Date: 02 September 2024
Our ref: 484533
Your ref: EN020036

Consultations
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 900

The Planning Inspectorate
Environmental Services
Operations Group 3
Temple Quay House
2 The Square
Bristol, BS1 6PN
grimsbytowalpole@planninginspectorate.gov.uk

BY EMAIL ONLY

Dear Sir / Madam

Environmental Impact Assessment Scoping Consultation under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulation 11

Proposal: Application by National Grid Electricity Transmission plc (the Applicant) for an Order granting Development Consent for the Proposed Grimsby to Walpole Project (the Proposed Development)
Location: Lincolnshire

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in the consultation dated 06 August 2024, received on 06 August 2024.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

A robust assessment of environmental impacts and opportunities, based on relevant and up to date environmental information, should be undertaken prior to an application for a Development Consent Order (DCO). Annex A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for the Proposed Development.

Natural England have participated previously in non-statutory pre-application engagement on the Proposed Development with the Applicant. Comments on this are included in the attached Annex.

For any further advice on this consultation please contact the case officer [redacted]@naturalengland.org.uk and copy to consultations@naturalengland.org.uk.

Yours faithfully

Lucy Collins
Sustainable Development Higher Officer
East Midlands Area Team

Annex A – Natural England's Advice on EIA Scoping

1. General principles

1.1 Regulation 11 of the Infrastructure Planning Regulations 2017 - (The EIA Regulations) sets out the information that should be included in an Environmental Statement (ES) to assess impacts on the natural environment. This includes:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases
- Appropriately scaled and referenced plans which clearly show the information and features associated with the development
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen
- A description of the aspects and matters requested to be scoped out of further assessment with adequate justification provided.
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation etc.) resulting from the operation of the proposed development
- A description of the aspects of the environment likely to be significantly affected by the development including biodiversity (for example fauna and flora), land, including land take, soil, water, air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), cultural heritage and landscape and the interrelationship between the above factors
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium, and long term, permanent and temporary, positive, and negative effects. Effects should relate to the existence of the development, the use of natural resources (in particular land, soil, water and biodiversity) and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment
- An outline of the structure of the proposed ES

1.2 Through our discussions with the applicant to date, Natural England (NE) are confident that the general principles above are likely to be addressed within the Environmental Statement.

1.3 It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the 'in combination' effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

2. Cumulative and in-combination effects

2.1 It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the 'in combination' effects of the proposed development with any existing developments and current applications.

2.2 An impact assessment should identify, describe, and evaluate the effects that are likely

to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment (subject to available information):

a) existing completed projects
b) approved but uncompleted projects
c) ongoing activities
d) plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
e) plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects

2.3 In particular, NE would like to refer to the high development pressure around the Humber Estuary. The impacts of this proposal in combination with other projects (NSIPS and TCPA projects) along the Humber must be considered within the ES. Especially, projects with the potential to impact functionally linked land should be considered.

3. Biodiversity and geodiversity

3.1 The assessment will need to include potential impacts of the proposal upon sites and features of nature conservation interest as well as opportunities for nature recovery through biodiversity net gain (BNG). There might also be strategic approaches to take into account.

3.2 Ecological Impact Assessment (EcIA) is the process of identifying, quantifying, and evaluating the potential impacts of defined actions on ecosystems or their components. EcIA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal. Guidelines have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM).

3.3 Public authorities who operate in England must consider what they can do to conserve and enhance biodiversity in England. This is the strengthened 'biodiversity duty' that the Environment Act 2021 introduces. This means that, as a public authority, National Grid must:

- Consider what they can do to conserve and enhance biodiversity.
- Agree policies and specific objectives based on their consideration.
- Act to deliver their policies and achieve their objectives.

4. International and European sites

4.1 The development site is within or may impact on the following **European/internationally designated nature conservation site(s):**

- Humber Estuary Special Area of Conservation (SAC)
- Humber Estuary Special Protection Area (SPA)
- Humber Estuary Ramsar
- The Wash & North Norfolk Coast SAC
- The Wash SPA
- The Wash Ramsar
- Saltfleetby – Theddlethorpe Dunes & Gibraltar Point SAC
- Gibraltar Point SPA

- Gibraltar Point Ramsar

4.2 The ES should thoroughly assess the potential for the proposal to affect internationally designated sites of nature conservation importance / European sites, including marine sites where relevant. This includes SPAs, SACs, listed Ramsar sites, candidate SACs and proposed SPAs.

4.3 Article 6 (3) of the Habitats Directive requires an appropriate assessment where a plan or project is likely to have a significant effect upon a European Site, either individually or in combination with other plans or projects.

4.4 Table 1 outlines potential impact pathways where further information/assessment is required. The advice is based on the information provided at this stage. NE may have additional comments to make when further information is provided.

Table 1: Potential risks to international/European designated sites

Site name with link to conservation objective	**Potential impact pathways where further information/assessment is required**
• Humber Estuary SPA • Humber Estuary Ramsar • The Wash SPA • The Wash Ramsar • Gibraltar Point SPA • Gibraltar Point Ramsar	Ornithological Interest • Noise & Visual Disturbance to birds during construction, including at Functionally Linked Land (FLL). • Bird collision risk during operation. • Visual Disturbance to birds during operation, including changes in lighting, perception as pylons as predator perch points. • Long term loss or damage to supporting habitats, including FLL. NE welcomes that the Habitats Regulations Assessment (HRA) will be informed by wintering and passage bird surveys. Please refer to Annex C Passage and wintering bird surveys for functionally linked land associated with the Humber Estuary and/or Lower Derwent Valley designated sites (Version 1.1, December 2021) for guidance on the methodology and presentation of the bird survey results to aid the assessment of impacts. We also recommend referring to Annex B: Humber Estuary Special Protection Area: non-breeding waterbird assemblage (Version 1.2, June 2023) for guidance on assessing impacts to the 'main component species' of the Humber Estuary SPA non-breeding waterbird assemblage. NE has generally advised that if ≥1% of a designated bird species population could be affected by a proposal, alone or in combination with other plans or projects, then further consideration is required. However, where species are particularly

Site name with link to conservation objective	Potential impact pathways where further information/assessment is required
	vulnerable due to declines in the Humber Estuary population, then it may not be appropriate to rely on the 1% of the estuary population as the critical threshold. Mitigation measures may be required where lower numbers of vulnerable species are using a site that is proposed for development. Comments on Chapter 8 of the EIA Scoping Report: • Table 8.1 notes 2 surveys a month will be completed for higher risk areas. We welcome this frequency for surveying high risk areas. We would advise higher risk areas are informed by the year 1 surveys and the Impact Risk Zones (IRZs) for the designated sites. • Paragraph 8.5.62 notes that there is some difference between the survey coverage and the scoping boundary due to the evolving corridor. As the Applicant has confirmed they will still collect two years of wintering bird data for this area, we agree that this will not constrain the final evaluation of impacts. • Paragraph 8.5.64 states that a qualitative assessment of collision risk will be made. We agree this is a suitable approach. • Table 8.4 sets out the impacts scoped in and out of the assessment. We agree with the scoping conclusions. • Table 8.5 summarises the scope of the surveys, which is as we have previously agreed for wintering and breeding birds. Comments on Appendix 8B: • P.10-11 state that the wintering bird surveys for 2024-2025 will cover the months Nov-Mar. We normally advise the wintering period should include Oct – Mar, as advised for the project. Table 8.5 in the Scoping Report states that surveys will cover Oct – Mar. Therefore, we need clarification on which months will be included in the wintering bird survey. We would strongly recommend including Oct 2024 in the survey schedule.
• Humber Estuary SAC • The Wash & North Norfolk Coast SAC • Saltfleetby-Theddlethorpe Dunes &	Habitat Interest • Air Quality impacts via construction traffic and dust mobilisation. See section 16 below. • Loss and fragmentation of designated habitats and FLL for mobile species (including lamprey and otter), including from barrier effects.

Site name with link to conservation objective	Potential impact pathways where further information/assessment is required
Gibraltar Point SAC	• Pollution events & water quality changes where hydrologically connected to the designated sites. See section 17 below. • Changes to the hydrology of the designated sites from discharge and / or abstraction. See section 17 below. Species Interest • Disturbance to River Lamprey *Lampetra fluviatilis* and Sea Lamprey *Petromyzon marinus*, i.e. noise, vibration and pollution, including at functionally linked habitats (Humber Estuary SAC). • Disturbance to Otter *Lutra lutra*, i.e. noise, vibration and pollution, including at functionally linked habitats (The Wash and North Norfolk Coast SAC). • Long term loss, fragmentation or damage to supporting habitats, including functionally linked habitats.

5. Nationally designated sites - Sites of Special Scientific Interest

5.1 Sites of Special Scientific Interest (SSSI) are protected under the Wildlife and Countryside Act 1981 (as amended). Further information on the SSSI and its special interest features can be found at www.magic.gov.uk.

5.2 Natural England's SSSI Impact Risk Zones can be used to help identify the potential for the development to impact on a SSSI. The dataset and user guidance can be accessed from the Natural England Open Data Geoportal.

5.3 The development site is within or may impact on the following **Sites of Special Scientific Interest:**

- Humber Estuary SSSI
- The Wash SSSI
- Gibraltar Point SSSI
- Bratoft Meadows SSSI

5.4 The ES should include a full assessment of the direct and indirect effects of the development on the features of special interest within the SSSIs and identify appropriate mitigation measures to avoid, minimise or reduce any adverse significant effects. NE agree with those impacts, receptors and potential for significant effects outlined in Table 8.4 of the EIA Scoping Report.

Table 2: Potential risks to nationally designated sites

Site name with link to citation	Potential impact pathways where further information/assessment is required
• Humber Estuary SSSI	A SSSI impact assessment will be required to provide an assessment of the impacts to features which are only notified as part

Site name with link to citation	Potential impact pathways where further information/assessment is required
• The Wash SSSI • Gibraltar Point SSSI	of the SSSIs, as well as the assessment of those which are also designated as European site features in Table 1. The impact pathways to be considered within the assessments are the same as stated above for the international/European designations in Table 1.
• Bratoft Meadows SSSI	NE notes from the non-statutory consultation that sections 6 and 7 of the cable search routes include areas in proximity to Bratoft Meadows SSSI, which is notified for its lowland neutral grassland feature. Any construction activity within 200m will need to review air pollution impacts to the site including from dust and NO_x from increased traffic movements during construction and any maintenance activities once operational.

6. Regionally and Locally Important Sites

6.1 The ES should consider any impacts upon local wildlife and geological sites, including local nature reserves. Local Sites are identified by the local wildlife trust, geo-conservation group or other local group and protected under the NPPF (paragraph 174 and 175). The ES should set out proposals for mitigation of any impacts and if appropriate, compensation measures and opportunities for enhancement and improving connectivity with wider ecological networks. Contact the relevant local body for further information.

7. Nationally designated landscapes

7.1 Public bodies have a duty to seek to further the statutory purposes of designation in carrying out their functions (under section 245 of the Levelling Up and Regeneration Act 2023). This duty also applies to proposals outside the designated area but impacting on its natural beauty.

7.2 The development site may impact on the Lincolnshire Wolds National Landscape (LWNL); formally known as the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB).

7.3 The Overarching National Policy Statement for Energy (EN-1) (section 5.10) provides significant protection for these nationally designated landscapes including their settings.

7.4 Assessment should be made of the direct and indirect effects on this designated landscape and in particular the effect upon its special qualities and purpose for designation – conserving and enhancing natural beauty. The management plan for the designated landscape may also have relevant information that should be considered in the EIA.

7.5 The ES should also include assessment of impact of severance on biodiversity and the functionality of habitats at a landscape scale in the national landscape setting. This should include how impacts to these features will be avoided.

7.6 Natural England have encouraged the Applicant to engage the Lincolnshire Wolds National Landscape Partnership to discuss potential impacts of the proposals national landscape. We understand this has been happening in relation to creating the LVIA.

7.7 Comments on the EIA Scoping Report:

- The statutory purpose of the Lincolnshire Wolds National Landscape is to conserve and enhance the area's natural beauty. NE welcome the Project will be designed to comply with existing National Grid standards and the guidelines and policies detailed in National Policy Statement for Electricity Networks Infrastructure (EN-5) (Chapter 2, paragraph 2.9.7 to 2.9.25).
- NE's landscape advice will focus on the potential for adverse effects on the statutory purpose of the LWNL and its setting. NE consider that much of the proposed route is likely to be within 5km of the LWNL boundary and within the setting of the LWNL and emphasise that this route is adjacent to the entire eastern edge of the designation, a circa 50km distance.
- We note that the Applicant has provided their own summary of NE's advice in Table 6.1 of the EIA Scoping Report. Natural England's full advice on the project to date, reviewed in the context of the EIA Scoping Report, is presented below within Table 3.
- We would like to note that the full rationale for the 2km buffer to the national landscape was not understood by NE at the route-selection (CPRSS) stage. We note that the EIA Scoping Report is proposing a study area of 5km from the proposed route, which is sited within 1km of the national landscape in places, and that the "*emphasis of the assessment will, however, be based on receptors lying within 3 km as beyond this distance significant landscape effects are highly unlikely to arise*" (para 6.4.6 EIA Scoping Report). We are unclear what landscape evidence has been used to establish these 5km and 3km thresholds, particularly in the absence of maps showing zones of theoretical visibility, however we welcome the Applicants intention to produce this evidence over a 10km distance.

Table 3: Natural England's EIA scoping advice on the Grimsby to Walpole project to date regarding the potential for adverse effects on the statutory purpose of the Lincolnshire Wolds National Landscape and its setting.

Stage	NE Advice	NE further comment at EIA Scoping stage
CPRSS methodology	NE's landscape advice will focus on the potential for adverse effects on the statutory purpose of the LWNL and its setting. LWNL is a nationally designated landscape, and its statutory purpose is to conserve and enhance the area's natural beauty. Consideration should be given to the direct and indirect effects on the designated landscape, and particularly the effect upon its purpose for designation, as well as the content of the relevant management plan.	Advice remains.
	The information presented does not provide certainty that the project can avoid direct impacts to the national landscape, the project would not be sited within the 2km buffer to the national landscape, the rationale behind the 2km buffer, the rationale behind the sensitivity weighting of the 2km buffer, or how landscape and visual evidence will inform the evaluation of the various route options.	The EIA Scoping Report indicates that the project cannot avoid direct impacts to the national landscape (temporary access routes), and that the project is sited within 1km of the LWNL at its closest. The rationale/evidence behind the CPRSS methodology was not provided to NE.
	NE support the presumption of undergrounding cables if the corridor was to go through the LWNL, as well as no substations or OHL within the LWNL. The technical note on CPRSS methodology	Advice remains. 6.5.36 of EIA scoping report states "*It is therefore proposed to exclude consideration of the direct effects on the landscape of the Lincolnshire Wolds*

	states "*The buffers were not intended to be areas where transmission development must be avoided but instead are areas where transmission development should be minimised*". NE advise that impacts to the landscape setting of LWNL is properly considered within early assessment.	*National Landscape (AONB) from the assessment with the exception of any effects arising from temporary access routes*". Accordingly, NE advises that the LVIA include an assessment of the potential direct impacts from temporary access routes through the LWNL. Table 6.2 states "*at its closest the Lincolnshire Wolds National Landscape (AONB) lies within 1 km of the Scoping Boundary and the Project is partly within the setting of the designated area. Some of the roads through the designated area may be used as temporary access routes*." NE consider that much of the proposed route is likely to be within 5km of the LWNL boundary and therefore within the setting of the LWNL and emphasise that this route is adjacent to the **entire eastern edge of the designation, ca. 50km.** NE note that a specific "setting study" is proposed by the Applicant to be submitted alongside other landscape assessment. We advise that this assessment includes effects on the 'special qualities' of the designated landscape, as set out in the statutory management plan for the area. These identify the particular landscape and related characteristics which underpin the natural beauty of the area and its designation status. NE are unclear what landscape and visual evidence has underpinned the proposed study area shown in Figure 6.1. The study area should be informed by ZTV analysis, which has not been provided. Appendix 6A (landscape methodology) provides no rationale behind using the metric 0.61 degrees to rule out significant landscape and visual effects.
	NE support that the LWNL is afforded the highest sensitivity weighting of 5 "Very High potential for the Project to be constrained" (as defined in the technical note).	Advice remains.
	NE are not clear why the 2km buffer to LWNL has been allocated a sensitivity weighting of 2 "Low potential to constrain the Project" for all project elements (OHL corridor, cable corridor, substation site). This requires justification. National planning policy and guidance is clear that development outside but within the setting of a designated landscape can impact negatively on its	Advice remains.

	statutory purposes.	
	NE are not clear why the sensitivity weightings of the OHL corridor, cable corridor, substation site (within the 2km buffer) are the same. This requires justification. Different infrastructure types have different landscape & visual impacts, and the sensitivity weightings (for 2km buffer) should reflect this/justify why they are the same.	Advice remains.
	What landscape and visual evidence, and rationale, has been used to underpin the proposal for a 2km buffer?	Advice remains.
	Page 4 of technical report states that "The extent of buffers was based upon the professional judgement of the relevant Project team subject matter expert, considering relevant legislation, policy and best practice." • Is the "Identification of designated sites" and a "Review of Landscape Character Assessments of relevance to the study areas" the only landscape evidence used to inform routeing and siting (and the buffer)? Is this the full list of data used? How did the ground truthing exercise (pg. 20) and the LCA review inform the corridors and siting zones, and the buffer? • What was the relevant legislation, policy and best practice considered (for landscape-related constraints)? Full methodology should include this.	Advice remains. Clarifications on the landscape evidence used by the Applicant in their routing and siting considerations has not been provided to NE. However, NE note that the EIA Scoping Report including Appendix 6A (methodology) does include information about the legislation, policy and guidance considered.
Non-statutory consultation	The CPRSS confirms that direct impacts to the LWNL cannot be avoided by the Corridors, Siting Zones, and Siting Areas presented (Table 5-5). We note that (para 5.2.22) "*Due to the potential challenge in routeing in the area between the AONB and Grimsby/Cleethorpes it was therefore considered that an alternative underground cable corridor to the west of the Overhead Line Study Area (within the AONB) should be considered as a viable alternative*". NE advise that a robust justification as to why the Western Corridor route cannot avoid the AONB (or its setting) will be necessary to meet the requirements of national policy. NE would like to understand this justification.	Advice remains.
	We note that para 6.2.9 confirms that lines within AONB will be undergrounded, and that temporary significant adverse effects on the AONB could occur during construction. NE support the presumption of undergrounding cables if a direct route through the AONB is unavoidable. NE advise that the scope of the LVIA should include an assessment of potential construction and operational effects on the defined (in the AONB Management	Advice remains.

	Plan) special qualities of the AONB and the delivery of the area's statutory purpose. NE advise that any assumptions at this stage that the buried pipeline will not have any adverse (significant or otherwise) effects once the route is reinstated and the scheme is operating should be avoided.	
	NE advise that further details on the design and siting of Sealing End Compounds should be provided, and that the potential effects of Sealing End Compounds on the AONB should be included within the scope of the LVIA.	NE note the clarification on page 6-10 of the EIA Scoping Report that "No Sealing End Compounds are currently proposed as part of the Project."
	NE advise that OHLs within parts of the Western Corridor have the potential to be within the immediate setting of the AONB. We note that the CPRSS acknowledges this potential effect, which NE advise will need to be explored further within an LVIA (para 6.2.8) "*There is potential that, even with careful routeing, significant adverse visual effects on the setting of the AONB and views to/from the AONB may not be avoidable and therefore consideration of other mitigation (informed by detailed landscape and visual assessments) such as alternative pylon types or undergrounding an overhead line (as described in Paragraph 4.8.4, hereafter 'other mitigation') in these Sections may be considered.*". NE would like to understand whether OHL will be avoided completely in the 2km constraint buffer to the AONB, and the scope for undergrounding cables within the setting of the AONB.	Advice remains. NE notes that the EIA Scoping Report indicates that the project cannot avoid direct impacts to the national landscape (temporary access routes), and that the project is sited within 1km of the LWNL at its closest.
EIA Scoping Report	**Lincolnshire Wolds Nationally Designated Landscape** • The development site is within or may impact on the LWNL. • National Policy Statements EN-1 and EN-5 provide the highest level of planning protection for these nationally designated landscapes. • Public bodies have a duty to seek to further the statutory purposes of designation in carrying out their functions (under section 245 of the Levelling Up and Regeneration Act 2023). This duty also applies to proposals outside the designated area but impacting on its natural beauty. • Consideration should be given to the direct and indirect effects on this designated landscape and in particular the effect upon its purpose for designation. The management plan for the designated landscape may also have relevant information that should be considered in the EIA.	N/A.

	Landscape and visual impacts • The environmental assessment should refer to the relevant National Character Areas. Character area profiles set out descriptions of each landscape area and statements of environmental opportunity. • The ES should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies. We encourage the use of Landscape Character Assessment (LCA) and the use of the NE guidance Landscape character assessments: identify and describe landscape types - GOV.UK (www.gov.uk). LCA provides a sound basis for guiding, informing, and understanding the ability of any location to accommodate change and to make positive proposals for conserving, enhancing or regenerating character. • A landscape and visual impact assessment should also be carried out for the proposed development and surrounding area. NE recommends use of the methodology set out in *Guidelines for Landscape and Visual Impact Assessment 2013* (3rd edition) produced by the Landscape Institute and the Institute of Environmental Assessment and Management. • In response to the Landscape Assessment Methodology described in Appendix 6A, NE welcome that the LWNL is classified as having a Very High landscape value; that landscape value and susceptibility will be assessed independently; and the clarification that a moderate effect will be classified as a significant effect. • We advise that the landscape and visual impact assessment also includes effects on the 'special qualities' of the designated landscape, as set out in the statutory management plan for the area. These identify the particular landscape and related characteristics which underpin the natural beauty of the area and its designation status. • The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. This should include an assessment of the impacts of other proposals currently at scoping stage. This assessment should be made in alignment with the GLVIA. An important output of the assessment will be a conclusion on whether any additional or total cumulative effects will	N/A.

	adversely affect the landscape character or conflict with the special qualities or objectives of the LWNL or its wider landscape setting. • NE welcome that the scope of the assessment will cover potential impacts to key views to and from the LWNL (Table 7.2, EIA Scoping Report). However, NE are not clear why people using National Trails and regionally promoted routes (beyond 3 km of the Project) are currently scoped out of the proposed assessment, and how the information presented in Figure 16.2 has been used to make this judgement. NE advise that there is the potential for views out of the LWNL to be affected by the proposed development, particularly from viewpoints at a higher elevation, and that these viewpoints may exist beyond 3km from the project. Evidence to exclude this scenario has not been presented.	

8. Landscape and visual impacts

8.1 The environmental assessment should refer to the relevant National Character Areas. Character area profiles set out descriptions of each landscape area and statements of environmental opportunity.

8.2 The EIA should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies. We encourage the use of Landscape Character Assessment (LCA), based on the good practice guidelines produced jointly by the Landscape Institute and Institute of Environmental Assessment in 2013. LCA provides a sound basis for guiding, informing, and understanding the ability of any location to accommodate change and to make positive proposals for conserving, enhancing or regenerating character.

8.3 A landscape and visual impact assessment should also be carried out for the proposed development and surrounding area. Natural England recommends use of the methodology set out in *Guidelines for Landscape and Visual Impact Assessment 2013* (3rd edition) produced by the Landscape Institute and the Institute of Environmental Assessment and Management. For National Parks and National Landscapes (formerly AONBs), we advise that the assessment also includes effects on the 'special qualities' of the designated landscape, as set out in the statutory management plan for the area. These identify the particular landscape and related characteristics which underpin the natural beauty of the area and its designation status.

8.4 The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. This should include an assessment of the impacts of other proposals currently at scoping stage.

8.5 To ensure high quality development that responds to and enhances local landscape character and distinctiveness, the siting and design of the proposed development should reflect local characteristics and, wherever possible, use local materials. Account should be taken of local design policies, design codes and guides as well as guidance in the National Design Guide and National Model Design Code. The ES should set out the

measures to be taken to ensure the development will deliver high standards of design and green infrastructure. It should also set out detail of layout alternatives, where appropriate, with a justification of the selected option in terms of landscape impact and benefit.

8.6 The National Infrastructure Commission has also produced Design Principles Design Principles for National Infrastructure - NIC endorsed by Government in the National Infrastructure Strategy.

9. Protected species

9.1 The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law. Records of protected species should be obtained from appropriate local biological record centres, nature conservation organisations and local groups. Consideration should be given to the wider context of the site, for example in terms of habitat linkages and protected species populations in the wider area.

9.2 The area likely to be affected by the development should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and, where necessary, licensed, consultants.

9.3 Natural England has adopted standing advice for protected species, which includes guidance on survey and mitigation measures. A separate protected species licence from Natural England or Defra may also be required.

9.4 Applicants should check to see if a mitigation licence is required using NE guidance on licencing NE wildlife licences. Applicants can also make use of Natural England's charged service Pre Submission Screening Service for a review of a draft wildlife licence application. Natural England then reviews a full draft licence application to issue a Letter of No Impediment (LONI) which explains that based on the information reviewed to date, that it sees no impediment to a licence being granted in the future should the DCO be issued. This is done to give the Planning Inspectorate confidence to make a recommendation to the relevant Secretary of State in granting a DCO. Work relating to a LONI may be undertaken via the existing Service Level Agreement between the Applicant and Natural England. Advice Note Eleven, Annex C – Natural England and the Planning Inspectorate | National Infrastructure Planning contains details of the LONI process.

9.5 Comments on the EIA Scoping Report, Chapter 8:

- **Table 8.5: Study Areas and methods to be used during further ecological surveys pgs 8-49-8-52:** NE welcome further consultation on the water vole survey approach
- **Paragraph 8.6.9 Control and Management Measures, point B06:** The Proposed Development may want to consider a selection of bat replacement structures be used to increase the range of bat species that could be attracted to the features. For example, potential roost features (PRFs) could be created by veteranisation of existing healthy retained trees, or PRFs in trees that are to be felled could be translocated to retained trees (where safe to do so), standing monoliths or dead

wood features could also be created within retained woodlands where practicable and safe to do so.

- **8.8.3 Expected Survey Requirements pg. 8-49:** Natural England would expect to see ground level tree assessments, climbed inspections or emergence surveys (where trees are unsafe to climb) where there are trees or structures of moderate - high bat roosting potential that are likely to be directly impacted by works i.e. removed, structurally changed, or subjected to high levels of disturbance. Where there is moderate -high potential for hibernation use inspections would be expected between core wintering months (January and February).

9.6 As surveys progress and if they highlight the need for protected species licensing then we strongly encourage engaging with NE as soon as possible. Due to the uncertainty over District Level Licensing in Lincolnshire we would strongly encourage that you pursue a traditional EPS Mitigation-licensed approach for Great Crested Newt (GCN). See below, section 10.

10. District Level Licensing for great crested newts

10.1 The applicant has expressed an interest in entering into a District Level Licence (DLL) agreement.

10.2 Where strategic approaches such as DLL for GCN are used, a LONI will not be required. Instead, the developer will need to provide evidence to the Examining Authority (ExA) on how and where this approach has been used in relation to the proposal, which must include a counter-signed Impact Assessment and Conservation Payment Certificate (IACPC) from Natural England, or a similar approval from an alternative DLL provider.

10.3 The DLL approach is underpinned by a strategic area assessment which includes the identification of risk zones, strategic opportunity area maps and a mechanism to ensure adequate compensation is provided regardless of the level of impact. In addition, Natural England (or an alternative DLL provider) will undertake an impact assessment, the outcome of which will be documented in the IACPC (or equivalent).

10.4 If no GCN surveys have been undertaken, Natural England's risk zone modelling may be relied upon. During the impact assessment, Natural England will inform the Applicant whether their scheme is within one of the amber risk zones and therefore whether the Proposed Development is likely to have a significant effect on GCN. The IACPC will also provide additional detail including information on the Proposed Development's impact on GCN and the appropriate compensation required.

10.5 By demonstrating that the DLL scheme for GCN will be used, consideration of GCN in the ES can be restricted to cross-referring to the Natural England (or alternative provider) IACPC as a justification as to why significant effects on GCN populations as a result of the Proposed Development would be avoided.

10.6 It should be noted that at present, no scheme is active in Lincolnshire. A DLL scheme is planned to be launched within Lincolnshire, however the exact timescales of this are currently unknown. Natural England would encourage engagement from the applicant regarding DLL as soon as possible, to ensure entry into the scheme is feasible for the full length of the project.

11. Priority Habitats and Species

11.1 Priority Habitats and Species are of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites. Lists of priority habitats and species can be found here. Natural England does not routinely hold species data. Such data should be collected when impacts on priority habitats or species are considered likely.

11.2 Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land. Sites can be checked against the (draft) national Open Mosaic Habitat (OMH) inventory published by Natural England and freely available to download. Further information is also available here.

11.3 An appropriate level habitat survey should be carried out on the site, to identify any important habitats present. In addition, ornithological, botanical, and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present.

11.4 The Environmental Statement should include details of:

- Any historical data for the site affected by the proposal (e.g. from previous surveys)
- Additional surveys carried out as part of this proposal
- The habitats and species present
- The status of these habitats and species (e.g. whether priority species or habitat)
- The direct and indirect effects of the development upon those habitats and species
- Full details of any mitigation or compensation measures
- Opportunities for biodiversity net gain or other environmental enhancement

12. Ancient woodland, ancient and veteran trees

12.1 Ancient woodland is an irreplaceable habitat of great importance for its wildlife, its history, and the contribution it makes to our diverse landscapes. Paragraph 180 of the NPPF sets out the highest level of protection for irreplaceable habitats and development should be refused unless there are wholly exceptional reasons, and a suitable compensation strategy exists. Paragraph 2.9.19 of NPS EN-5 states that *'…applicants should: …protect as far as reasonably practicable areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and ground water sources and nature conservation areas.'*

12.2 Ancient Woodland has been identified within the scoping areas for the proposed development. We welcome the intention to avoid these areas as far as practicable as the route and Order Limits are defined. The ES should assess the impacts of the proposal on the ancient woodland and any ancient and veteran trees, and the scope to avoid and mitigate for adverse impacts. It should also consider opportunities for enhancement.

12.3 Natural England and the Forestry Commission have prepared standing advice on ancient woodland, ancient and veteran trees.

13. Biodiversity net gain

13.1 The Environment Act 2021 includes NSIPs in the requirement for BNG, with the biodiversity gain objective for NSIPs defined as at least a 10% increase in the pre-

development biodiversity value of the on-site habitat. It is the intention that BNG should apply to all terrestrial NSIPs accepted for examination from November 2025. Natural England welcome National Grid's commitment to deliver 10% biodiversity Net Gain across all of their construction projects in advance of this date, including this project.

13.2 Biodiversity Net Gain outcomes can be achieved on-site, off-site or through a combination of both, however, on-site provision should be considered first. Natural England advise that the latest version of the biodiversity metric should be used to calculate the biodiversity impact of the development. It should be noted that the same version of the BNG metric should be used pre- and post-development to ensure consistency, as each version of the metric may give altered biodiversity unit scores as the calculator is updated.

13.3 Natural England recognises the high opportunity for the development to deliver BNG and it is recommended that the following guidance is applied in order to achieve this:

- Biodiversity Net Gain: Good Practice Principals for Development
- BS 8683: 2021 Process for designing and implementing Biodiversity Net Gain

13.4 In addition, the applicant should be aware of forthcoming guidance and legislation in relation to the Environment Act 2021, which may be released in the interim prior to submission of the DCO application.

13.5 In order to maximise nature recovery and target habitat enhancement where it will have the greatest local benefit it is recommended that locally identified opportunities should be acknowledged and incorporated into the design of BNG (both on and off-site). This should include any locally mapped ecological networks and priority habitats identified by City of Doncaster Council. In addition, Local Nature Recovery Strategies (LNRS) are a new mandatory system of spatial strategies for nature established by the Environment Act 2021 which will contribute to the national Nature Recovery Network (NRN). Work is currently underway to develop these strategies, which will identify strategic priorities for nature protection, recovery, and enhancement. Given the size, scale and opportunities afforded by the application is therefore recommended that engagement with relevant local planning authorities, responsible authorities and statutory consultees (including Natural England) is undertaken to align habitat enhancement through the development with any emerging plans and policies in relation to LNRS.

14. Connecting people with nature

14.1 The applicant should have regard to NPPF Paragraph 100 which requires planning decisions to protect and enhance National Trails. The National Trails website www.nationaltrail.co.uk provides further information.

14.2 The ES should consider potential impacts on access land, common land, public rights of way (including National Trails) and, where appropriate, the England Coast Path and coastal access routes and coastal margin in the vicinity of the development, in line with NPPF paragraph 100. It should assess the scope to mitigate for any adverse impacts. Rights of Way Improvement Plans (ROWIP) can be used to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

14.3 Measures to help people to better access the countryside for quiet enjoyment and opportunities to connect with nature should be considered. Such measures could include

reinstating existing footpaths or the creation of new footpaths, cycleways, and bridleways. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Access to nature within the development site should also be considered, including the role that natural links have in connecting habitats and providing potential pathways for movements of species.

15. Soils and agricultural land quality

15.1 Soils are a valuable, finite natural resource and should also be considered for the ecosystem services they provide, including for food production, water storage and flood mitigation, as a carbon store, reservoir of biodiversity and buffer against pollution. It is therefore important that the soil resources are protected and sustainably managed. Impacts from the development on soils and best and most versatile (BMV) agricultural land should be considered. Further guidance is set out in the Natural England Guide to assessing development proposals on agricultural land.

15.2 The following issues should be considered and, where appropriate, included as part of the ES:

- The degree to which soils would be disturbed or damaged as part of the development.
- The extent to which agricultural land would be disturbed or lost as part of this development, including whether any BMV agricultural land would be impacted.

15.3 This may require a detailed Agricultural Land Classification (ALC) survey if one is not already available. For information on the availability of existing ALC information see www.magic.gov.uk.

- Where an ALC and soil survey of the land is required, this should normally be at a detailed level, e.g. one auger boring per hectare, (or more detailed for a small site) supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2 metres. The survey data can inform suitable soil handling methods and appropriate reuse of the soil resource where required (e.g. agricultural reinstatement, habitat creation, landscaping, allotments and public open space).
- The ES should set out details of how any adverse impacts on BMV agricultural land can be minimised through site design/masterplan.
- The ES should set out details of how any adverse impacts on soils can be avoided or minimised and demonstrate how soils will be sustainably used and managed, including consideration in site design and master planning, and areas for green infrastructure or biodiversity net gain. The aim will be to minimise soil handling and maximise the sustainable use and management of the available soil to achieve successful after-uses and minimise off-site impacts.

15.4 Temporary displacement of soils because of the underground cable installation and temporary haul roads/ construction compounds can also result in permanent land quality change and soil damage if undertaken inappropriately. Degradation or permanent loss of BMV agricultural land should be considered in the EIA.

15.5 Further information is available in the Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites and The British Society of Soil Science Guidance Note Benefitting from Soil Management in Development and Construction.

15.6 Comments on the EIA Scoping Report:

- **Paragraph 12.4.2:** The plan should apply to all soils affected by the scheme, not just those currently in agricultural use. This reflects the Government's commitment in its 25 Year Environment Plan for all soils to be sustainably managed. It is however recognised that some soils for engineering applications, such as for bulk fill will require different management to those selected for agricultural, landscaping or ecological end uses.
- **Paragraph 12.5.3:** We welcome use of the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2009) to guide soil management during construction. Alongside this there should also be a commitment for 'best and most versatile' (BMV) agricultural temporality required for the development to be returned back to its original ALC grade. This includes areas such as field scale ecological mitigation areas and borrow pits where reinstatement to the physical characteristics of 'best and most versatile' quality may also be required.
- **Paragraph 12.6.4:** An Outline Soil Management Plan should be provided with the ES. Natural England welcome the commitment to provide a detailed SMP post consent / pre-construction, however, an Outline SMP prepared at this stage to set out the soil management and restoration proposed to demonstrate the mitigation measures proposed in the ES have been considered and will be employed. It should be note how restoration of the substations during decommissioning would be undertaken with regards to the soil resource.
- **Paragraph 12.6.4 Point AS01:** Natural England note and welcome the inclusion of roles and responsibilities. We advise that if the development proceeds, the developer uses an appropriately experienced soil specialist to advise on, and supervise, soil handling, including identifying when soils are dry enough to be handled and how to make the best use of the different soils on site.
- Machinery to be used will need to be specified. This should accord with best practice as set out in Defra 2009 Code of Construction Practice for the Sustainable Use of Soils on Construction Sites, namely using excavators and dump trucks. Use of bulldozers should not be permitted for any subsoils being returned to best and most versatile quality due to the high risk of soil compaction due to repeated trafficking. Bulldozers should not normally be used, other than if a modified loose tipping method of topsoil (not subsoil) replacement is employed in line with the Defra Construction Code.
- **Paragraph 12.8.2:** It is welcome that the permanent and temporary loss of soils in other (non-agricultural) land uses (second bullet) will be assessed; this should include all non-agricultural uses. The impacts on soils which are of particular importance for their carbon storage (peats and highly organic soils) should also be characterised.
- As noted previously an assessment of the impact on soil resources should be wider than just those affecting agricultural interests.
- **Paragraph 12.8.4:** Data on the presence of any agri-environment scheme can also be downloaded from the Natural England website.
- **Paragraph 12.9.3:** Duplication of 12.9.1

16. Air quality

16.1 Air quality in the UK has improved over recent decades but air pollution remains a significant issue. For example, approximately 85% of protected nature conservation sites are currently in exceedance of nitrogen levels where harm is expected (critical load) and approximately 87% of sites exceed the level of ammonia where harm is expected for

lower plants (critical level of 1µg)[1]. A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The Government's Clean Air Strategy also has a number of targets to reduce emissions including to reduce damaging deposition of reactive forms of nitrogen by 17% over England's protected priority sensitive habitats by 2030, to reduce emissions of ammonia against the 2005 baseline by 16% by 2030 and to reduce emissions of NOx and SO_2 against a 2005 baseline of 73% and 88% respectively by 2030. Shared Nitrogen Action Plans (SNAPs) have also been identified as a tool to reduce environmental damage from air pollution.

16.2 The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly, or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The ES should take account of the risks of air pollution and how these can be managed or reduced. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk).

16.3 Natural England has produced guidance for public bodies to help assess the impacts of road traffic emissions to air quality capable of affecting European Sites. Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations - NEA001

16.4 In addition, ammonia can be emitted from vehicle exhaust emissions as a by-product of the catalytic conversion process designed to reduce emissions of nitrogen oxide.

16.5 Natural England therefore advises that ammonia sourced from traffic emissions should be included for assessment within the HRA. For further information please see this report from Air Quality Consultants (AQC) that looks at ammonia emissions from roads for assessing impacts on nitrogen-sensitive habitats.

16.6 There are currently two models which can be used to calculate the ammonia concentration and contribution to total N deposition from road sources. One of these models is publicly available and called CREAM, and there is another produced by National Highways. The current CREAM model created by AQC used to assess ammonia emissions from road traffic has not been peer reviewed, however, at this time it has been recognised as a Best Available Tool and we deem it appropriate to be used where any caveats associated with this model are also considered within the assessment.

16.7 Information on air pollution modelling, screening and assessment can be found on the following websites:

- SCAIL Combustion and SCAIL Agriculture - http://www.scail.ceh.ac.uk/
- Ammonia assessment for agricultural development https://www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit
- Environment Agency Screening Tool for industrial emissions https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit
- Defra Local Air Quality Management Area Tool (Industrial Emission Screening Tool) – England http://www.airqualityengland.co.uk/laqm

[1] Report: Trends Report 2020: Trends in critical load and critical level exceedances in the UK - Defra, UK

16.8 Comments on the EIA Scoping Report:

- **Paragraph 14.4.1** references IAQM guidance for screening criteria for air quality impacts from construction dust. Ecological sites within 50m of the scoping boundary would be reviewed in line with this guidance. NE would ask for the more precautionary 200m distance. The rates at which dust particles are removed from the atmosphere depend strongly on their size. Large particles deposit rapidly near their source (within 100m) by gravitational settling; Intermediate particles are likely to travel up to 200-500m (DETR, 2000). Dust produced during the construction phase could cause smothering effects if the designated site is within approx. 200m. Smaller particles can travel up to 1km from source and some can be transported over long distances - even between different countries and continents.
- **Paragraph 14.4.3** references the IAQM guidance for indicative criteria for requiring an air quality assessment in regards to increases in road traffic. This is a more precautionary approach than we would request, so are satisfied it will capture all impacts to designated sites from additional construction traffic air pollution.

17. Water quality

17.1 The planning system plays a key role in determining the location of developments which may give rise to water pollution, and hence planning decisions can have a significant impact on water quality, and land. The assessment should take account of the risks of water pollution and changes to water quantity and how these can be managed or reduced. A number of water dependent protected nature conservation sites have been identified as failing condition due to elevated nutrient levels and nutrient neutrality is consequently required to enable development to proceed without causing further damage to these sites. The ES needs to take account of any strategic solutions for nutrient neutrality or Diffuse Water Pollution Plans, which may be being developed or implemented to mitigate and address the impacts of elevated nutrient levels.

18. Climate change

18.1 The England Biodiversity Strategy published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development will embed Nature Based Solutions, maintain ecological networks and build resilience to climate change. The ES should also incorporate the policies as set out in NPS EN-1 relating to climate change. The NPPF also requires that the planning system should contribute to the enhancement of the natural environment ‘by establishing coherent ecological networks that are more resilient to current and future pressures’ (NPPF Para 174), which should be demonstrated through the ES.

Annex B: Humber Estuary Special Protection Area: non-breeding waterbird assemblage (Version 1.2, June 2023)

The Humber Estuary Special Protection Area (SPA) qualifies under article 4.2 of the European Commission Bird Directive (79/409/EEC) in that it supports an internationally important assemblage of waterbirds. Confusion can arise concerning which species to consider when assessing the Humber Estuary SPA non-breeding, waterbird assemblage feature.

Natural England recommends focusing on what are referred to as the 'main component species' of the assemblage. Main component species are defined as:

a) All species listed individually under the assemblage feature on the SPA citation (i.e the species that qualified in 2007 when the site was designated).
b) Species which might not be listed on the SPA citation but occur at site levels of more than 1% of the national population according to the most recent Humber Estuary Wetland Bird Survey (WeBS) 5-year average count (currently 2017/18 - 2021/22).
c) Species where more than 2000 individuals are present according to the most recent Humber Estuary WeBS count.

The assemblage qualification is therefore subject to change as species' populations change. It should be noted that species listed on the citation under the assemblage features, whose populations have fallen to less than 1% of the national population, retain their status as a main component species and should be considered when assessing the impacts of a project or plan on the Humber Estuary SPA.

Natural England advises that the main component species of the Humber Estuary SPA non-breeding waterbird assemblage include (June 2023):

a) Species listed individually under the assemblage feature on the SPA citation:

- Avocet, *Recurvirostra avosetta* (non-breeding)
- Bar-tailed godwit*, Limosa lapponica* (non-breeding)
- Bittern, *Botaurus stellaris* (non-breeding)
- **Black-tailed godwit*, Limosa limosa islandica* (non-breeding)[1]**
- **Brent goose, *Branta bernicla* (non-breeding)[1]**
- **Curlew, *N. arquata* (non-breeding)[1]**
- **Dunlin, *Calidris alpina alpina* (non-breeding)[1]**
- **Golden plover, *Pluvialis apricaria* (non-breeding)[1]**
- Goldeneye, *Bucephala clangula* (non-breeding)
- Greenshank, *T. nebularia* (non-breeding)
- Grey plover, *P. squatarola* (non-breeding)
- Knot, *Calidris canutus* (non-breeding)
- **Lapwing, *Vanellus vanellus* (non-breeding)[1]**
- **Mallard, *Anas platyrhynchos* (non-breeding[1]**
- Oystercatcher, *Haematopus ostralegus* (non-breeding)
- Pochard, *Aythya farina* (non-breeding)
- **Redshank, *Tringa totanus* (non-breeding[1]**
- Ringed plover, *Charadrius hiaticula* (non-breeding)
- **Ruff, *Philomachus pugnax* (non-breeding)[1]**
- Sanderling, *Calidris alba* (non-breeding)

[1] Species known to use off-site supporting habitat / functionally linked land (FLL) in the non-breeding season

- Scaup, *Aythya marila* (non-breeding)
- **Shelduck, *Tadorna tadorna* (non-breeding) [1]**
- **Teal, *Anas crecca* (non-breeding)[1]**
- Turnstone, *Arenaria interpres* (non-breeding)
- **Whimbrel, *Numenius phaeopus* (non-breeding)[1]**
- **Wigeon, *Anas Penelope* (non-breeding)[1]**

And

b) Species which are not listed on the SPA citation but occur at site levels of more than 1% of the national population according to the most recent Humber Estuary Wetland Bird Survey (WeBS) 5-year average count:

- Green sandpiper, *Tringa ochropus* (non-breeding)
- **Greylag goose, *Anser anser* (non-breeding)[1]**
- **Little egret, *Egretta garzetta* (non-breeding)[1]**
- **Pink-footed goose, *Anser brachyrhynchus* (non-breeding)[1]**
- Shoveler, *Anas clypeata* (non-breeding)
- **Crane, *Grus grus* (non-breeding)[1]**

As stated above, the assemblage qualification is subject to change as species' populations change; therefore, the appropriate WeBS data should be considered in any assessment and the above list should be used as a guide only.

Please note, the advice set out above should be considered when assessing potential impacts on the waterbird assemblage feature. You will also need to consider potential impacts on species which are not considered to be non-breeding waterbirds but are listed on the citation qualifying under article 4.1 and 4.2 of the Directive. These include:

- **Hen harrier, *Circus cyaneus* (non-breeding)[1]**
- **Marsh Harrier, *Circus aeruginosus* (breeding)[1]**
- Little tern, *Sterna albifrons* (breeding)
- Avocet*, Recurvirostra avosetta* (breeding)
- Bittern, *Botaurus stellaris* (breeding)

The species marked [1] **in bold text** are known to use off-site supporting habitat / functionally linked land (FLL) (e.g. arable farmland, grassland/pasture, and/or non-estuarine waterbodies) in the non-breeding season and may therefore be the most relevant for assessing potential impacts of a proposed plan/project on birds using FLL associated with the Humber Estuary SPA. However, please note that this list should be used as a guide only; usage may depend on factors such as the habitats available on the site and distance to the Humber Estuary etc. Therefore, assessments of potential impacts on birds using functionally linked land should consider all relevant species and clear justification should be provided if any species are excluded from the assessment.

[1] Species known to use off-site supporting habitat / functionally linked land (FLL) in the non-breeding season

Annex C: Passage and wintering bird surveys for functionally linked land associated with the Humber Estuary and/or Lower Derwent Valley designated sites (Version 1.1, December 2021)

Background

The below guidance is intended to inform assessments of proposed development sites in proximity to the Humber Estuary and/or the Lower Derwent Valley designated sites only, where potential impacts from loss of/disturbance to functionally linked land (FLL) have been identified, for example due to presence of suitable habitat (such as arable land/grassland or open waterbodies) and/or relevant bird records and/or local knowledge.

Natural England recommends that surveys are undertaken of the site and surrounding fields to provide an overview of bird usage during wintering and spring/autumn passage periods.

We recommend that the surveys are carried out in line with the following best practice guidance. Where alternative approaches are used, clear justification should be provided.

Please note that recommended survey periods, frequency and design may differ for sites located within the boundaries of Humber Estuary or Lower Derwent Valley designated sites, or in proximity to other designated sites. Please contact Natural England in such cases.

Survey periods and frequency

Natural England recommends that surveys are completed at the following frequency:

- Autumn Passage – two surveys per month between August to October inclusive.
- Winter - two surveys per month between October to March inclusive.
- Spring Passage – two surveys per month between March - Mid-May inclusive.

We advise that spring and autumn passage surveys are completed (in addition to winter surveys) as the Humber Estuary and Lower Derwent Valley SPAs are important for species migrating between breeding and wintering sites. Further advice on seasonality for Humber Estuary SPA and Lower Derwent Valley SPA designated features can be found at Designated Sites View (naturalengland.org.uk) and UK9006092 Lower Derwent Valley SPA Published 14 Sep 2023 (naturalengland.org.uk), respectively.

Weekly visits during the autumn and spring passage periods are recommended where birds are likely to be present in the migration period only, due to high turnover of birds during migration. Note that certain passage species, such as whimbrel associated with the Lower Derwent Valley SPA, may have specific survey requirements due to their migration behaviour. Please discuss such cases with Natural England.

Natural England recommends that two years of wintering and passage surveys should be completed in certain cases to provide a more robust understanding of SPA bird usage on the site and inform design of suitable mitigation, where relevant. This will depend on site-specific factors, for example where proposed development sites:

- are in very close proximity to the designated site/s; and/or
- have a large development footprint; and/or
- are expected/shown to have high bird sensitivity, especially where activity varies significantly between years; and/or
- existing bird records / expert advice demonstrates usage of the site by high numbers of SPA birds.

Please contact Natural England if you are unclear on whether two years of wintering and passage surveys are recommended for this proposal.

Survey design

Wintering/passage surveys should be designed to ensure that results are sufficient to provide a robust picture of distribution, abundance and regularity of use by waterbirds associated with the Humber Estuary and/or Lower Derwent Valley SPAs across the full extent of the proposed development site. Please refer to Annex B and/or Annex B1 for the non-breeding waterbird assemblage list for the Humber Estuary and Lower Derwent Valley SPA, respectively.

A detailed methodology should be included in the relevant report/s, including key information such as number of visits, date and time of visits, viewpoint locations and/or transect routes walked. The survey results should provide some understanding of how the birds use the site (for example, for roosting or foraging) as well as presence/ absence. We would expect to see commentary of birds landing and taking off within and outwith the development site. We also recommend recording birds in flight, particularly if the application may have the potential to affect bird flight lines.

Consideration should also be given to surveys in poor weather/ visibility conditions. Usual survey methodology is to avoid surveying in poor conditions due to potential reduced detectability of birds. However, use can vary in different weather conditions, so it may be helpful to carry on with surveys in poor weather. Weather conditions may affect the results of the surveys and therefore should be considered in assessing the robustness of the dataset.

In addition, details of wider weather conditions should be included, for example, where there may have been a particularly wet or cold season and this may change bird distribution across the area, due to frozen ground etc. Furthermore, a milder autumn may lead to wintering birds arriving later and vice versa in colder autumns.

The methodology should also consider whether the site has any seasonal features such as dips and low-lying areas that retain water at particular times, for example early in the season or in wet years. These areas may have importance for waders at these times, but if surveyed during a drier spell or where full passage/winter surveys have not been completed, it may be possible to underestimate the importance of the site.

For sites in close proximity to the Humber Estuary, the surveys should cover different tidal states. Use of sites closer to the estuary are more likely to be tidally influenced. For sites which may potentially affect high tide roosts, observations should be conducted from two hours before high tide to two hours after high tide. For sites where there are high tide roosts, it may be beneficial to have a series of counts at different heights of tides ('through the tide counts'), as some sites are only used on Spring tides and others are only used on Neap and low tides.

For sites in proximity to the Lower Derwent Valley, the surveys should cover different times of day and different flooding states in the valley. For example, during certain winter periods, the designated site may be extensively flooded and therefore usage of surrounding functionally linked land may be higher for wading birds.

The surveys should cover open arable land/grassland and any waterbodies within the proposed site boundary, as well as land adjacent to the development that could be affected and provides the potential to support designated site species. Where a site is adjacent to the Humber Estuary designated site, additional considerations may be required, for example

ensuring adequate surveys of intertidal habitats. Please contact Natural England in such cases.

Surveys may also need to take account of surveys at dusk and dawn, depending upon the bird species (i.e. geese and swans). If geese and swans have the potential to use the development site or surrounding area, we would expect to see surveys 1 hour before and 1 hour after, dusk and dawn during the respective bird survey season (i.e. winter, spring and autumn passage (as above)). These surveys should be in addition to the standard daytime survey but can be carried out on the same day. For example, a dawn survey to count geese or swans at their night-time roost could then extend into a survey of daytime use of fields for foraging.

Natural England generally recommends that observations from vantage points (VP) are used. VP surveys are considered preferable to walkover surveys for observing behaviour of birds on the ground (i.e., whether they are foraging/loafing etc.), and to minimise the risk of flushing birds due to movement of a surveyor during a walkover survey. Also, birds which may otherwise have landed in the field during the survey period may be unlikely to do so with the presence of a moving surveyor. If landscape features mean it is not possible to avoid walking through part of the survey area to get from one point count to another, this should be noted and the reaction of any birds present recorded, including any that are flushed.

Further guidance on vantage point surveys can be found at Recommended bird survey methods to inform impact assessment of onshore windfarms | NatureScot. Natural England recognises that the NatureScot VP guidance is written for impacts associated with wind turbines. However, Natural England considers that the survey guidance detailed in Section 3.7 provides an appropriate methodology to identify distribution and abundance of birds to inform the assessment of other developments. We acknowledge that some of the information regarding the required watch hours and height considerations etc will not be relevant in the context of other developments. Therefore, site-specific considerations should be taken into account when designing the survey methods.

Where VP surveys are not considered appropriate for a particular site, clear reasoning and justification regarding the alternative survey methods undertaken should be provided.

Natural England has generally advised that if ≥1% of a Humber Estuary bird species population could be affected by a proposal, alone or in combination with other plans or projects, then further consideration is required. However, where species are particularly vulnerable due to declines in the Humber population, then it may not be appropriate to rely on the 1% of the estuary population as the critical threshold. Mitigation measures may be required where lower numbers of vulnerable species are using a site that is proposed for development.

Nocturnal surveys

Wader and waterfowl usage of arable land/grassland outside designated sites can be substantially different at night. Therefore, Natural England recommends nocturnal surveys are also carried out if waders and/or waterfowl have the potential to use the development site. These surveys should be in addition to the standard daytime surveys. We recommend that several visits should be completed to determine if the site and/or surrounding areas play a regular role in supporting SPA species at night. Night vision/infra-red equipment and survey on moonlit nights can establish presence of nocturnal species or presence and direction of feeding/migration movements both by calls and by sight[1].

Guidance on nocturnal surveys can be found at Nocturnal bird surveys | Bird Survey Guidelines. The nocturnal survey design should take this guidance into account, and the approach should be justifiable in the assessment. It should be noted that for most species nocturnal activity is likely to be underestimated in any attempted survey[1].

[1] Scottish Natural Heritage: Recommended bird survey methods to inform impact assessment of onshore wind farms (March 2017- Version 2).