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Our ref: 462569
Your ref: PA/2023/1124



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BY EMAIL ONLY

Dear Ed Senior,

Planning consultation: Planning permission for the development of 599 No. dwellings and lake, along with associated infrastructure, including landscaping, public open space and play area, pedestrian and cycle links, pumping station and sub-station.

Location: Lincolnshire Lakes, Land east of M181 and north of Burringham Road, Scunthorpe

Thank you for your consultation on the above dated 21 December 2023 which was received by Natural England on the same date.

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

SUMMARY OF NATURAL ENGLAND'S ADVICE

FURTHER INFORMATION REQUIRED TO DETERMINE IMPACTS ON DESIGNATED SITES

As submitted, the application could have potential significant effects on Humber Estuary Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), and Ramsar. Natural England requires further information in order to determine the significance of these impacts and the scope for mitigation.

The following information is required as part of the Habitats Regulations Assessment:

- Further information relating to potential impacts on the Humber Estuary SSSI/SAC/Ramsar as part of the Habitats Regulations Assessment including: recreational disturbance; air quality; loss of/disturbance to functionally linked land associated with the Humber Estuary Ramsar.
- Wintering and passage bird surveys.

Without this information, Natural England may need to object to the proposal.

Please re-consult Natural England once this information has been obtained.

Natural England's further advice on designated sites/landscapes and advice on other issues is set out below.

THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017 (AS AMENDED)

Internationally designated sites

The application site is within or in close proximity to a European designated site (also commonly referred to as Natura 2000 sites), and therefore has the potential to affect its interest features. European sites are afforded protection under the Conservation of Habitats and Species Regulations 2017, as amended (the 'Habitats Regulations'). The application site is in close proximity to the Humber Estuary Special Area of Conservation (SAC) and Ramsar which are European sites. The site is also listed as the Humber Estuary Ramsar site¹ and notified at a national level as Humber Estuary Site of Special Scientific Interest (SSSI). Please see the subsequent sections of this letter for our advice relating to SSSI features.

In considering the European site interest, Natural England advises that you, as a competent authority under the provisions of the Habitats Regulations, should have regard for any potential impacts that a plan or project may have². The [Conservation objectives](#) for each European site explain how the site should be restored and/or maintained and may be helpful in assessing what, if any, potential impacts a plan or project may have.

Natural England notes that a Habitats Regulations Assessment (HRA) has been produced and that the assessment concludes that the likelihood of significant effects arising from the proposal can be ruled out, both alone and in-combination.

Natural England notes that the HRA has not been produced by your authority, but by the applicant. As competent authority, it is your responsibility to produce the HRA and be accountable for its conclusions. We provide the advice enclosed on the assumption that your authority intends to adopt this HRA to fulfil your duty as competent authority.

On the basis of information provided, Natural England advises that there is currently not enough information to rule out the likelihood of significant effects. Natural England therefore advises that your authority should not grant planning permission at this stage.

Natural England advises that additional information is required in order to fully assess the proposal.

Additional Information required

Functionally linked land

Natural England considers that the proposed development may have the potential to impact on birds using functionally linked land associated with the Humber Estuary Ramsar. The term 'functionally linked land' describes an undesignated area of land or sea present outside of a designated site which nonetheless is considered to be critical to or necessary for sustaining a feature for which a nearby protected site has been designated. We advise that the potential for loss of functionally linked land should be considered in assessing what, if any, potential impacts the proposal may have on European sites.

In particular, we recommend you obtain the following information to support the Habitats

¹ Listed or proposed Wetlands of International Importance under the Ramsar Convention (Ramsar) sites are protected as a matter of Government policy. Paragraph 118 of the National Planning Policy Framework applies the same protection measures as those in place for European sites.

² Requirements are set out within Regulations 63 and 64 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' process. The Government has produced core guidance for competent authorities and developers to assist with the Habitats Regulations Assessment process. This can be found on the Defra website. <http://www.defra.gov.uk/habitats-review/implementation/process-guidance/guidance/sites/>

Regulations Assessment (HRA):

- Wintering and passage bird surveys to determine bird usage of the fields within and surrounding the proposed development site by Ramsar species. We recommend that the surveys follow the Vantage Point Survey methodology detailed in Annex C and include the fields adjacent to the site.

Please note that the HRA likely significant effect test identifies whether there is a credible risk that the project might undermine the conservation objectives for the European site. In this case, we advise that likely significant effect cannot be ruled out at the screening stage, due to the proximity to the Humber Estuary Ramsar site and potential habitat suitability for Ramsar birds. Therefore, we advise that the bird survey results and other relevant data should be considered at the appropriate assessment stage of the HRA and Natural England must be consulted on any appropriate assessment your authority may decide to make.

Natural England notes that Lincolnshire Environmental Records Centre (LERC) and the North & East Yorkshire Ecological Data Centre (NEYEDC) bird records provided in the shadow HRA (dated December 2023) are now outdated and it is Natural England's advice that bird surveys need to be undertaken. We have referred to the requirement of bird surveys within our engagement with the emerging North Lincolnshire Local Plan.

Natural England also notes that two records centres – LERC and NEYEDC – were referred to in the shadow HRA, with the NEYEDC bird records only referred to regarding two species in Table 6: European golden plover and Bar-tailed godwit. Also, this is inconsistent with the information given in Section 3.3 of the Shadow HRA, where it states that NEYEDC found records of three species: Eurasian Marsh Harrier, Ruff, and Common Redshank. Natural England advises that justification for the intermittent use of these two records centres and clarity on the source of records is provided.

Natural England also notes that the Shadow HRA finds it unlikely that large numbers of golden plover will use the site, despite the habitat being suitable, due to the enclosed nature of the site. Natural England disagrees with this reasoning due to the large size of the proposed development site.

Natural England notes that no bird records were referred to for the waterbird assemblage in the shadow HRA and advises that this information is required to inform the HRA.

We recommend that passage and wintering bird surveys for wintering waders and wildfowl are undertaken. Further guidance on passage and wintering bird surveys is provided in Annex C.

Recreational disturbance to functionally linked land

Natural England notes that the proposed development is approximately 2.5km from the Humber Estuary Special Area of Conservation (SAC) and Ramsar site. This planning application is part of allocation SS7 of the emerging 2020 – 2036 North Lincolnshire Local Plan. Due to the application site falling within the Zone of Influence for recreational disturbance impacts on the designated sites, we advise that it is not possible to rule out likely significant effects from potential recreational pressure / disturbance impacts to the Humber Estuary SAC / Ramsar at the screening stage of the HRA. An appropriate assessment should therefore be undertaken to further assess recreational disturbance impacts, with any relevant mitigation measures included where appropriate.

If a Suitable Alternative Natural Greenspace (SANG) is being proposed to mitigate for recreational disturbance impacts, we advise that Natural England's SANG guidance (attached alongside this letter) should be considered in designing a SANG. This guidance has been produced since the Local Plan was adopted. It should be noted that this document is specific to the SANG creation for the Thames Basin Heaths, although the broad principles are more widely applicable. Such provisions can help minimise any predicted increase in recreational disturbance/ pressure by containing the majority of recreation within and around the development site boundary away from the European site.

As a minimum, we advise that such provisions should include:

- High-quality, informal, semi-natural areas of 8 ha per 1000 population.
- Circular dog walking routes of 2.3 - 2.7 km within the site.
- Signage/information leaflets to promote these areas for recreation.
- Dog waste bins.
- A commitment to the long-term maintenance and management of these provisions.

Air quality impacts from traffic

Designated sites within 200m of a road which will experience a significant increase in traffic movements should be assessed for impacts due to air pollution from traffic. When undertaking an assessment of the potential impacts during the construction or operation phase of the development there will need to be clarification provided on which roads will be used to access the development site, and the number of predicted vehicle movements. Natural England has produced [guidance](#) for assessing the impacts of air pollution due to traffic.

Ammonia emissions from road traffic could make a significant difference to nitrogen deposition close to roads. As traffic composition transitions toward more petrol and electric cars (i.e., fewer diesel cars on the road) – catalytic converters may aid in reducing NOx emissions but result in increased ammonia emissions – therefore consideration of the potential for impacts is needed (see [Air Quality Consultants - News - Ammonia Emissions from Roads for Assessing Impacts on Nitrogen-Sensitive Habitats \(aqconsultants.co.uk\)](#)).

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 ([Air Quality Consultants - News - Ammonia Emissions from Roads for Assessing Impacts on Nitrogen-Sensitive Habitats \(aqconsultants.co.uk\)](#)), and there is another produced by National Highways.

Natural England notes that the Revised Transport Assessment provided (dated 21 December 2023) refers to a predicted traffic assignment which was undertaken to determine the likely distribution of development traffic across the highway network. The results of this are displayed in figure 5 and table 12, and sections of the route leading to zone “L” of the gravity model falls within 200 metres of the Humber Estuary SSSI/SAC/Ramsar. Therefore, air quality impacts on the Humber Estuary SAC/Ramsar from increased traffic movements should be assessed; demonstrating clearly the number of daily vehicle movements in proximity to the Humber Estuary SAC/Ramsar.

In-combination assessment

The HRA will need to consider in-combination impacts from other relevant projects and plans. The in-combination requirement makes sure that the effects of numerous small proposals, which alone would not result in a significant effect, are assessed to determine whether their combined effect would be significant enough to require more detailed assessment.

Plans or projects that should be considered in the in-combination assessment include the following:

- The incomplete or non-implemented parts of plans or projects that have already commenced;
- Plans or projects given consent or given effect but not yet started;
- Plans or projects currently subject to an application for consent or proposed to be given effect;
- Projects that are the subject of an outstanding appeal;
- Ongoing plans or projects that are the subject of regular review;
- Any draft plans being prepared by any public body;
- Any proposed plans or projects published for consultation prior to application.

Where consideration of in-combination effects is required, its necessary extent must be decided on a case-by-case basis. In Natural England's opinion the competent authority can apply their professional judgment when considering the scope of the in-combination assessment. An exhaustive search for relevant plans and projects by a competent authority is normally required to comply with the Habitats Regulations. However, a pragmatic approach to identifying the most pertinent ones may need to be taken where there is a large number of proposals. Where a competent authority chooses to take a more pragmatic approach, suitable justification should be provided.

WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

Sites of Special Scientific Interest

Natural England notes that the application site is located in close proximity to Humber Estuary SSSI. Based on the plans submitted, Natural England considers that the proposed development could have potential significant effects on the interest features for which the site has been notified. Our advice regarding the potential impacts upon the above SSSIs coincide with our advice regarding the potential impacts upon the European sites as detailed above.

Please note that if your authority is minded to grant planning permission contrary to the advice in this letter, you are required under Section 281 (6) of the Wildlife and Countryside Act 1981 (as amended) to notify Natural England of the permission, the terms on which it is proposed to grant it and how, if at all, your authority has taken account of Natural England's advice. You must also allow a further period of 21 days before the operation can commence.

Other advice.

Further general advice on the protected species and other natural environment issues is provided at Annex A.

If you have any queries relating to the advice in this letter please contact me on emma.gallagher@naturalengland.org.uk.

Should the applicant wish to discuss the further information required and scope for mitigation with Natural England, we would be happy to provide advice through our [Discretionary Advice Service](#).

Please consult us again once the information requested above, has been provided.

Yours sincerely

Emma Gallagher
Yorkshire and Northern Lincolnshire Area Team
Natural England

Annex A – Additional advice

Protected Landscapes

Paragraph 182 of the [National Planning Policy Framework](#) (NPPF) requires great weight to be given to conserving and enhancing landscape and scenic beauty within Areas of Outstanding Natural Beauty (known as National Landscapes), National Parks, and the Broads and states that the scale and extent of development within all these areas should be limited. Paragraph 183 requires exceptional circumstances to be demonstrated to justify major development within a designated landscape and sets out criteria which should be applied in considering relevant development proposals. [Section 245](#) of the Levelling Up and Regeneration Act 2023 places a duty on relevant authorities (including local planning authorities) to seek to further the statutory purposes of a National Park, the Broads or an Area of Outstanding Natural Beauty in England in exercising their functions. This duty also applies to proposals outside the designated area but impacting on its natural beauty.

The local planning authority should carefully consider any impacts on the statutory purposes of protected landscapes and their settings in line with the NPPF, relevant development plan policies and the Section 245 duty. The relevant National Landscape Partnership or Conservation Board may be able to offer advice on the impacts of the proposal on the natural beauty of the area and the aims and objectives of the statutory management plan, as well as environmental enhancement opportunities. Where available, a local Landscape Character Assessment can also be a helpful guide to the landscape's sensitivity to development and its capacity to accommodate proposed development.

Wider landscapes

Paragraph 180 of the NPPF highlights the need to protect and enhance valued landscapes through the planning system. This application may present opportunities to protect and enhance locally valued landscapes, including any local landscape designations. You may want to consider whether any local landscape features or characteristics (such as ponds, woodland, or dry-stone walls) could be incorporated into the development to respond to and enhance local landscape character and distinctiveness, in line with any local landscape character assessments. Where the impacts of development are likely to be significant, a Landscape and Visual Impact Assessment should be provided with the proposal to inform decision making. We refer you to the [Landscape Institute](#) Guidelines for Landscape and Visual Impact Assessment for further guidance.

Biodiversity duty

The local planning authority has a [duty](#) to conserve and enhance biodiversity as part of its decision making. Further information is available [here](#).

Designated nature conservation sites

Paragraphs 186-188 of the NPPF set out the principles for determining applications impacting on Sites of Special Scientific Interest (SSSI) and habitats sites. Both the direct and indirect impacts of the development should be considered. A Habitats Regulations Assessment is needed where there is a likely significant effect on a habitats site and Natural England must be consulted on '[appropriate assessments](#)'. Natural England must also be consulted where development is in or likely to affect a SSSI and provides advice on potential impacts on SSSIs either via [Impact Risk Zones](#) or as standard or bespoke consultation responses.

Protected Species

Natural England has produced [standing advice](#) to help planning authorities understand the impact of particular developments on protected species. Natural England will only provide bespoke advice on protected species where they form part of a Site of Special Scientific Interest or in exceptional circumstances. A protected species [licence](#) may be required in certain cases.

Local sites and priority habitats and species

The local planning authority should consider the impacts of the proposed development on any local wildlife or geodiversity site, in line with paragraphs 180, 181 and 185 of the NPPF and any relevant development plan policy. There may also be opportunities to enhance local sites and improve their connectivity to help nature's recovery. Natural England does not hold locally specific information on local sites and recommends further information is obtained from appropriate bodies such as the local records

centre, wildlife trust, geoconservation groups or recording societies. Emerging [Local Nature Recovery Strategies](#) may also provide further useful information.

Priority habitats and species are of particular importance for nature conservation and are 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. A list of priority habitats and species can be found on [Gov.uk](#).

Natural England does not routinely hold species data. Such data should be collected when impacts on priority habitats or species are considered likely. Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land, further information including links to the open mosaic habitats inventory can be found [here](#).

Biodiversity and wider environmental gains

Development should provide net gains for biodiversity in line with the NPPF paragraphs 180(d), 185 and 186. Major development (defined in the [NPPF glossary](#)) is required by law to deliver a biodiversity gain of at least 10% from 12 February 2024 and this requirement is expected to be extended to smaller scale development in spring 2024. For nationally significant infrastructure projects (NSIPs), it is anticipated that the requirement for biodiversity net gain will be implemented from 2025.

Further information on the timetable for mandatory biodiversity net gain can be found [here](#). Further information on biodiversity net gain, including [draft Planning Practice Guidance](#), can be found [here](#).

The statutory [Biodiversity Metric](#) should be used to calculate biodiversity losses and gains for terrestrial and intertidal habitats and can be used to inform any development project. For small development sites, the [Small Sites Metric](#) may be used. This is a simplified version of the [Biodiversity Metric](#) and is designed for use where certain criteria are met.

The mitigation hierarchy as set out in paragraph 186 of the NPPF should be followed to firstly consider what existing habitats within the site can be retained or enhanced. Where on-site measures are not possible, provision off-site will need to be considered.

Development also provides opportunities to secure wider biodiversity enhancements and environmental gains, as outlined in the NPPF (paragraphs 8, 74, 108, 124, 180, 181 and 186). Opportunities for enhancement might include incorporating features to support specific species within the design of new buildings such as swift or bat boxes or designing lighting to encourage wildlife.

Natural England's [Environmental Benefits from Nature tool](#) may be used to identify opportunities to enhance wider benefits from nature and to avoid and minimise any negative impacts. It is designed to work alongside the [Biodiversity Metric](#) and is available as a beta test version.

Further information on biodiversity net gain, the mitigation hierarchy and wider environmental net gain can be found in government [Planning Practice Guidance for the natural environment](#).

Ancient woodland, ancient and veteran trees

The local planning authority should consider any impacts on ancient woodland and ancient and veteran trees in line with paragraph 186 of the NPPF. Natural England maintains the Ancient Woodland [Inventory](#) which can help identify ancient woodland. Natural England and the Forestry Commission have produced [standing advice](#) for planning authorities in relation to ancient woodland and ancient and veteran trees. It should be taken into account when determining relevant planning applications. Natural England will only provide bespoke advice on ancient woodland, ancient and veteran trees where they form part of a Site of Special Scientific Interest or in exceptional circumstances.

Best and most versatile agricultural land and soils

Local planning authorities are responsible for ensuring that they have sufficient detailed agricultural land classification (ALC) information to apply NPPF policies (Paragraphs 180 and 181). This is the case regardless of whether the proposed development is sufficiently large to consult Natural England. Further information is contained in [GOV.UK guidance](#). Agricultural Land Classification information is available on the [Magic](#) website and the [Data.Gov.uk](#) website

Guidance on soil protection is available in the Defra [Construction Code of Practice for the Sustainable Use of Soils on Construction Sites](#), and we recommend its use in the design and construction of development, including any planning conditions. For mineral working and landfilling, separate guidance on soil protection for site restoration and aftercare is available on [Gov.uk](#) website. Detailed guidance on soil handling for mineral sites is contained in the Institute of Quarrying [Good Practice Guide for Handling Soils in Mineral Workings](#).

Should the development proceed, we advise that 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 soils on site.

Green Infrastructure

Natural England's [Green Infrastructure Framework](#) provides evidence-based advice and tools on how to design, deliver and manage green and blue infrastructure (GI). GI should create and maintain green liveable places that enable people to experience and connect with nature, and that offer everyone, wherever they live, access to good quality parks, greenspaces, recreational, walking and cycling routes that are inclusive, safe, welcoming, well-managed and accessible for all. GI provision should enhance ecological networks, support ecosystems services and connect as a living network at local, regional and national scales.

Development should be designed to meet the [15 Green Infrastructure Principles](#). The GI Standards can be used to inform the quality, quantity and type of GI to be provided. Major development should have a GI plan including a long-term delivery and management plan. Relevant aspects of local authority GI strategies should be delivered where appropriate.

GI mapping resources are available [here](#) and [here](#). These can be used to help assess deficiencies in greenspace provision and identify priority locations for new GI provision.

Access and Recreation

Natural England encourages any proposal to incorporate measures to help improve people's access to the natural environment. Measures such as reinstating existing footpaths, together with the creation of new footpaths and bridleways should be considered. Links to urban fringe areas should also be explored to strengthen access networks, reduce fragmentation, and promote wider green infrastructure.

Rights of Way, Access land, Coastal access and National Trails

Paragraphs 104 and 180 of the NPPF highlight the important of public rights of way and access. Development should consider potential impacts on access land, common land, rights of way and coastal access routes in the vicinity of the development. Consideration should also be given to the potential impacts on the any nearby National Trails. The National Trails website www.nationaltrail.co.uk provides information including contact details for the National Trail Officer. Appropriate mitigation measures should be incorporated for any adverse impacts.

Further information is set out in Planning Practice Guidance on the [natural environment](#)

Annex B: Humber Estuary Special Protection Area: non-breeding waterbird assemblage

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)
- 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.

Annex C: Passage and wintering bird surveys for functionally linked land associated with the Humber Estuary and/or Lower Derwent Valley designated sites

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 $\geq 1\%$ 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 sight¹.

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 survey³.

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