consideration of Chapter 4 (above), however the final study will need to address the landscape effects of the scheme in light of the full survey of the vegetation.
- Where landscape effects are noted to reduce “over time”, it would be useful to have more definite information on these; for example, are we talking 15 years?
- It would be useful to have a direct comparison (possibly in table form) of the landscape and visual effects between the Overground and Waveney Valley Alternative Options.
- Visualisations – These are Type 4, but only up to wireframe stage is presented. Full photomontage is expected for the final ES.
- 4.9.6 sets out that the LoDs that are being sought; will the final wireframes and photomontages cover these parameters?

Appendix 4.1 – Draft Outline Code of Construction Practice (CoCP)

Draft CoCP

- Table 4.1 – Surely that, outside of a DCO, hedgerow removals would continue to come under the jurisdiction of the Hedgerows Regulations and administered by LPA.
- B8, GG15, GG16, and GG17 imply that a tree/vegetation survey will be undertaken after detailed design; as set out above, this approach is not acceptable to SNC
- It is suggested that LV06 of the draft CoCP be reworded to require that that all works to all trees should be by suitably qualified and experienced arborists (not just ‘high grade’ trees) in order to ensure no inadvertent damage and support best practice. Also, it is

recommended not to refer to 2012 in BS, as the Standard might be revised (there was a relatively recent consultation on it, I believe).

Mitigation planting

There appear to be no proposals for this yet, but – as experience of other electricity infrastructure schemes has shown – there are potential issues and foreseeable uncertainties with providing for replacement trees as often the suitable locations are outside of the DCO, and the mechanisms for ensuring that the planting is successful are often reliant on landowner co-operation for the long term.

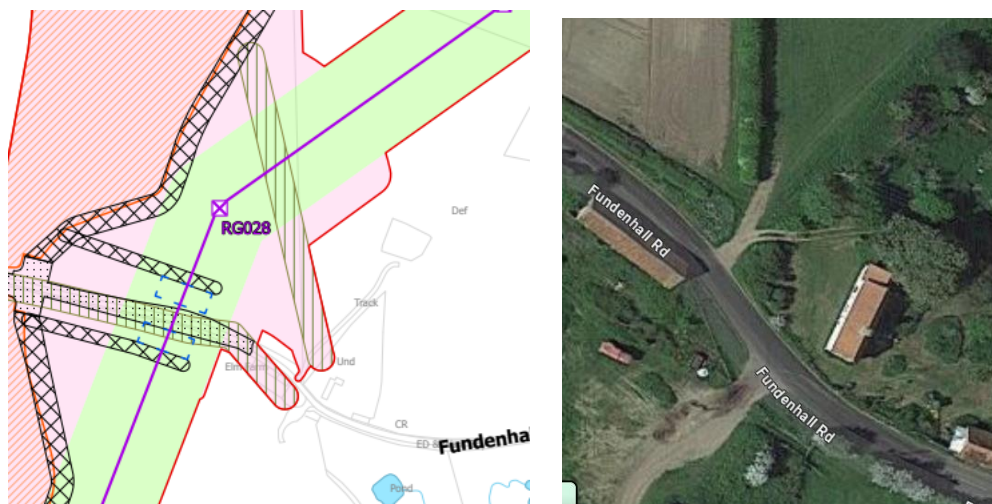
Impact on Heritage Assets and Design Comments

The Council's Senior Heritage and Design Officer has provided the following comments:

Heritage matters are dealt with in Chapter 11 of the PEIR Review. This includes archaeological remains, historic buildings – designated and non-designated. and historic landscapes. Archaeological matters will be commented on by the County Council Historic Environment Services, whereas landscapes will only be commented on if historic parklands are affected which may be designated or undesignated.

The methodology/matrix for the assessment of impact is taken from National Highways guidance which is now the standard approach for infrastructure projects that require an EIA. The PEIR review at this stage does not make the final assessment in terms of level of impact on the assets, but discounts those assets where there is considered to be no impact or negligible level of impact on significance derived from contribution by the setting to the asset and impact from proposals and these have not been taken forward for further assessment. NDHAs have been identified but the report does not yet establish level of impact.

There will be no direct physical impact on any historic buildings or parkland in the Norfolk area, therefore impact is assessed on the setting of heritage assets with advice taken from Historic England advice note 3. It is noted that construction works do in some case seem to involve construction work within curtilage of a listed building, such as Elm Farm.



The methodology is set out in paragraphs 1.5 “Methodology” in the appendix. Heritage value is contained in Table 1 p4 & 5. Buildings have been included within a zone of theoretical visibility and 250m study area for non-designated heritage asset, and 2km for the draft order limits for designated assets, extending to 3km for the assets with highest significance such as grade I

and II* churches. Buildings outside this area have been scoped out.

The assessment also excludes structures that have a restricted setting due to their nature such as mileposts for example and buildings within an urban area. Also, buildings affected by other major infrastructure and any other listed buildings or NDHAs not already scoped out where it is established that their settings do not extend to the area. Given the nature of the proposal I consider that this is acceptable within the South Norfolk area. This will however be subject to review if any other issues come forward. As a safeguard listed buildings within 2-3km that have been scoped out identified as such in appendix 11.1

Where buildings such as historic barns are close to listed buildings, but may not technically be curtilage listed due to separation by a farm track from the farmhouse and its garden (e.g. Kenningham Hall) it is good to see they are included in the setting analysis. These separate farm buildings could be considered separate NDHAs, however in terms of significance it is the grouping of associated buildings with the heritage asset which should be understood as a whole and consequently the impact on these as a group – so that can be further assessed and detailed in the EIA. Similarly, at Flordon Hall which is also likely to be significantly impacted upon the hall and separately listed farm buildings will all be assessed in terms of setting as a group.

The relationship between a farmhouse, farm buildings and surrounding farmed fields can be problematic to assess as setting in itself is not a heritage asset. There is usually a historic relationship between a farmhouse and its surrounding fields – however unless there is a clear visible connection which places experiencing the asset of the farmhouse within the visual and physical context of its fields, this is only minor contribution to the significance of the asset and I agree can be scoped out as a factor as pylons and wires would not have an impact on the historic association between the fields and the farmhouse/farm buildings.

There are potentially certain assets further afield which have a very wide setting, for example country houses with long views through surrounding parklands and beyond that parkland, and if there are any such buildings within the wider area where this is a consideration this will need to be scoped in. However, it is considered that there are none of these types of assets affected in the South Norfolk district. Keswick Hall and associated assets and parkland have been desk based assessed, but due to topology, infrastructure and mature vegetation of the intervening landscape, the setting is not considered to extend to the draft Order Limits and are scoped out, and similarly Rainthorpe Hall.

Also, the setting of nearby churches which have large and wide setting has been assessed. It is noted that with the Church of St Remigus, which is grade I, the introduction of the powerline would result in a significant effect with no mitigation proposed, whereas the Waveney valley alternative would result in a no significant negative effect. (This also applies to grade II Grove Farmhouse.) The initial view would therefore be to support the alternative proposal as this would significantly lessen heritage impact especially to the highly significant grade I Church of St Remigus.

Potential for impact on the setting of conservation areas is also assessed. With regard to conservation a view out of the Tacolneston conservation area from Hurn Lane would be affected and so identifies view from Hurn Lane so extended to the draft Order Limits. With Winfarthing it is also noted that the setting extends to order limit with views east from the churchyard.

Regarding listed buildings identified in the assessment, it has come to light that Elm Tree Farm (which was identified as NDHA 1313 near to the draft order limit) para 3.2.533 is actually a grade II listed building (Elm Farmhouse on the list description) and was incorrectly positioned on

the Historic England listing database map. This has now been corrected.

<https://historicengland.org.uk/listing/the-list/list-entry/1373558> . This consequently needs to be assessed as a listed building and of higher 'medium' value, and given the proximity of the pylon and mast within the setting should be considered to have a significant affect and level of impact assessed at the next state. This will need to be marked on fig 11.3 page 2 of 25.

In the non-technical summary it states the following are assessed – “archaeological remains – designated and non-designated”; “Historic Buildings – designated and non-designated” and “Historic landscapes non-designated”.

I am concerned at the evaluation of non-designated heritage asset in the report and that these appear to be evaluated in terms of archaeological value and stated as having evidential or historic value whereas historic buildings are also likely to have architectural value. The significance for a number of assets includes their architectural and historic significance as buildings and should be assessed in the same manner as a listed building i.e. how setting contributes to that significance.

Such an example is the former Henstead Workhouse and Vale Hospital (1312) which is in very close proximity to the wire and pylons which will have an effect on its setting. Paragraph 3.2.465 states “The former Henstead Union Workhouse and Vale Hospital (1312) is located 240 m west of Swainsthorpe, north of Church Road and partially within the draft Order Limits. Henstead Union Workhouse was built in 1836 to house a maximum of 250 inmates. The building was constructed on a double cruciform and bricks manufactured in the Swainsthorpe brickyard were used. In 1948 it became part of the NHS as Vale Hospital, providing care for the elderly mentally ill. The hospital was closed in 1984 and the buildings converted for residential use. The site has the potential to contain low value archaeological remains of evidential value.”



Wire and pylon will be in this view of the former workhouse from Church Road and will have a harmful impact upon its setting as an NDHA.

With regard to the NPS, and the section quoted in para 11.2.2, it states in para 5.9.24 ‘In considering the impact of a proposed development on any heritage assets, the Secretary of State should consider the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between their conservation and any aspects of the proposal’. These heritage assets would include upstanding non-designated heritage assets.

Cottage 1307 is on NDHA map/plan but not 1308 or 1309 which are buildings referred to in

chapter 11.

Diss Heywood School (1311) 3.2.910 is referred to but no initial evaluation of setting with regard to significance. Having looked at google streetview and map it does not look like the setting will be affected but this could be evaluated as per listed buildings.

Ideally NDHA which are upstanding archaeology/buildings and not underground should be separated to those NDHAs which are being evaluated for their archaeological value – as they are separated in the technical summary.

It would also be useful if an appendix map showed these NDHA which are historic buildings alongside designated heritage assets rather than identifying them together with the archaeological assets as there is a difference in how they will be assessed in terms of impact. It should be much clearer on the plans which assets are being evaluated in terms of visual impact on setting rather than archaeological impact.

Impact on Ecology

The Council's Ecologist has commented as follows and in addition to her previous comments:

These comments relate to land within South Norfolk District (Section A) and potential impacts on terrestrial ecology. I will defer to the experts at the Environment Agency regarding impacts on aquatic ecology associated with rivers and streams, and the RSPB regarding ornithological impacts. I would like to note that South Norfolk District Council are involved with the Biodiversity Net Gain stakeholder Group¹

Ecological Comments

Statutory designated sites of international importance scoped into the Habitat Regulation Assessment

1. The route has been aligned² to avoid direct impacts to the Norfolk Valley Fens Special Area of Conservation (SAC) although there is potential for indirect impacts from construction air pollution, and hydrological changes to Flordon Common Site of Special Scientific Interest (SSSI) which is a component site of the Norfolk Valley Fens Special SAC and 0.14 km from draft order limits. These impacts will be considered as part of the Habitat Regulation Assessment (HRA).

Statutory designated sites of national importance to be considered within the Environmental Statement

2. The route has been aligned³ to avoid direct impacts to nationally important designated sites comprising: Flordon Common Site of Special Scientific Interest (SSSI) (140m from draft DCO boundary) (a component site of the Norfolk Valley Fens SAC), Fornsett Meadows SSSI (1010m from draft DCO boundary), Aslacton Parish Land SSSI (1270m from draft DCO boundary, and Shelfanger Meadows SSSI (170 m from draft DCO boundary).
3. Indirect impacts to these sites have been identified⁴ and will be considered within the Environmental Statement. It is noted that measures required to mitigate/compensate

¹ See para 8.2.10 of the [PIER](#)

² see [Volume II Figures 8.1](#)

³ see [Volume II Figures 8.1](#)

⁴ See Table 8.7 of the PIER.

impacts will be put in place and appropriate derogation licensees and/or SSSI assent from Natural England sought as needed⁵.

4. Consideration will be given to collision risk from birdlife associated with the national site network sites (SPAs and SPA sites/candidate sites). Breeding and wintering bird surveys are being undertaken to support this assessment.
5. All mitigation/compensation measures should be proven to be effective and while mitigation will be agreed with Natural England⁶ avoiding impacts should be the first consideration and the ES should clearly demonstrate how the mitigation hierarchy has been applied and informed by baseline surveys.

Statutory designated sites of local importance: direct impacts to Roydon Fen LNR contrary to EN-1 and GNLP Policy 3

6. The route⁷ avoids direct impacts Dunston Common Local Nature Reserve (LNR) although there is potential for indirect impacts from construction pollution (dust)⁸. No indirect impacts are anticipated at Smockmill Common LNR.
7. Roydon Fen LNR⁹, which is owed by South Norfolk District Council and managed by Suffolk Wildlife Trust, will be directly impacted by the proposal. The site is also common land. The LNR is within both the draft order limits and the Waveney Valley Alternative (WVA) draft order limits and will be subject to direct habitat loss because of drainage installation (WVA), or to facilitate third party works¹⁰.
8. LNRs from part of the countries Green Infrastructure Network and are important for enhancing and conserving nature and ecosystem services¹¹. It is not clear why direct impacts from the drainage have not been designed out and the extent of the third-party works has not been defined. Although this area has been identified for further ecological surveys it is of ecological importance and the proposal has not complied with the mitigation hierarchy and avoided impacts in the first instance. Further details are provided below (see Roydon Fen CWS).
9. Under normal planning situations such impacts would not be permitted. Policy 3 of the Greater Norwich Local Plan states that proposals should avoid harm to designated and non-designated assets of the natural environment, following the hierarchy of seeking firstly to avoid impacts, mitigate for impact...or as a last resort compensate for losses. The Environmental Statement would be expected to demonstrate how the proposal complies with the mitigation hierarchy, having been informed by the baseline ecological surveys.
10. This is contrary to EN-1 which states in paragraph 4.6.1 that projects should follow the mitigation hierarchy.

⁵ See para 8.2.11 of the PIER

⁶ See para 8.2.28 of the PIER

⁷ see [Volume II Figures 8.1](#)

⁸ See Table 8.7 of the PIER

⁹ Local Nature Reserves are designated under Section 21 of the National Parks and Access to the Countryside Act 1949

¹⁰ See Table 8.7 of the PIER

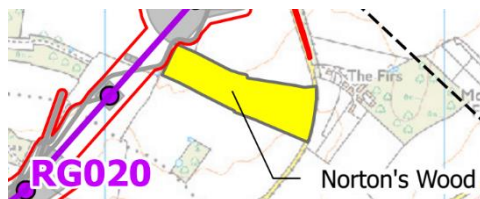
¹¹

https://www.wolverhampton.gov.uk/sites/default/files/pdf/LNRs_in_England_A_guide_to_their_selection_and_declaration_2010.pdf

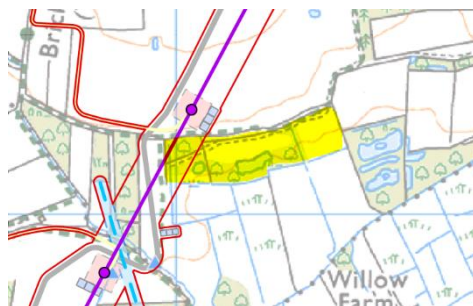
Non-statutory designated Sites: direct impacts to County Wildlife Sites contrary to EN-1 and GNLP Policy 3

11. There are 44 County Wildlife Sites (CWS) within a 2km radius of the draft order limits, and the scheme will directly impact three CWS¹² in South Norfolk:
- Norton Wood CWS (next to)
 - Brick Kiln Lane, Bunwell Hill (over)
 - Roydon Fen CWS (included within the red line)
12. It is requested that copies of the CWS citations provided as part of the examination (see [Appendix 1](#)).

13. [Norton Wood CWS 61](#), adjacent to the draft DCO boundary (see right). In normal planning situations we would request that a suitable buffer¹³ is provided between the temporary access track and the CWS to prevent damage to the CWS and any ancient/veteran trees present (*there is an ancient oak pollard along the southern boundary*). Recent experience with other cable routes has shown that this is necessary to avoid impacts during detailed design i.e. once vehicle tracking paths have been detailed or additional works considered. In the absence of a suitable buffer there is concern that Norton Wood will be indirectly impacted.



14. The overhead lines pass over [Brick Kiln Lane, Bunwell Hill CWS 2072](#) (see right) which is comprised of a mosaic of grasslands (mainly unimproved marshy grassland), tall-herb fen, and ponds. It is also not clear why, in line with the mitigation hierarchy and the requirements of EN-1, the power lines/pylons have not been sited to avoid impacts. There is potential for direct loss of vegetation to ensure minimum clearance (meters) between vegetation and the power lines, but the extent of loss is not clear. Targeted NVC surveys within the draft order limits at Brick Kiln Plantation (and the wider area to include the woodland to the west), will need to be undertaken at this site and the potential impacts clearly identified as part of the ES¹⁴. In normal planning situations this would not be acceptable as it is contrary to the NPPF and Policy 3 of the GNLP. As noted above all CWS should be excluded from the red line and appropriately buffered.



15. **Royden Fen CWS** has been incorrectly identified as being located within Suffolk and its designation has also been missed out from several sections including Annex B and Figure 8 of the reptile report.
16. [Roydon Fen CWS](#) (and LNR) is located within the red line boundary for both the overhead power line and Waveney Valley Alternative options (see below). The former with regards to overhead line mitigation work area (wood pile lines) (see Figure 1) and

¹² The location of the CWS in relation to the draft DCO order limits is shown in [Volume II Figure 8.2](#)).

¹³ See here <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions> for buffers for ancient woodland and ancient/veteran trees.

¹⁴ the location of planned NVC surveys is show in Figure A.8.1.3.

the latter with regards to temporary attenuation drainage existing into the ditch which forms the boundary of the CWS (see Figure 2). An NVC survey (survey site 12) is planned in 2024 for the parts of the CWS impacted (see Figure A.8.1.3).

17. It is not clear what the overhead line mitigation works involve and it is requested that the temporary attenuation drainage is re-designed to avoid the CWS, and a suitable buffer (works exclusion zone) provided around the CWS. The extent of hydrological impacts on the ecological interest of the CWS is of serious concern and must be clearly considered, for each CWS, within the ES.
18. The inclusion of the CWS within the red line is contrary to EN-1 Overarching National Policy Statement for Energy which states that projects should follow the mitigation hierarchy and avoid harm. The CWS should be avoided in its entirety and a suitable buffer provided between the works area and CWS boundary.



Figure 1

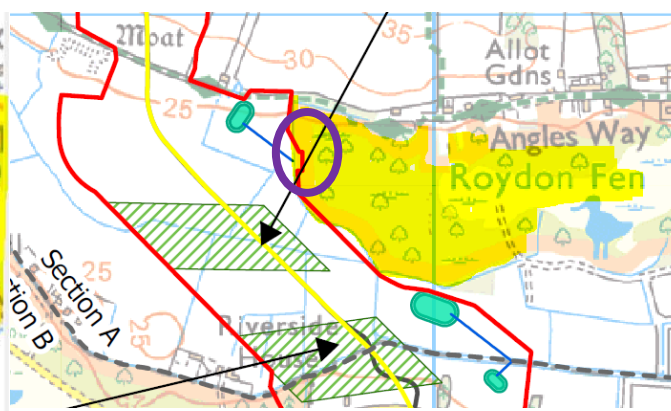


Figure 2

19. Three Roadside Nature Reserves are located within a 250m buffer, but no direct impacts are anticipated at this point.

Norwich Main Substation: Concern regarding consented and future permissions impact on achieving BNG

20. Land around the Norwich Main Substation has been identified as an Environmental Area where compensation would be provided for habitat loss, and biodiversity enhancement as part of the BNG commitment. Due to its proximity to the Norwich Main Substation this area has been, and will continue to be, subject to disturbance from schemes currently consented e.g. cable routes for wind farms, the substation extension (2024/1336), solar farms and battery storage (2023/1095) connection applications, and planned in the future. The creation and restoration of habitats in this area would likely be subject to constant applications to amend schemes and it is questionable whether delivery of compensation, and BNG would realistically be achievable in this area.

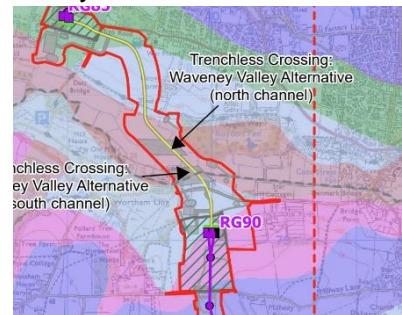
Waveney Valley: Concern regarding impacts on potentially irreplaceable habitats

21. Two options are presented within the Waveney Valley, between Roydon Fen CWS and Worham Ling. The first option - the 'Waveney Valley Overhead Lines' comprise overhead lines any pylons numbered RG084 to RG091. Third party utilities diversions and / or modifications would also be required to facilitate the construction of the Project.

22. The second option - the 'Waveney Valley Alternative' has a larger footprint¹⁵. The WVA comprises circa 150m of trenchless underground cabling and circa 1850 m of open cut crossing from RG85 – RG90 with two CSE compounds (with permanent access) in the location of pylon RG084¹⁶.

23. The preliminary information identifies this as an area of fen peat soils however further ground investigations including a peat survey to establish the extent of the soil¹⁷ are proposed in 2024. The drone-based Phase 1 habitat survey identified this as area agricultural but

detailed botanical, invertebrate, reptile surveys, breeding bird surveys will be undertaken during 2024. The area – River Waveney – Little Ouse Corridor has already been identified for its wintering bird interest¹⁸.



24. Based on the available information there is already reason to be very concerned about the ecological impacts of both the proposed overhead cable and Waveney Valley Alternative. Given presence of peat soils¹⁹, there is **potential for irreplaceable habitats to be present**. National Grid acknowledge this within the PIER²⁰ and propose to compensate for any losses of irreplaceable habitat. Irreplaceable habitats cannot be compensated for because by their nature they are habitats which are very difficult - or take a very significant time- to restore, recreate or replace once destroyed, due to their: age, uniqueness, species diversity, and/or rarity²¹ and under normal circumstance planning permission resulting in the loss of such habitats would be refused. While EN-1 makes provision for such loss no details as to what the bespoke compensation package looks like (no guidance is available) has been submitted as part of the PIER and will need to be set out in the ES. Any compensation needs to be provided as close to the impact as possible to minimise impacts on habitat connectivity.

25. Overall the PIER downplays the significance of the loss of irreplaceable habitats by only including irreplaceable habitats revealed by the desk top study and suggesting that mitigation (for the loss of ancient woodland) would result in a neutral- likely not significant effect²². The extent of irreplaceable habitat will not be known until baseline surveys have been completed and the detailed design worked up. The loss of irreplaceable habitat is a significant loss irrespective of the adequacy of any compensation provided.

26. At the present time there is insufficient information to assess potential impacts of the overhead line or undergrounding or identify whether they can be adequately mitigated or, as a last resort, compensated. Let alone achieve a biodiversity net gain. What is known is that the undergrounding scheme would have a larger footprint than that of the

¹⁵ See Table 4.3 of the PIER <https://www.nationalgrid.com/electricity-transmission/document/154446/download>

¹⁶ details are provided on page 76 of the PIER Volume 1 Main Text¹⁶ and Figure 4.1 see [nationalgrid.com/electricity-transmission/document/154736/download](https://www.nationalgrid.com/electricity-transmission/document/154736/download)

¹⁷ See Para 6.5.4 of the [PIER Volume 1 – Main Report](#)

¹⁸ See Table A8.5.3

¹⁹ Figure 6.6 - Agriculture and Soils Soils Scapes Mapping Page 5 of 25 10059280-ARC-ELS-ZZ-DR-ZZ-00087 Revision A [download \(nationalgrid.com\)](#)

²⁰ see 8.7.8 of the PIER

²¹ <https://www.gov.uk/guidance/irreplaceable-habitats#:~:text=Irreplaceable%20habitats%20are%20habitats%20which,rarity>

²² See Table 8.11 of the PIER

overhead line proposal- if irreplaceable habitats are present undergrounding would likely have a greater impact on terrestrial ecology.

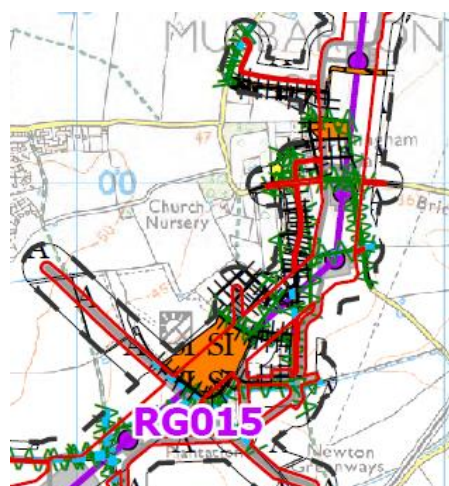
27. National Grid accept that the WVA, which has a greater ecological footprint than the overhead option, would be ecologically more complex to mitigate²³. If the WVA is taken forward National Grid will prepare a bespoke mitigation package with Natural England²⁴ which may include off-site compensation²⁵. In line with EN1 however if irreplaceable habitats are present, it would be impossible too adequately mitigate impacts.

Habitats

28. Habitats were digitally mapped between April and May 2022 and the results used to create a Phase 1 map (see Figure 8.1.1: Phase 1 habitat map, in Annex A). Ground truthing surveys have been undertaken in 2023 and will be undertaken in 2024. Habitats were also mapped using the UK Habitat Classification to facilitate BNG. National Vegetation Surveys will commence in April 2024 in 44 locations including between Roydon Fen CWS and Wortham Common SSSI (NVC survey points 12), near Snow Street (NVC 11). See Figure 8.1.3: NVC survey locations and Hedgerow Assessment locations, in Annex A)

29. The desk-based study indicates that the draft Order limits within South Norfolk does not contain any ancient woodland however not all ancient woodlands appear on Natural England's ancient woodland inventory (i.e. anything under 2 ha is unlikely to appear). Similarly, not all ancient and veteran trees are covered by Tree Preservation Orders. There is potential for both ancient woodland and ancient and/or veteran trees within the draft order limits which has not yet been identified. Any losses must be avoided.

30. Further surveys will determine whether Habitats Principal Importance, as listed under section 41 the Natural Environment and Rural Communities (NERC) Act (HMSO, 2006) are present within the draft Order Limits. The results of these surveys need to be presented maps of a suitable scale i.e. the Phase 1 habitat map provided in Figure A8.1.1. (see right) is illegible, and identify impacts by district not parish) rather than by habitat type – compensation for losses should be provided in line with the biodiversity gain hierarchy²⁶ – onsite, or as close to the impact as possible. Compensation for losses at, for example, Dunston, should not be made in Diss, nor losses from South Norfolk compensated for out of district.



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31. With regards to assisting with understanding - an illustration showing expected vegetation clearance requirements of the WVA should be included for clarity within the

²³ See 8.2.24 of the PIER <https://www.nationalgrid.com/electricity-transmission/document/154446/download>

²⁴ See para 6.7.9 of the [PIER Volume 1 – Main Report](#)

²⁵ See para 8.2.21 of the PIER <https://www.nationalgrid.com/electricity-transmission/document/154446/download>

²⁶ See <https://www.gov.uk/guidance/biodiversity-net-gain>

ES to supplement those provided for overhead²⁷ and haul road²⁸ vegetation clearance. The extent of vegetation loss needs to be clearly identified.

Image 4.2 – Expected Overhead Line vegetation clearance requirements

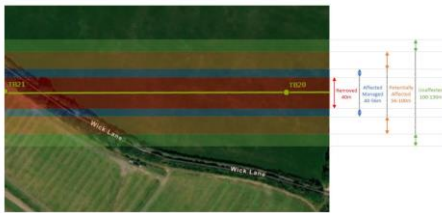


Image 4.4 - Expected haul road vegetation clearance requirements



Hedgerow Regulation Surveys

32. Surveys planned in 2024²⁹ include hedgerow regulations surveys but these will not cover all hedges within the draft order limit. Please can we seek clarification that all hedged directly impacted (lost) would be surveyed.

General comments on protected species potentially affected by this proposal

33. National Grid have previously consulted with Natural England on the scope of ecological surveys for wintering and breeding birds, bats, great crested newts, and the HRA³⁰, and study area³¹. However ecological surveys will also be required outside of the draft DCO boundary where highway works are required³². These should also be informed by the mitigation hierarchy and deliver biodiversity net gains.
34. Ecological surveys used to inform the PIER were undertaken between September 2022 and September 2023 during which time approximately 44% of land within the draft Order Limits has been surveyed. It is not clear what proportion of South Norfolk was surveyed.
35. The ecological section of the PIER has therefore predominantly been informed by the results of desk top studies and aerial Phase 1 habitat surveys³³. As such the surveys of protected species and species of principal importance are incomplete. While pre-construction surveys are proposed as part of the CEMP to ensure that up to date information is available at the commencement of construction, surveys should be completed for land within the entirety of the red line and appropriate buffer, prior to the start of the detailed design.

Bats

36. Most of the route has not been subject to ground level tree assessment surveys as these have only taken place, where access allows, within the permanent works and undergrounding locations. National Grid proposes to complete the bat roost surveys of trees pre-construction (post DCO consent) once the extent of tree removal is known³⁴. While radio tracking surveys are proposed the trigger for such surveys is not clear, but it is understood that none are planned for South Norfolk. Appropriate licences will be obtained if roosts are lost but please can we clarify if bat boxes will also be provided for

²⁷ See 4.8.18 of the PIER <https://www.nationalgrid.com/electricity-transmission/document/154446/download>

²⁸ See 4.8.57 of the PIER <https://www.nationalgrid.com/electricity-transmission/document/154446/download>

²⁹ See Table 8.3 of the PIER

³⁰ See Table 8.1 Stakeholder Engagement of the PIER

³¹ See Table 8.2 Study Area for Biodiversity receptors

³² See 8.5.35 – 8.3.36 of the PIER

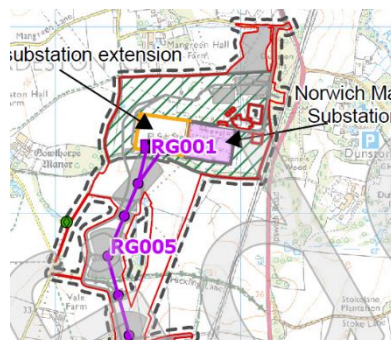
³³ See [Volume III – Technical Appendices – 1 of 4](#)

³⁴ See para 3.3.2 of Volume III – [Technical Appendices – 2 of 4](#)

all potential roost features lost (on a 1:1 basis) and provided within the red line or as close to the impact as possible.

Badgers

37. Specific surveys for badgers have not been undertaken. The PIER has been informed by the results of the desk top study and setts recorded anecdotal during the habitat surveys undertaken between April 2023 and September 2024. In South Norfolk two setts were recorded during the habitat surveys (1 main (see right) and 1 unknown).



Main

38. The area around, and to the south of, Norwich is heavily utilised by badgers. To date no bait marking surveys have been undertaken but it is requested that this are undertaken in support of the ES to better understand the impacts of this scheme on badgers in this area, which will be subject to additional impacts (on top of existing impacts of developments in this area) by the proposed scheme. The applicant is encouraged to liaise with Orstead and Vattenfall, and other applicants in this area to enable impacts, and sett closures, to be avoided using appropriate buffers and minimised.

Great Crested Newts – Uncertainty regarding whether NE will grant a licence

39. The proposed scheme will be entered into the District Level Licence (DLL) scheme and a letter of comfort was received from Natural England's DLL team.³⁵ Please note that the scheme is not currently accepting new applications due a lack of compensation pond availability although Natural England expect the DLL scheme to be back on track by the end of this financial year. [Standing advice](#) provides for such and is of material consideration.

Species of Principal Importance³⁶

40. Slow worms and common frogs should be included within the list of Species of Principal Importance (see Table 8.1) of Volume I, and their presence should be assumed where suitable habitat is present. Freshwater aquatic species of principal importance will be covered in an aquatic ecology report.

Otter and Water Vole

41. Results to date have confirmed the presence of otter on the River Tas and River Waveney – and on watercourses within the draft Order Limits in South Norfolk. Specific surveys are planned for 2024³⁷

42. Water voles are present on the River Waveney with surveys are planned for 2024.

43. As noted previously the proposal needs to adhere with the mitigation hierarchy. Licences would be obtained where required and it is requested the mitigation/ compensation is proposed as close to the impacts as possible.

³⁵ See Table 8.1 Stakeholder Engagement of the [Preliminary Environmental Information Report Volume I](#).

³⁶ Appendix 8.10: Species of Principal Importance Report

³⁷ Appendix 8.9: Otter and Water Vole Report

Reptiles

44. Potential impacts on reptiles are not known and surveys are proposed for both receptors in 2024 in the area between Roydon Fen CWS (Section A) and Wortham Ling SSSI (Section B) only. The mitigation hierarchy should be adhered to.

Terrestrial Invertebrate Report

45. The desk study revealed 39 locations that are directly affected by the draft Order Limits that may be of value to invertebrates, as illustrated on [Figure A8.2.1: Terrestrial Invertebrate Survey Sites and Desk Study Records](#). Four Invertebrate Surveys Locations in South Norfolk (see figures below) will be surveyed in 2024



Biodiversity Net Gain

46. EN-1 states that Energy NSIP proposals, whether onshore or offshore, should seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and the wider environment where possible.
47. In line with EN-1 National Grid are committed to delivering a minimum of 10% Biodiversity Net Gain as part of a strategic habitat enhancement and creation plan³⁸ although at the present time the project has identified a -6% net biodiversity loss for area habitats³⁹ across the whole scheme.
48. The BNG assessment is partly based on aerial surveys and is likely to change once UK Habs. surveys (for the entirety of land within the red line), and arboricultural surveys have been completed and the extent of tree loss identified. Where irreplaceable habitat is impacted biodiversity net gain cannot be achieved. It is therefore essential that all botanical and arboricultural surveys are completed as soon as possible and are used to inform the detailed design and DCO order limits to ensure that impacts to irreplaceable habitats such as veteran/ancient trees, ancient woodland are avoided.
49. The red line incorporates several water courses so consideration will also need to be given to delivering a minimum of 10% BNG for watercourse habitats.
50. The ES should be supported by a biodiversity gain statement, statutory metric and condition assessments. The Biodiversity Gain Hierarchy should be considered as part of the Environmental Statement i.e. avoidance of adverse effects on habitats of medium, high and very high distinctiveness (with mitigation provided if they cannot be avoided), the provision of compensation through: the enhancement of existing onsite habitats, creation of new onsite habitats. Offsite credits should be purchased as a last resort. The BNG hierarchy is distinct from the mitigation hierarchy, which should also be adhered

³⁸ See para 8.7.25 of the PIER <https://www.nationalgrid.com/electricity-transmission/document/154446/download>

³⁹ See para 8.5.29 of the PIER <https://www.nationalgrid.com/electricity-transmission/document/154446/download>

to⁴⁰. BNG is in addition to any measures to mitigate or compensate for habitat loss and should not be considered as part of the embedded mitigation measures⁴¹.

51. National Grid proposes to deliver BNG within in 'Environmental Areas' around the main substations (within the red line) but are currently showing a net loss of-6%. It is expect that all losses within the district to be compensated for in line with the biodiversity gain hierarchy and are wary of the plan to provide strategic compensation/enhancement if this would result in a net loss of biodiversity within the district.
52. If BNG is to be delivered offsite, the ES should demonstrate how it has considered the biodiversity gain hierarchy - with compensatory measures provided within the district in the first instance. We would encourage consideration of the Waveney Valley and the [Waveney and Little Ouse Recovery Project](#) as this would benefit the wider environment in line with EN-1⁴². Also, in line with EN-1, the application should include a statement demonstrating⁴³ how opportunities for delivering wider environmental net gains have been considered, and where appropriate incorporated into the proposal as part of good design.
53. In line with EN-1 it is noted that the local Nature Recovery Strategy will be considered if it is available but in the interim period the LPA has published its own guide which is currently being updated to reflect the adoption of the Greater Norwich Local Plan.
54. The Norwich main substation extension and Environmental Area proposed around Norwich Main Substation⁴⁴, ⁴⁵ also forms part of a current planning application lodged with South Norfolk District Council - application reference 2024/1336 ⁴⁶ (validated 01/05/2024). If the planning application is granted it will affect the provision of BNG for the DCO ⁴⁷.

⁴⁰ The Biodiversity Gain Hierarchy is distinct from the mitigation hierarchy set out in paragraph 186(a) of the [National Planning Policy Framework](#) which states that a planning application should be refused if significant harm to biodiversity resulting from the development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort,- whilst biodiversity net gain relates only to habitats, the mitigation hierarchy is applied to all aspects of ecology and potential for avoidance, minimisation, mitigation and offsetting impacts on species will also need to be considered outside of a BNG approach.

⁴¹ See Table 4.2 of Chapter 4

⁴² See 4.6.12 of <https://assets.publishing.service.gov.uk/media/65bbfbd709fe1000f637052/overarching-nps-for-energy-en1.pdf>

⁴³ Using appropriate tools for measuring natural capital assets and ecosystem services

⁴⁴ see Figure 4.1: Proposed Project Design – Page 1 of 60 in [Volume II](#)

⁴⁵ This area is approximately 28.6 ha (measured using MAGIC)

⁴⁶ Available via <https://info.southnorfolkandbroadland.gov.uk/online-applications/>

⁴⁷ See page 14 of the 'Project Background Document' <https://www.nationalgrid.com/electricity-transmission/document/154586/download>

55. BNG should be secured as part of the Development Consent Order and maintained for at least 30 years (if not the lifetime of the project).

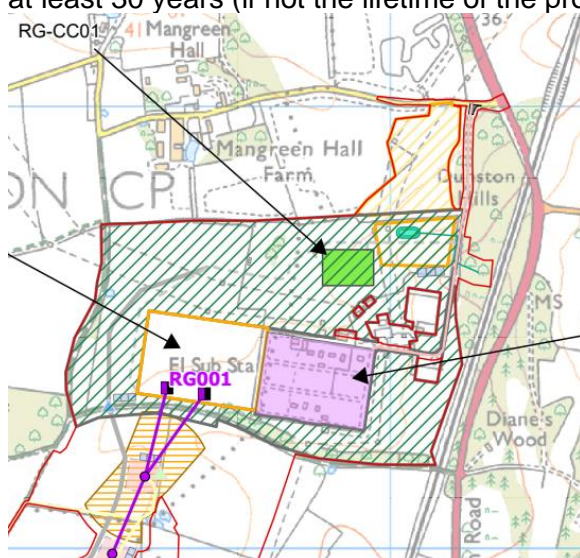


Figure 3 2024/1336 BNG proposal for the extension



Figure 4 Environmental Area around Norwich Sub Station

Draft Code of Construction Practice⁴⁸

56. It is requested that the draft Outline Code of Construction Practice include a sensitive lighting to ensure that ecological receptors are protected at night as well as during the day. The lighting strategy should comply with the [ILP and BCT's guidance note 8 Bats and Artificial Lighting](#).
57. In line with best practice the Ecological Clerk of Works (EcOW) should be accredited by [CIEEM](#).
58. It is requested that a non-native species protocol and Biosecurity protocol (complaint with BS42020:2013) are included within the Code of Construction Practice.
59. Construction Exclusion Zones are welcomed but they will need to be justified, and clearly identified within the LEMP (within the CEMP) and relevant plans submitted in

⁴⁸ See Appendix 4.1 Draft Outline Code of Construction Practice <https://www.nationalgrid.com/electricity-transmission/document/154751/download>

support of the DCO⁴⁹. This should also include CEZ around Roydon Fen CWS, and other County Wildlife Sites and sensitive habitats.

60. The final check for nesting birds should be no more than 24 hrs in advance of works (rather than 48 hrs). CEZ for nesting birds should be detailed in the CEMP⁵⁰. The BTO have also recently provided guidance on the bird nesting period which should inform the Environmental Statement. Harm can still occur to young birds who have left the nest but are still dependant on its parents.
61. Construction Exclusion Zones need to be clearly identified - 'a minimum buffer 'where practical' does not provide sufficient comfort as to what will be provided and where. CEZ buffer distances need to be clearly identified and mapped and used to inform the detailed design.⁵¹

Environmental Protection

The Council's Environmental Management Officer has commented as follows:

Working Hours (Paragraph 4.7.2)

Working hours will be restricted to

07:00 – 19:00 Monday to Friday (Noisy works restricted to 08:00 – 18:00)

07:00 – 13:00 Saturday (Noisy works restricted to 08:00 – 13:00)

No works on Sunday or Public/Bank Holidays. 24hr working is not acceptable as standard.

Any works proposed outside of these hours will require a Section 61 agreement.

Compounds (Paragraph 4.8.3 – 4.8.7)

A noise impact assessment (NIA) and a vibration impact assessment (VIA) will be required.

Given the length of time that the compounds will be in place and be used the NIA should be undertaken in accordance with B4142. This should include an assessment of noise and vibrations relating to the construction of compound.

A lighting assessment will be required, which should be undertaken in accordance with the Institute of Lighting Professionals Guidance Note 1 on Obtrusive Light and Bats and Artificial Light.

A dust management plan should be provided.

Foundations (Paragraph 4.8.11 – 4.8.14)

If pilling is required, then percussive pilling is not considered to be acceptable, and other pilling types should be selected and a specific noise and vibration assessment should be undertaken in accordance with BS5228.

A dust management plan should be provided.

Pylon Assembly and Erection (Paragraph 4.8.15 – 4.8.17)

A NIA and VIA in accordance with BS5228 should be produced for each pylon location. This should include details of any proposed mitigation.

⁴⁹ Table 5.1 'B06' <https://www.nationalgrid.com/electricity-transmission/document/154751/download>

⁵⁰ Table 5.1 'B08' <https://www.nationalgrid.com/electricity-transmission/document/154751/download>

⁵¹ Table 5.1 'B07' <https://www.nationalgrid.com/electricity-transmission/document/154751/download>

Substations (Paragraph 4.8.23)

A NIA and VIA in accordance with BS5228 should be produced for each substation location. This should include details of any proposed mitigation.

A dust management plan should be provided.

CSE Compounds (Paragraph 4.8.24 – 4.8.27)

A NIA and VIA in accordance with BS5228 should be produced for each CSE location. This should include details of any proposed mitigation.

The use of percussive piling methods is unacceptable at all times due to the potential impact on amenity of the nearby vulnerable receptors. If piling is required then different pile types should be utilised and a specific noise and vibration assessment should be undertaken in accordance with BS5228.

A dust management plan should be provided.

Underground Cables (Paragraph 4.8.28 – 4.8.33)

A NIA and VIA in accordance with BS5228 should be produced for each underground cable location. This should include details of any proposed mitigation.

A soil management plan should be provided which details how soil will be managed during the construction.

A dust management plan should be provided.

Trenchless Installation (Paragraph 4.8.28 – 4.8.33)

A NIA and VIA in accordance with BS5228 should be produced for each trenchless installation location. This should include details of any proposed mitigation.

Haul Roads (Paragraph 4.8.46 – 4.8.50)

No information has been provided as to the noise impact of the construction of the haul road and whether the road will be compacted with vibro-rollers and what the impact of the vibrations will be on the noise and vibration sensitive receptors. Dust impacts should be assessed for both during construction of the haul road and during its use.

Third Party (Statutory Undertakers) Works (Paragraph 4.8.46 – 4.8.50)

A NIA and VIA in accordance with BS5228 should be produced for each Norwich Main Substation location. This should include details of any proposed mitigation.

A dust management plan should be provided.

Norwich Main Substation (Paragraph 4.9.22)

A NIA and VIA in accordance with BS5228 should be produced for each Third Party (Statutory Undertakers) Works location. This should include details of any proposed mitigation.

A lighting assessment will be required, which should be undertaken in accordance with the Institute of Lighting Professionals Guidance Note 1 on the Reduction of Obtrusive Light.

A dust management plan should be provided.

Decommissioning (Paragraph 4.8.46 – 4.8.50)

It is understood that there are currently no plans to decommission the pylons however, consideration should be given to noise, light, dust, air and light pollution as well as how the infrastructure will be recycled.

Appendix 4.1 Code of Construction Practice

4. Consents and Permissions

This should include Section 61 agreements which have to be applied to the Local Authority for. Table 5.1

GG10. The Dust management plan will be undertaken in accordance with guidance produced by the Institute of Air Quality Management. Noise and Vibration mitigation measures should be design using BS4142 and BS5228 for compounds and general works area respectively.

GG22. The layout of each compound needs to be agreed with the LA.

GG31. All lighting will have to be designed in accordance with the Institute of Lightings Guidance Note 1 on Obtrusive light and Note 8 Bats and Artificial Light.

GG36. A copy of the contact details for the project shall be provided to the LA to be displayed on the councils website.

AQ1. Real time monitoring is the preferred monitoring system and should include PM2.5 as well as PM10 and should be cloud based with limit values and alarms set up. The cloud-based system should be made available to the LA and the local public.

NV01. All compounds must be assessed using BS 4142 not BS5228 due to the length of time which the compounds will be present.

NV02. The mitigation measures for noise and vibration should be designed on a case-by-case basis assessing and identifying each noise and vibration sensitive receptor (NVSR) and the required mitigation measures required.

NV03. Section 61 applications will only be agreed where there is a clear and necessary requirement for the works and not as a route to circumvent the required protection of the NVSR.

NV04. Vibration levels above 1mm/s are not acceptable. The project should be designed that no vibrations will be felt which will exceed this.

NV05. This would have to be placed as a prior to commencement requirement of the DCO.

NV23. Percussive pilling methods are not acceptable under any circumstances.

Appendix 7. Air Quality

No significant comments relating to the methodology or the outcomes which they have drawn. However, we do have the following comments:

7.1.2 The assessment of particulate matter should include PM2.5 as well as PM10.

7.1.4. As above.

7.1.6. As above.

7.1.11. As above.

7.2.2. Any monitoring which is undertaken shall be agreed with the local authority and shall be undertaken by MCerts automatic monitors with a cloud-based system with agreed alert levels and automatic notification of breach the set limits. The cloud-based system must be made available to the general public as well as to the developer and LA.

Additionally, a final AQ report will have to be undertaken when the course of the route has been finalised.

7.3.23. It is understood that geological receptors should be removed from the assessment, but these should be listed along with all the ecological receptors. It would be expected that if the critical load is not available then a worst case estimate should be used and the ecological receptors assessed accordingly. The appropriate critical load estimates should be discussed and agreed with Natural England.

Appendix 9. Contaminated Land

No significant comments regarding the methodology or the outcomes which they have drawn. However, further information will be required when the course of the route has been finalised. This should include the location of the works to be undertaken details of the proposed works and the proposed chemical analysis. The location of the works and the analysis to be undertaken should be agreed with the LA before it is undertaken.

14. Noise and Vibration.

Noise

The general assessment is acceptable but is considered to be basic and further assessment is considered to be necessary. The report calculates the potential noise impact from each activity but does not assess these results against the location of the noise sensitive receptors. Specifically, the report should define the specific noise that will be generated by the designated equipment, its potential impact on the vulnerable receptors and the mitigation measures required to be installed.

The noise assessments for the compounds should be undertaken against BS4142 given the length of time that the compounds will be in place.

The figures provided need to show the LOAEL levels as well as the SOAEL levels for noise. This should be accompanied by a list of all noise sensitive receptors and the predicted noise impact and the specific noise mitigation measures which are proposed.

Vibration

The figures provided need to show the LOAEL levels as well as the SOAEL levels for vibration. This should be accompanied by a list of all vibration sensitive receptors and the predicted vibration impact and the specific vibration mitigation measures which are proposed.

The report also uses the levels 12.5 mm/s which is the limit for structural damage. As this significantly exceeds the 1mm/s SOAEL for human health this level is not considered to be acceptable. All subsequent vibration assessment should use 1mm/s as the maximum permissible level.

The report also assesses the impact from percussive piling. Percussive piling is not considered to be acceptable in this situation and alternate piling methods should be used.

14.2 Construction Traffic Noise Assessment

As well as noise impact we would expect that the assessment for construction traffic would also include an assessment of the vibrations caused by the traffic.

Economic Development and skills

It is essential to South Norfolk that the economic benefits are maximised for the communities that are hosting the project which will have a significant impact on their environment. It is considered that the impacts upon tourism and skills have not been fully assessed in the documents provided as part of the consultation, no specific data relating to South Norfolk has been provided, we note the PEIR states 'A borough by borough breakdown of direct and indirect employment generation will not be provided' however the Council more accurate local information should be provided.

Economic Impacts – existing businesses

The Council continues to have concerns that the proposal will have a detrimental impact on established businesses in the district.

The Council has also raised concerns at the potential serious implications this proposed development would have on a number of airfields. Directly affected are Tibenham Airfield and Priory Farm, however there could be also implications for other airfields within the locality too. The proposed pylon route sits to the west of the two airfields, Tibenham and Priory Farm, and the existing pylons sit to the east, resulting in the airfields being sandwiched between overhead lines and lattice pylons. The Council is not convinced that the Preliminary level of significance of effect in construction and operation as set out in the PEIR is Not Significant. The loss of these business and facilities would be an unacceptable consequence of the National Grid proposals.

Tourism and visitors

South Norfolk with its Market Towns of Diss, Harleston, Loddon and Wymondham; numerous Heritage assets including Saxon and Norman Churches; the Waveney Valley; Boudicca Way; museums; walking and cycling routes for example, provides a rich tourism/visitor offer. In reviewing the documentation it is not considered that National Grid have fully assessed the impacts that the project infrastructure would have on the known features, directly and indirectly.

Community Benefits

It is considered that National Grid should commit to providing a package of community benefits, to seek localised benefits to South Norfolk communities to offset the significant impacts the project will create. The Council would welcome further discussion with National Grid regarding an appropriate community benefit package.

Conclusion

South Norfolk Council maintains its objection to the proposed project.

We expect National Grid to fully take into account the comments the Council has provided and those made by our communities as part of all the pre-application consultations stages.

Notwithstanding our position the Council will continue to engage with National Grid to seek to minimise the impact of the development on its communities and environment in a constructive and respectful manner.

Yours sincerely



Ben Burgess
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