Shadow Habitat Regulations Assessment

Barrow Road, Barton-upon-Humber

19th August 2025

TG Report No. 16539_R03c_AHS

Tyler Grange

Project No:	Report No.	Date	Revision
16539	R03c	19th August 2025	C

Admin QA	Author	Checked	Approved
-	Amy Haddock-Sherwin MBiol, ACIEEM	-	Rob Revolta BA MSc MCIEEM

Contents:

Appendices:

Plans:

Summary

S.1. This report has been prepared by Tyler Grange Group Ltd (TG) on behalf of Strata. It sets out the findings of a 'shadow' Habitat Regulations Assessment (HRA). It has been prepared to accompany a full planning application (ref: PA/2023/1607) for a proposed residential development on a parcel of land off Barrow Road, hereinafter referred to as the 'Site'.

S.2. This report uses available data to examine likely effects of the proposed development on statutory designated National Site Network Sites (NSNS) and Ramsar internationally protected Sites, both alone and in combination with other proposals; it sets out information required to inform a HRA, which will ultimately be carried out by the competent authority (North Lincolnshire Council). The following internationally designated site was identified within 10km of the Site (no other NSNS were identified within 10km of the Site):

- The Humber Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar) – 1.7km north of the site.

S.3. The HRA screening exercise outlined in this report has identified the potential operation phase impacts on some of the qualifying features of the Humber Estuary SAC/SPA/Ramsar.

S.4. Information to inform an appropriate assessment is provided, including information on proposed mitigation measures to control potential operation phase impacts on qualifying features of the designated Sites.

S.5. Humber Estuary SAC/SPA/RAMSAR is designated for its internationally significant numbers of overwintering and migrating bird species. To inform an impact assessment of future development within the Site on qualifying bird features, non-breeding (passage and wintering) bird surveys have been carried out by Whitcher Wildlife Ltd on behalf of Strata between August 2022 to March 2025. Additionally, reference is made within this report to surveys completed by North Lincolnshire Council for the a link road application (ref: PA/2023/1981).

S.6. The Estuary is also designated for its internationally important habitats, and marine life including sea lamprey *Petromyzon marinus*, river lamprey *Lampetra fluviatilis,* natterjack toad *Epidalea calamita* and grey seal *Halichoerus grypus*. As the Site does not contain these habitats or habitats that can support these species, no surveys were therefore required in relation to such species.

S.7. Across the 51 non-breeding bird surveys undertaken within the Site, curlew were the only designated species recorded within the Site. Curlew were recorded on only three occasions (in October 2023, December 2023 and January 2024) and during each occasion, the birds were observed foraging briefly before dispersing to surrounding areas, with no evidence of sustained use or roosting.

S.8. Additionally, the approved link road application will bisect the Site, making it sub-optimal for curlew to forage during and following completion of the road. Given the infrequency and transient nature of the observations of curlew, previous assessment within the link road HRA that the competent authority conclusion supported by Natural England that the Site is not functionally linked land and that the Site has approval for significant changes to land use, the Site is not considered to be functionally linked to the Humber Estuary National Site Network Site (NSNS). No form of mitigation is therefore required in relation to functionally linked land.

S.9. Embedded mitigation measures are, however also outlined in this report in relation to the construction phase of the development in order to ensure no significant impacts to qualifying features of the NSNS. This is alongside the operational phase of the development in order to ensure that any anticipated recreational pressure is mitigated for accordingly.

S.10. It is therefore anticipated that the conclusions of this report will allow the competent authority to conclude that there will be no Likely Significant Effects (LSEs) arising from the proposed scheme on the Conservation Objectives or the qualifying features of the designated sites (Humber Estuary SAC/SPA/Ramsar).

Section 1: Introduction

1.1. This 'shadow' Habitat Regulations Assessment (HRA) has been prepared by Tyler Grange Group Ltd (TG) for Strata in relation to the Site. The Site is centred on OS Grid Reference TA 04220 21589. **Figure 1** below shows the Site's development boundary. It is wholly located within North Lincolnshire Council's authoritative boundary.

1.2. The following internationally designated site was identified within 10km (no others were identified within 10km):

- The Humber Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar – 1.7km north of the site.

Figure 1: Site context and site boundary (red line) and Humber Estuary (green area). (Aerial Imagery © Google Earth 2025)

1.3. To inform the scope of the Stage 1 Screening and potential for LSEs, the following reports are referred to throughout this report, including the methodology utilised for the over-wintering bird surveys and should be read alongside this report (see **Appendix 2**);

- Ecological impact assessment (EcIA) report written by Whitcher Wildlife Ltd (ref: 220776/EcIA/6) in July 2025 (this includes the non-breeding bird survey data from 2022);
- Non-breeding bird survey report written by Whitcher Wildlife Ltd (ref: 220776/winteringbirds/Rev1) in March 2024;
- Non-breeding bird survey report written by Whitcher Wildlife Ltd (ref: 220776/winteringbirds2025/Rev1) in March 2025;

1.4. As outlined within the aforementioned EcIA report, the Site predominantly comprises arable land and hedgerows. The surrounding landscape comprises residential development to the west and north, and arable land to the east and south.

Planning Context

1.5. The Applicant (Strata) is seeking Full Planning Permission (ref: PA/2023/1607) for residential development upon the Site.

1.6. On the 6th September 2024, North Lincolnshire Council granted Full Planning Permission (ref: PA/2023/1981) for the installation of a link road and roundabout upon the Site. The approved roundabout will be installed upon the northern extent of the Site, whilst a link road will run directly through the Site from north to south. The location of such infrastructure is identified upon **Figure 2** below.

1.7. It must also be noted that a suite of wintering bird surveys were carried out during October 2023 to March 2024 in support of the Council's link road planning application PA/2023/1981, as reported in Arup's Habitats Regulation Assessment - Stage 1 Screening (Date: 15th April 2024 Author: ARUP). Based on the survey data collected, Natural England concluded that the land within and adjacent to the link road site boundary is not functionally linked to the Humber Estuary.

1.8. It must be noted that at the time of planning permission being granted for the link road, Strata's 2022 bird surveys and 2023-2024 wintering bird surveys had been submitted and reviewed by Natural England.

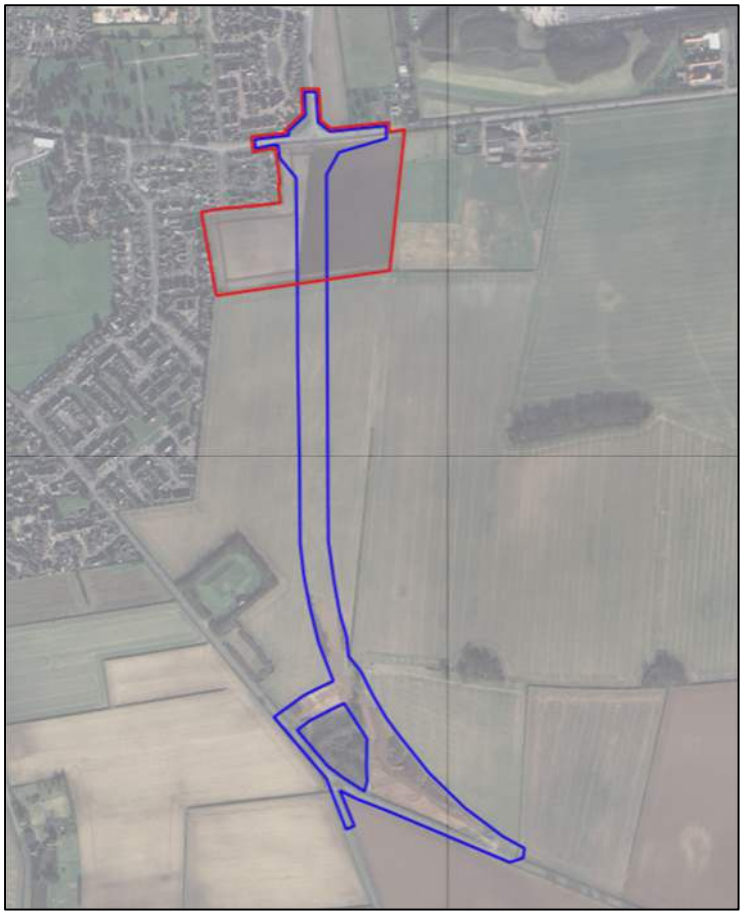


Figure 2: Site context and site boundary (red line) with Link Road Scheme shown (blue line). (Aerial Imagery © Google Earth 2025)

Natural England Correspondence

2023

1.9. In November 2023, Natural England provided consultee comments upon Strata's planning application (ref: PA/2023/1607) (see **Appendix 3**), of which stated:

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

The following information is required:

- *A Habitats Regulation Assessment (HRA).*
- *Additional passage and wintering bird surveys for wintering waders and wildfowl.*

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

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

1.10. Subsequent to the receipt of such comments, non-breeding bird surveys were undertaken upon the Site by Whitcher Wildlife, between November 2023 and March 2024.

2024

1.11. In July 2024, following the completion of the 2023/2024 wintering bird surveys (see **Appendix 2**), these were submitted to Natural England via their Discretionary Advice Service (ref: DAS/481293).

1.12. Strata and Natural England (NE) subsequently engaged in discussions relating to the Site and the non-breeding bird survey results. The following matters were raised during correspondence between August 2024 and October 2024 regarding potential impacts on NSNSs and mitigation required in relation to the proposed development (see **Appendix 3**).

- Natural England considered that the three instances of which curlew landed upon the Site demonstrate that the Site is Functionally Linked Land (FLL) and therefore the loss of this land should be mitigated in a way which is proportionate to the curlew using the Site;
- The developer must consider increased recreational pressure of which is anticipated to be placed upon the Humber Estuary by future residents and subsequently implement mitigation measures;
- The developer must consider air quality impacts associated with the construction and operational phase of the development.

1.13. In 2024, as part of the Discretionary Advice Service, mitigation measures were discussed between Strata and Natural England in relation to alleviating recreational pressure through contributing towards footpath works at Far Ings NNR. Such mitigation measures were agreed subject to further clarifications. However, following further discussions with Lincolnshire Wildlife Trust, it has been confirmed that such works cannot be implemented or progressed. It is therefore proposed that in order to mitigate recreational pressure associated with the development, a financial contribution is provided by Strata towards North Lincolnshire Council's strategically led mitigation strategy to be secured via a Section 106 agreement.

2025

1.14. During conversations between Strata and Natural England throughout 2024, TG concluded that the Site should not be considered FLL due to the reasons put forward in Sections 5.18-5.26.

1.15. Subsequent to these conversations between Strata and Natural England, between October 2024 and March 2025, further wintering bird surveys were completed upon the Site by Whitcher Wildlife. No curlews were surveyed as being present upon the Site.

1.16. This further data was submitted to Natural England via their Discretionary Advice Service (ref: DAS/481293), of whom provided further comments in April 2025 (see **Appendix 3**).They advised that they could not come to a view based upon the latest survey data regarding the

potential impacts the proposed development could have upon the Humber Estuary and whether the site was determined as being functionally linked land.

1.17. A Habitat Regulation Assessment was therefore requested to be completed by the competent authority in order to enable Natural England to come to a conclusive view. Natural England requested that the HRA incorporates the following:

- *'An assessment of all available bird survey data for the site including 2022, 2023 , and 2024 survey data.*
- *An assessment of potential direct and indirect impacts to land functionally linked to the Humber Estuary SPA/Ramsar.*
- *An assessment of potential visual/noise impacts on birds associated with the Humber Estuary SPA/Ramsar sites during construction and operation.*
- *An assessment of potential recreational disturbance impacts which may arise from the proposed development.'*

1.18. The purpose of this report is therefore to examine likely effects of the development alone and in-combination with other developments on National Sites Network sites (NSNSs)[1]. It sets out a 'shadow' Habitats Regulations Assessment (HRA) report which, in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'), provides information for the competent authority[2] North Lincolnshire Council, to complete the HRA, which should then be shared with Natural England.

1.19. This report sets out 'shadow' HRA stage 1 screening (**Section 5**) and provides information to inform HRA stage 2 Appropriate Assessment (AA) (**Section 6**).

Quality Control

1.20. All ecologists at Tyler Grange Group Ltd are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) or acting under the supervision of staff that are members of CIEEM, and abide by the Institute's Code of Professional Conduct.

[1] It is acknowledged that NSNSs do not include Ramsars. However, for ease of reference for the purposes of this report, the term 'NSNSs' includes Special Protection Areas (SPAs), potential SPAs (pSPAs), Special Areas of Conservation (SACs), candidate SACs (cSACs) and Ramsars.
[2] The Habitats Regulations define a 'competent authority' as including any Minister of the Crown, government department, statutory undertaker, public body of any description or persons holding public office, or any person exercising those functions (regulation 7(1)).

Section 2: Legislation and Planning Policy

2.1. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance (listed under Annex I, II and IV of the Directive). The Birds Directive (formally known as Council Directive 2009/147/EC on the conservation of wild birds) was also adopted in 2009. These directives have been transposed into UK law through The Conservation of Habitats and Species Regulations, hereafter referred to as 'the Habitats Regulations 2017 (as amended)', and incorporated protections for European sites now known as NSNS and Ramsar Internationally protected sites.

2.2. It should be noted that the UK's departure from the European Union (EU) does not alter the implementation of this legislation in the UK at the time of writing. Section 6 of the EU (Withdrawal) Act 2018 (as amended) requires retained EU law such as the Conservation of Habitat and Species Regulations 2017 (as amended) to be interpreted in line with "retained case law" which includes retained EU case law.

2.3. Changes made by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 changed the name of these sites from European protected sites to NSN and Ramsar sites which comprise:

- SACs and candidate SACs (cSACs) designated under the Habitats Directive;
- SPAs and potential SPAs (pSPAs), classified under the Birds Directive;
- Ramsar sites, designated under the Convention on Wetlands of International Importance; and
- European Marine sites (EMS).

2.4. Under the Habitats Regulations, competent authorities are required to consider impacts of any plans / projects which may result in Likely Significant Effect (LSE) and/or adverse effects on the integrity of NSNSs - either alone or in-combination with other plans / projects. The assessment of the potential effects is termed an HRA, which is split into four stages, as described below, and shown in Figure 2:

- Stage 1 is a screening stage to determine if the proposed development is expected to have an LSE on a NSNSs. If an LSE is determined, AA, Stage 2, is required;
- If required, Stage 2 refers to an AA which is used to determine whether the project will adversely affect the integrity of any given NSNSs (through also considering proposed avoidance and mitigation measures), in view of their conservation objectives. Conservation objectives specify the overall target for a site's qualifying features (habitats and species / populations listed in Annex I and II) in order for that feature to be maintained or restored, to reach favourable conservation status;
- Stage 3 is triggered if significant adverse effects are identified in stage 2 that cannot be avoided or mitigated. This stage requires alternative options to be examined to avoid significant impacts on NSNSs; and

- If it is deemed that the project should proceed for Imperative Reasons of Overriding Public Interest (IROPI), stage 4 comprises an assessment of compensatory measures which would be required.

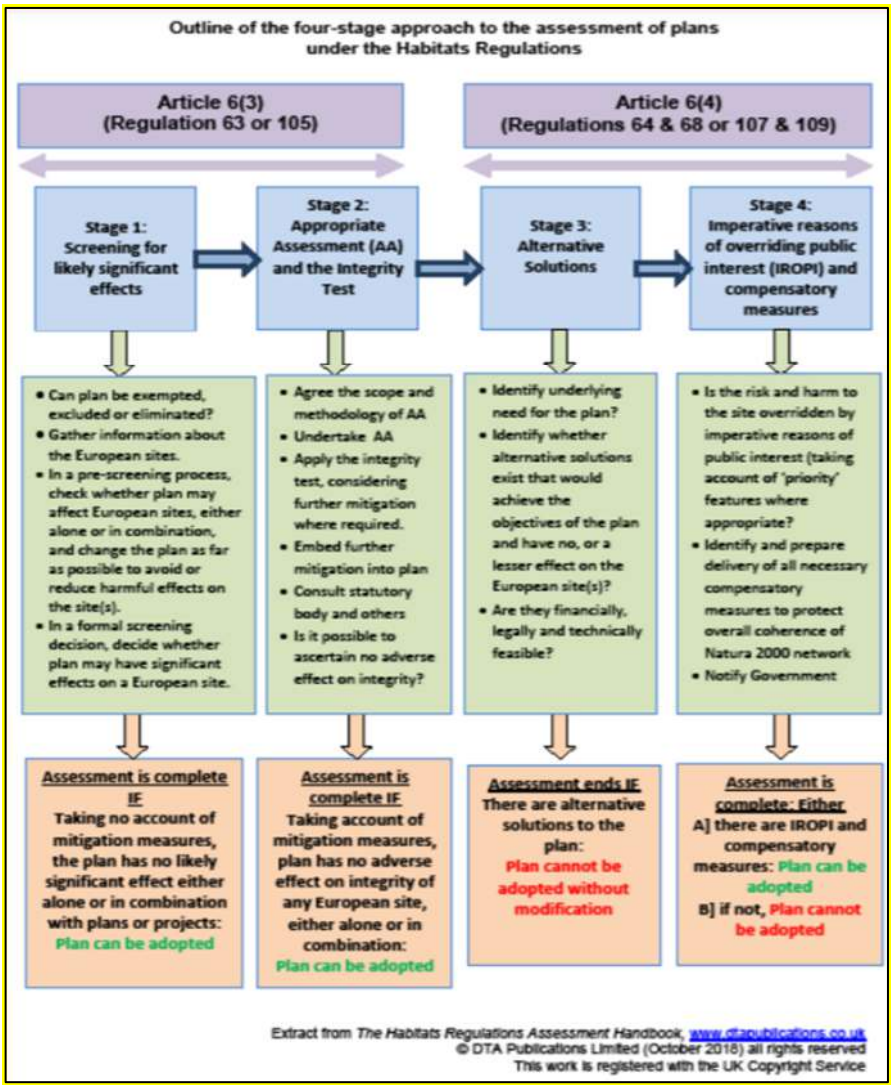


Figure 3: HRA stages[3]

2.5. The responsibility of undertaking AA, if required, lies with the competent authority who is responsible for granting consent for the scheme - in this case, it is understood that this will be the Local Planning Authority (LPA), North Lincolnshire Council. However, it is the applicant's obligation to provide information to the competent authority to enable them to undertake the assessment. In this case, the applicant is Strata.

2.6. This report aims to provide sufficient information relevant to HRA screening (HRA stage 1) to demonstrate to the LPA that AA (HRA stage 2) is only required for potential adverse effects relating to recreational pressure.

[3] Reproduced from DTA publications (2018) HRA handbook [Online] Available at: https://www.dtapublications.co.uk [Accessed: 29/07/2025].

2.7. The National Planning Policy Framework (NPPF) 2024 requires development plans to identify, map and safeguard international, national and locally designated sites of importance for biodiversity, such as National Network and Ramsar designated sites[4]. Under the requirements of the NPPF, unless it has been concluded that the proposed development will not adversely affect the integrity of NSNSs, the usual presumption in favour of sustainable development does not apply[5].

[4] NPPF (2024) Paragraph 192
[5] NPPF (2024) Paragraph 195

Section 3: Methodology

3.1. This report provides information relevant to HRA screening (stage 1) and AA (stage 2) and aims to determine if the proposed development is likely to have an LSE on any NSNSs. Detailed methodology at each stage is set out below.

3.2. Alongside this desk-based assessment by TG, extensive ecological surveys and assessments have taken place to inform the scope of the Stage 1 Screening, and potential for LSEs. These assessments including Whitcher Wildlife's EcIA and non-breeding bird reports (2023/2024 and 2024/2025) (see **Appendix 2**) should be read alongside this report and have been referred to throughout this report, including the methodology utilised for the over-wintering bird surveys.

3.3. Non-breeding bird surveys carried out during October 2023 to March 2024 in support of the Council's link road planning application PA/2023/1981, as reported in Arup's Habitats Regulation Assessment - Stage 1 Screening (Date: 15th April 2024 Author: ARUP), are also referred to throughout this report, including the methodology utilised for the non-breeding bird surveys

HRA Stage 1: Screening

3.4. Screening aims to determine if the proposed development is expected to have any LSE's on NSNSs. An effect is considered 'likely significant' if, in the absence of mitigation, it cannot be excluded based on objective information and it might undermine a NSNSs conservation objectives.

3.5. To assess whether LSE's may occur, the following information is provided:

- Identification of relevant sites and their respective qualifying features (presented in Section 4, NSNSs);
- Identification and understanding of the conservation objectives the identified sites (presented in Section 4, NSNSs);
- Where relevant, an estimation of the likely magnitude, duration, location and extent of effects on Sites if any are anticipated (presented in Section 5, HRA screening (stage 1); and
- Identification of whether any element of the proposed development will have an LSE on any qualifying feature, either alone or in-combination with other projects and plans (presented in Section 5, HRA screening (stage 1)).

3.6. This assessment has been informed by thorough review of the proposed development proposals (set out in Section 1 above) and the detailed masterplan (**Appendix 1**) In addition, the following resources were reviewed to inform this report:

- The Habitats Regulations 2017 (as amended);

- UK government guidance on the use of HRA[6] ;
- Joint Nature Conservation Committee for citations of National Network and Ramsar sites and associated conservation objective and site improvement plan documents[7] ;
- Natural England's web resources for citations of NSNSs and associated conservation objective and site improvement plan documents;
- Multi-Agency Geographic Information for the Countryside (MAGIC) interactive maps for locations of statutory sites (DEFRA 2020) within a 10km search radius of the site[8];
- North Lincolnshire Local Plan[9] , and HRA [10] of the North Lincolnshire Council local plan (2010).

3.7. In order to establish the sites which may be affected by the proposed development a 10km search radius was used from the Site boundary, defined as the zone of influence.

3.8. The Court of Justice of the European Union (CJEU) in the case of People Over Wind, Peter Sweetman v Coillte Teoranta ruled that "in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site" [11] . Hence it is not acceptable for the stage 1 screening assessment to rely on avoidance or reduction (mitigation) measures. Therefore, if it cannot be concluded that there will be no LSE in the absence of mitigation measures at the screening stage, HRA stage 2 (AA) is required.

Assessment of Effects and Mitigation Measures

3.9. An assessment of the potential effects for NSNSs in view of their conservation objectives is made, in terms of the magnitude, duration, location and extent of effects, both alone and in-combination with other developments.

3.10. Mitigation measures can include both avoidance measures and reduction measures, but the former approach is preferred.

Integrity Test

3.11. The integrity test requires the competent authority to ascertain if the development (alone and in-combination with other plans / projects) will not have a significant adverse effect on a NSNSs integrity, which is defined as:

[6]Ministry of Housing, Communities and Local Government (2019) Guidance Appropriate assessment: Guidance on the use of Habitats Regulations Assessment, [Online] Available at: https://www.gov.uk/guidance/appropriate-assessment [Accessed 28/07/2025].
[7] JNCC (2020) Joint Nature Conservation Committee for citations of internationally designated sites, [Online] Available at: https://jncc.gov.uk/our-work/uk-protected-areas/ [Accessed 29/07/2025].
[8] [Online] Available at: https://magic.defra.gov.uk/ [Accessed 28/07/2025]
[9] {Online] Available at: Planning policy - The North Lincolnshire Local Plan - North Lincolnshire Council [Accessed 28/07/2025]
[10] [Online] Available at https://m.northlincs.gov.uk/public/planningreports/corestrategy/hraupdate/nlccorestrategyrevhrascreening.pdf [Accessed 28/07/2025]
[11] Court of Justice of the European Union (CJEU) (2018) Judgement of 12.4.2018 - Case C-323/17 People Over Wind and Sweetman

"The coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the level of populations for the species for which it was classified.[12]"

12 The Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government (2019) Guidance: Appropriate Assessment, [Online] Available at: https://www.gov.uk/guidance/appropriate-assessment [Accessed: 28/07/2025]

Section 4: National Network and Ramsar Sites

4.1. The Site falls within the Zone of Influence for one NSNS identified by MAGIC[13], listed in Table **4.1 below**. Qualifying features and recorded threats/pressures of each designated site are provided in **Table 4.2** and shown on **Plan 1.**

Table 4.1 NSNS, statutory designated site within the search radius of 10km.

Site Name	Designation	EU Code	Area (ha)	Distance and Direction from Site
Humber Estuary	SPA[14]	UK9006111	37630	1.7Km north
	SAC[15]	UK0030170	36657	
	Ramsar[16]	663	37,988	

4.2. Given the lack of terrestrial or hydrological linkages to NSNSs beyond 10km, effects on NSNSs other than that listed in **Table 4.2** have been scoped out of this assessment and are discussed no further within this report.

[13] [Online] Available at: https://magic.defra.gov.uk/ [Accessed 11/08/2025]
14 [Online] Available at: European Site Conservation Objectives for Humber Estuary SPA - UK9006111 [accessed 27/07/2025]
15 [Online] Available at: European Site Conservation Objectives for Humber Estuary SAC - UK00300170 [accessed 27/07/2025]
16 [Online] Available at: Humber Estuary | Ramsar Sites Information Service [accessed 27/07/2025]

Table 4.2. NSN and Ramsar sites assessed as part of the screening stage, including qualifying features and threats of each site, where given.

Site Name	Qualifying Features	Threats
Humber Estuary SPA[17]	Qualifying species; Annex I species (Article 4.1): • Avocet *Recurvirostra avosetta* – (GB population: 1.7% wintering, 8.6% breeding) • Bittern *Botaurus stellaris* – (GB population: 4.0% wintering, 10.5% breeding) • Hen harrier *Circus cyaneus* – (GB population: 1.1% wintering) • Golden plover *Pluvialis apricaria* – (GB population: 12.3% wintering) • Bar-tailed godwit *Limosa lapponica* – (GB population: 4.4% wintering) • Ruff *Philomachus pugnax* – (GB population: 1.4% passage) • Marsh harrier *Circus aeruginosus* – (GB population: 6.3% breeding) • Little tern *Sterna albifrons* – (GB population: 2.1% breeding) Migratory species (Article 4.2): • Shelduck *Tadorna tadorna* – (1.5% NW Europe breeding population) • Knot *Calidris canutus islandica* – (6.3% wintering, 4.1% passage) • Dunlin *Calidris alpina alpina* – (1.7% wintering, 1.5% passage) • Black-tailed godwit *Limosa limosa islandica* – (3.2% wintering, 2.6% passage) • Redshank *Tringa totanus brittanica* – (3.6% wintering, 5.7% passage) Assemblage qualification: The Humber Estuary qualifies under Article 4.2 of the Directive (79/409/EEC) as it is used regularly by over 20,000 waterbirds (as defined by the Ramsar Convention) in any season. In the non-breeding season, the area regularly supports 153,934 individual waterbirds (five-year peak mean 1996/97–2000/01), including dark-bellied brent goose *Branta bernicla bernicla*, shelduck, wigeon *Anas penelope*, teal *Anas crecca*, mallard *Anas platyrhynchos*, pochard *Aythya ferina*, scaup *Aythya marila*, goldeneye *Bucephala clangula*, bittern, oystercatcher *Haematopus ostralegus*, avocet, ringed plover *Charadrius hiaticula*, golden plover, grey plover *Pluvialis squatarola*, lapwing *Vanellus vanellus*, knot *Calidris canutus*, sanderling *Calidris alba*, dunlin, ruff *Philomachus pugnax*, black-tailed, bar-tailed godwit, whimbrel *Numenius phaeopus*, curlew *Numenius arquata*, redshank *Tringa totanus*, greenshank *Tringa nebularia*, and turnstone *Arenaria interpres*.	Outdoor sports and leisure activities, recreational activities Invasive non-native species Abiotic (slow) natural processes Changes in abiotic conditions Changes in biotic conditions.

[17] [Online] Avalable at : https://publications.naturalengland.org.uk/publication/5382184353398784 [Accessed 30/07/2025]

Site Name	Qualifying Features	Threats
Humber Estuary SAC[18]	**Annex I Habitats** - • Atlantic salt meadows *Glauco-Puccinellietalia maritimae* • Coastal lagoons • Dunes with *Hippophae rhamnoides* • Embryonic shifting dunes • Estuaries • Mudflats and sandflats not covered by seawater at low tide • Fixed dunes with herbaceous vegetation (` grey dunes`) • Salicornia and other annuals colonising mud and sand • Sandbanks which are slightly covered by sea water all the time; and • Shifting dunes along the shoreline with *Ammophila arenaria* (` white dunes') **Annex II Species** - River Lamprey *Lampetra fluviatilis*, sea lamprey *Petromyzon marinus* and grey seals *Halichoerus grypus*.	Industrial or commercial areas; Pollution to groundwater (point sources and diffuse sources); Human induced changes in hydraulic conditions; Abiotic (slow) natural processes; Changes in abiotic conditior

Humber Estuary Ramsar[19]	**Ramsar (Criterion 1) ;**
	The Humber Estuary is a representative example of a near-natural macro-tidal estuary with diverse coastal and estuarine habitats:
	• Habitat types – dune systems, humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons.
	• Geomorphology – a dynamic system with high suspended sediment loads driving accretion and erosion of intertidal and subtidal mudflats, sandflats, saltmarsh, and reedbeds.
	• Dune habitats – includes strandline, foredune, mobile, semi-fixed, fixed dunes, and dune grassland on both estuary banks.
	• Salinity range – spans from open coast to tidal limits of the Rivers Ouse and Trent, supporting a full gradient of saline conditions.
	• Shore exposure – wave-exposed sandy shores in the outer estuary transition to moderately exposed and sheltered muddy shores inland.
	• Saltmarsh vegetation:
	  • Lower marsh: *Spartina anglica*, *Salicornia* spp.
	  • Mid marsh: *Aster tripolium*, *Puccinellia maritima*, *Atriplex portulacoides*
	  • Upper marsh: dominated by *Elytrigia atherica* (*Elymus pycnanthus*)
	  • Upper estuary marshes – include *Phragmites australis* fen, *Bolboschoenus maritimus* swamp, and *Elytrigia repens* (*Elymus repens*) saltmarsh.
		Not specific threats listed

[18] [Online] Avalable at : https://publications.naturalengland.org.uk/publication/5009545743040512 [Accessed 30/07/2025]
[19] [Online] Avalable at : https://jncc.gov.uk/jncc-assets/RIS/UK11031.pdf [Accessed 30/07/2025]

Site Name	Qualifying Features	Threats
	• Saline lagoons – the site contains good examples of four out of five physiographic types of saline lagoon. Ramsar (Criterion 3) ; The Humber Estuary supports notable fauna of conservation importance: • Grey seal *Halichoerus grypus* – breeding colony at Donna Nook, the second largest in England and the southernmost regular breeding site on the east coast. • Natterjack toad *Bufo calamita* – breeding in dune slacks at Saltfleetby-Theddlethorpe, the most north-easterly breeding site in Great Britain. Waterbird assemblage (Criterion 5): The Humber Estuary regularly supports >20,000 waterbirds. Species meeting (Criterion 6) -1% threshold of biogeographic population: • Dark-bellied brent goose *Branta bernicla bernicla* – (1.1% NW Europe & Siberia wintering population) • Shelduck – (1.5% NW Europe breeding population) • Wigeon *Anas penelope* – (1.3% NW Europe wintering population) • Teal *Anas crecca* – (1.3% NW Europe wintering population) • Mallard *Anas platyrhynchos* – (1.1% NW Europe wintering population) • Goldeneye *Bucephala clangula* – (1.1% NW & Central Europe wintering population) • Avocet – (8.6% GB breeding population) • Ringed plover *Charadrius hiaticula* – (1.2% Europe/North Africa wintering population) • Golden plover *Pluvialis apricaria* – (12.3% GB wintering population) • Grey plover *Pluvialis squatarola* – (1.2% Eastern Atlantic wintering population) • Lapwing *Vanellus vanellus* – (1.1% GB wintering population) • Knot – (6.3% wintering, 4.1% passage) • Dunlin – (1.7% wintering, 1.5% passage) • Black-tailed godwit – (3.2% wintering, 2.6% passage) • Bar-tailed godwit *Limosa lapponica* – (4.4% GB wintering population) • Curlew *Numenius arquata* – (1.2% GB wintering population) • Redshank – (3.6% wintering, 5.7% passage) • Turnstone *Arenaria interpres* – (1.1% Western Palearctic wintering population)	

4.3. Although Ramsar designations do not have specific Threats listed, the Humber Estuary SAC/SPA boundary overlaps with that of the Ramsar, therefore the threats listed above are also relevant to the Ramsar.

Conservation Objectives

4.4. Conservation objectives are set out for SAC and SPA sites by Natural England to help public bodies comply with the law and to protect NSNSs. Conservation objectives for these protected sites are set out below in **Table 4.3.**

Table 4.3. NSNSs protected sites conservation objectives

Site Name	Conservation objectives
Humber Estuary SPA	Ensure that the integrity of the Humber Estuary SPA is maintained or restored as appropr and ensure that it contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site.
Humber Estuary SAC	Ensure that the integrity of the Humber Estuary SPA is maintained or restored as appropriate, and ensure that it contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; • The extent and distribution of qualifying natural habitats and habitats of qualifying species • The structure and function (including typical species) of qualifying natural habitats • The structure and function of the habitats of qualifying species • The supporting processes on which qualifying natural habitats and habitats of qualifying species rely • The populations of qualifying species, and, • The distribution of qualifying species within the site.

4.5. Although Ramsar sites do not have specific conservation objectives, the Humber Ramsar boundary overlaps with that of the SPA/ SAC and the Humber Estuary Ramsar with the SPA therefore the conservation objectives listed above are also relevant to the Ramsar.

Consultation Responses

4.6. As outlined within Section 1, consultation with Natural England (NE) was undertaken in 2023, 2024 and 2025 (**Appendix 3**) regarding potential impacts on NSNSs and mitigation required in relation to the proposed development (**Appendix 3**). Responses regarding the proposed development include:

- Consideration of impacts on Functionally Linked Land (FLL), through targeted surveys and consultation with other resources (i.e. bird groups, BTO WeBS data);
- Consideration of increased recreational pressure on the estuary; and
- Consideration of air quality impacts.

Section 5: Screening (HRA Stage 1)

5.1. The aim of the HRA Screening is to establish whether construction or operation of the proposed development at the Site is likely to result in a LSE on NSNSs.

5.2. In this stage, the following information is required:

- Identification of internationally designated sites;
- Identification / understanding of conservation objectives of each interest / qualifying feature; and
- Identification of whether any element of the development will have an LSE on any feature or interest, either alone or in combination with other projects / plans (**Section 5**).

Site Context

5.3. The Site measures approximately 6.35ha and predominantly comprises arable habitat bordered by hedgerows.

5.4. **Plan 1** appended to this report provides an aerial view of the Site in proximity to the NSNSs and a habitat features plan showing the habitats present is shown in the EcIA report (ref: 220776/EcIA/6) written by Whitcher Wildlife in July 2025 (**Appendix 2**).

5.5. Additionally, the Site has Full Planning Permission (ref: PA/2023/1981) for a roundabout to be installed upon the northern extent of the Site, with a link road running directly through the Site from north to south. The location of such infrastructure is identified in **Figure 2** above.

Potential Likely Significant Effects (LSEs)

Disturbance to Qualifying Features Within the NSNSs

5.6. Due to the distance between the Site and the NSNSs (1.7 km at the closest point), no LSEs are anticipated in relation to visual or noise disturbance from within the Site on qualifying features located within the NSNSs during construction or operation of the proposed development. This is backed up by the guidance note written by NatureScot (July 2022), which quotes the disturbance distance for non-breeding curlew to be 200-650m[20].

5.7. Due to the nature of the proposed development resulting in an increase in residential units, there is potential for increases in recreation by future residents to the NSNSs. This increase in recreation could lead to increased visual and noise disturbance to qualifying bird species of the NSNSs.

5.8. Therefore, given LSEs have been identified from recreational pressure associated with the residential development and that the Humber Estuary is noted in the saved local plan HRA

[20] [Online] Available at: https://www.nature.scot/doc/disturbance-distances-selected-scottish-bird-species-naturescot-guidance [accessed 12/08/2025]

(2014)[21] and the local plan publication draft HRA (2021)[22] as being vulnerable to recreational pressure, an LSE is considered to occur in the absence of mitigation as a result of the proposed developments. Therefore, recreational effects are discussed further in **Section 6:** Appropriate Assessment (HRA Stage 2), alongside proposed mitigation.

5.9. On the basis that there are no habitats present onsite which could support marine mammal, fish, amphibian or plant species no tangible effect pathways are considered to exist in relation to disturbance to these qualifying species of the Ramsar and SAC. Therefore, no LSEs are anticipated in relation to these qualifying species.

Loss of or Damage to Habitats Within the NSNSs

5.10. Human-induced changes in hydraulic conditions and pollution to groundwater are listed as a threat to the Humber Estuary. Due to the distance between the Site and the NSNSs (1.7km km at the closest point) and there being no direct land take and no terrestrial habitat or hydrological linkage between the Site and the NSNSs, no LSEs related to direct loss or damage to habitats within the NSNSs from the Site during construction or operation are anticipated.

5.11. Standard best practice pollution prevention measures are however still proposed within the Construction Management Plan (Dated: July 2025) and the Construction Environmental Management Plan (CEMP) (Ref: 220776/CEMP/6 Date: 25th July 2025) of which support Strata's planning application (ref: PA/2023/1607). The implementation of the measures outlined within such documents, will ensure that potential impacts from dust and vibration alongside any potential chemical/fuel run-off will not cause a significant effect to NSNSs. Such documents also outline the timing of the proposed construction works and the construction methods/materials to be implemented of which in turn will ensure that there would be no LSEs as a result of construction traffic.

5.12. Recreational activities from residents of the development (including Outdoor sports and leisure activities) are also identified as a potential threat to the Humber Estuary. Due to the nature of the development, there is potential for increases in recreation to the NSNSs to occur, which may in turn lead to increased erosion or other damage to habitats within the NSNSs. However, as recreation has already been identified to have an LSE in **paragraph 5.7** above and will be fully mitigated, this is discussed no further here and is discussed in detail in **Section 6:** Shadow Appropriate Assessment (HRA Stage 2).

5.13. No LSEs are anticipated in relation to changes in air quality due to the distance between the Site and the NSNSs, being within an existing urban context and also the proposed development being relatively small-scale in nature.

5.14. The accompanying Air Quality Assessment (REF: J10-15231B-10) has demonstrated that pollutant concentrations will remain well below the relevant objectives at all existing receptors during both the construction and operational phase of the development. The

[21] North Lincolnshire Council Local Development Framework Habitat Regulations Assessment (2014)
[22] North Lincolnshire Local Plan Publication Draft Shadow Habitat Regulations Assessment (October 2021)

emissions during the operational phase of the development from additional traffic are predicted to have a negligible impact upon existing air quality conditions.

5.15. Other potential threats listed for the NSNSs (see **table 4.2** above) will be mitigated for, via embedded mitigation to ensure that there would be no LSEs as a result of the proposed development. These are outlined below:

- **Industrial or commercial areas** – No mitigation required as the proposed development does not fall into any of these activities;
- **Invasive non-native species** - A Landscape and Ecological Management Plan (LEMP) will be implemented to prevent the introduction and spread of invasive non-native species. This will include biosecurity protocols, early detection strategies, and eradication measures where necessary; and
- **Abiotic and biotic natural processes (including changes to conditions)** - Given the development's location approximately 1.7 km from the Humber Estuary, the direct risk of adverse effects on abiotic and biotic natural processes is minimal as activity associated with the Site during the construction and operational phase will not directly effect biotic and abiotic processes within the Humber Estuary. This is also supported above in sections 5.6-5.9 that demonstrate there will be no effects on qualifying species.

5.16. Nonetheless, a CEMP specific to ensuring that construction processes do not impact abiotic and biotic natural processes is to be formed prior to construction works commencing upon the Site (to be subject to a planning condition). Such document will be prepared to ensure that natural geomorphological processes such as sedimentation and erosion are not adversely affected alongside outlining outline pollution control measures to protect groundwater and surface water quality, addressing both point and diffuse sources in line with Environment Agency guidance.

5.17. In addition to this the Construction Management Plan (Dated: July 2025) and the Construction Environmental Management Plan (CEMP) (Ref: 220776/CEMP/6 Date: 25th July 2025) of which support Strata's planning application (ref: PA/2023/1607)include provisions for maintaining soil, water, and air quality during construction and operation, including dust suppression, runoff control, and the minimisation of artificial lighting and noise.

Loss, Damage or Disturbance to Functionally Linked Habitat

5.18. During the meeting held on the 28th August 2024, NE quoted FLL to be any land outside of an SPA which the qualifying species rely on as part of their life cycle. FLL does not have a specific definition in case law as it is acknowledged that it is context specific.

5.19. Varying definitions of FLL are provided by Natural England in relation to other studies. In particular, Natural England Commissioned Report NECR361 'Identification of FLL supporting SPA waterbirds in the North West of England' defines FLL as "areas of land occurring within 20km of an SPA, that are **regularly used by significant numbers** of qualifying bird species". 'Significant' in that context was defined as 0.5% of the Great Britain population of the species concerned, or 1000 individuals. It is acknowledged that this threshold was unique to that study. 'Regular' in the NERC361 study was defined as 'being used by **significant numbers of**

birds for 7 or more years since 2010', or 'when a threshold is met in two-thirds of the season for which adequate data are available'[23].

5.20. Although there is not a recognised definition of FLL, a repeat theme throughout all definitions is reference to land which is 'regularly' or 'frequently' used by 'significant' numbers of qualifying species and is 'important' to them, 'supports' such species, with the loss of such land affecting the conservation status of the species concerned and the conservation objectives of the SPA.

5.21. To understand potential usage of the Site by the qualifying species associated with the Humber Estuary NSNSs, a suite of over-wintering bird surveys spanning between 2022 and 2025 were undertaken by the applicant and for the link road scheme. The details of these surveys undertaken by the applicant are provided separately in **Appendix 2** and for the link road within Arup's Habitats Regulation Assessment - Stage 1 Screening (Date: 15th April 2024 Author: ARUP), but in summary comprised surveys between August and October 2022, October 2023 to March 2024 and October 2024- March 2025.

5.22. The proposed residential project discussed in this report undertook survey effort comprising vantage point surveys twice a month between November 2023 and March 2024 (alongside singular monthly visits comprising vantage point/walked surveys August – October 2022), combined with monthly nocturnal visits between December 2023 and March 2024 and an additional 12 vantage point and six nocturnal surveys between October 2024 and March 2025.

5.23. Separately, another consultancy (on behalf of North Lincolnshire Council) undertook a suite of non-breeding bird surveys between October 2023 and March 2024 within the Site and wider area associated for North Lincolnshire's highway infrastructure proposals relating to 'Phase 1' of the 'Barton-upon-Humber Link Road Scheme'[24]. The surveys undertaken for this scheme comprised the Site plus a wider area following the alignment of the proposed link road southwards from the Site and 500m around the alignment of the link road.

5.24. North Lincolnshire Council's wintering bird surveys comprised of two vantage point/walked transect surveys per month between October 2023 and March 2024 (including an initial scoping survey visit in October), alongside monthly nocturnal surveys between November and March 2024.

5.25. In total, between August 2022 and March 2025 the Site has been subject to a total of 36 daytime high-water mark surveys and 15 nocturnal surveys.

5.26. Of the survey dates for the two projects (Strata's residential development and North Lincolnshire Council's link road infrastructure) only once did they coincide with each other. However, in this instance one survey was at dawn and one was at dusk, therefore they are considered to be separate.

5.27. A specific comment made by Natural England in their consultation response to the current application is that the survey effort undertaken in relation to the residential project is only

23 Stroud et al. (2001) – The UK SPA network: its scope and content
24 Application reference PA/2023/1981

'sufficient' when a precautionary approach to the assessment is taken, as there 'is potential that the actual peak counts could have been missed due to incomplete survey coverage'. This is contested as when combined with the link road surveys, a full season of survey data spanning between October 2023 and March 2024 is available, comprising four visits per month and nine nocturnal surveys. Notwithstanding, the receipt of these comments from Natural England, further surveys have also been completed covering the full 2024–2025 season, including 12 daytime and 6 nocturnal visits. This extended dataset provides additional confidence in the robustness of the assessment and the conclusions presented in this report. The results of the surveys completed as part of the Link Road scheme concluded that the entirety of the area surveyed (including the entire Site) is not functionally linked to the Humber Estuary SPA, with no objection being presented by Natural England to the proposal, and this is confirmed in the consultation response for the Link Road (NE reference 476622) received (13th June 2024), which reads:

"Based on the conclusions of the bird survey data collected by Waxwings ornithology submitted in support of this application, and the results of Whitcher Wildlife's surveys of the site (conducted August – October 2023) submitted in support of application PA/2023/1607, Natural England agrees that the land comprising/adjacent to the site is not functionally linked to the Humber Estuary."

5.28. It must be noted that such conclusion was made by Natural England despite having sight of Strata's 2023/2024 survey data.

5.29. The surveys associated with the Link Road application recorded three qualifying species (curlew, lapwing and golden plover) of the SPA. Where this data relates to the residential development Site discussed in this report, no lapwing were recorded and no golden plover were recorded within the Site. During one of these surveys (23rd October 2023), a single curlew was noted to 'down briefly' within the Site red line boundary foraging immediately south of the Barrow Road and Falkland Way junction. Although a map was not presented, this is assumed to relate to the field comprising the proposed residential development Site. Small numbers of curlew (one and seven respectively) were subsequently recorded flying over the Site on two other occasions; no interaction was recorded with the Site itself.

5.30. It is important to note that North Lincolnshire Council's Link Road Scheme has now received full planning permission (via ref: PA/2023/1981) as of 6th September 2024. Strata's residential development is to be constructed only once the roundabout and link road have been delivered by the Council. The roundabout will comprise the northern extent of the Site and the link road itself will intersect the Site from north to south.

5.31. Strata's development will be directly served by the roundabout and link road. Strata will not therefore be commencing construction upon the Site until such infrastructure has been installed on the Site by North Lincolnshire Council.

5.32. On this basis, the Site will have already been disturbed and rendered sub-optimal for curlew by implementation of the approved full planning permission (via ref: PA/2023/1981). Once construction of the link road and roundabout infrastructure commences pursuant to the permission (ref: PA/2023/1981), this will render the Site sub-optimal for curlew use due to disturbance alongside permanent alteration of the Site's associated habitats and context.

5.33. In relation to the surveys completed by Whitcher Wildlife on behalf of Strata, curlew were recorded within the Site on two occasions – on the 15th December 2023 and 12th January 2024.

5.34. On the 15th of December 2023, two curlews landed within the Site, joined by a further 40. Shortly afterwards, 15 birds took off northwards, with the remaining birds present until the end of the survey period foraging.

5.35. On the 12th of January 2024, 39 curlew landed on Site and foraged briefly for approximately one hour before departing, with 29 curlew returning shortly afterwards and continued foraging for the remainder of the survey period.

5.36. No evidence of curlew during the nocturnal surveys have been recorded at any stage.

5.37. In summary, across the 51 surveys completed within the Site (including those for the link road scheme) between 2022 and 2025, curlew were recorded on three occasions only (in October 2023, December 2023 and January 2024), showing no evidence of regular use of the Site.

5.38. No curlew have been recorded within 500m of the Site; this is demonstrated through the Link Road survey area which extends significantly beyond the Site's red line boundary.

5.39. Curlew recorded upon the Site during the two visits in 2023/2024 with a peak count of 42 curlew and 39 curlew were recorded above the 1% SPA threshold (24)[25]. These incidents of curlew within the Site are not however considered regular in the context of the amount of robust survey data of which has been undertaken on the Site, in particular given that no curlew were experienced or recorded upon the Site during the latest season (2024-25).

5.40. The single recording of one curlew during the Link Road surveys is not considered significant when compared to the overall estuarine population. This is also reflected in Natural England's conclusion that the land associated with the full application *PA/2023/1607* is not functionally linked to the Humber Estuary.

5.41. Ideal foraging habitat for curlew typically comprises open, lowland wet grasslands, rough pasture, and coastal or estuarine margins with soft, moist soils rich in invertebrates such as earthworms and insect larvae[26]. Data from Google Earth historical aerial imagery records shows that the site has been used as intensively managed arable farmland since 2003. The land is predominantly used for combinable crops, including wheat (harvested late July to September), barley (July to August), oilseed rape (late July to August), peas (July to August), and beans (late August to September).

5.42. During the 2023–2025 winter survey period, the land was actively cultivated, with ploughing and sowing observed during the bird surveys. The habitat structure was uniform and lacked features such as wet depressions or semi-natural grassland that typically support high densities of invertebrates. As such, the Site is considered suboptimal for foraging waders, including curlew, due to limited prey availability and frequent agricultural disturbance. This

[25] [Online] Available at: https://app.bto.org/webs-reporting/numbers.jsp [accessed 27/07/2025]

[26] [Online] Available RSPB-Land-Management-For-Wildlife-Curlew_2017.pdf [accessed 27/07/2025]

assessment is consistent with the survey findings, which recorded only low numbers of common farmland birds across all the surveys. [27]

5.43. In a paper on curlew written by Hull University '*Some individuals showed flexibility in habitat use, switching between intertidal and terrestrial areas depending on environmental conditions, suggesting opportunistic foraging behaviour rather than strict site fidelity*'[28]. The curlew observations made on-Site limited to three brief foraging events across 51 surveys are consistent with opportunistic use rather than regular site fidelity. Given the Site's proximity to the Humber Estuary SPA, it is likely that these individuals originated from core estuarine roosts and were exploring peripheral areas. Curlew are known to range widely in winter, with GPS-tracked individuals on the Humber Estuary showing home ranges extending several kilometres inland[29]. The absence of curlew during the 2024–2025 survey season, despite extensive monitoring, reinforces the conclusion that the Site does not provide essential foraging habitat and is not relied upon to support the conservation objectives of the Humber Estuary NSNSs.

5.44. Taking all of this data into account, and considering that Natural England have established that the land which will be developed as part of the link road scheme, and adjoining land which runs directly through the site is not FLL the following is evident:

- Curlew are not regularly using the Site, and no other qualifying species were recorded within the Site;
- Curlew do not use the Site for roosting;
- Curlew do not use the surrounding land adjacent to the Site;
- The current and previous agricultural use of the Site is not optimal for curlew owing to the intensive agricultural nature and poor quality of soil invertebrate diversity;
- Curlew are not reliant on the Site to sustain populations and maintain the Conservation Objectives of the Humber Estuary NSNSs;

5.45. Based upon the above, when assessing the impacts of the scheme against the Conservation Objectives of the Humber Estuary as a whole, the following summary is made in **Table 5.1.**

Table 5.1. NSNSs protected sites conservation objectives

Conservation Objective	Commentary
The extent and distribution of the habitats of the qualifying features	The proposals would not result in the loss of any habitat associated with the SPA, nor would it indirectly impact any habitats within the SPA. The data presented in this note confirms that the Site very rarely supported relatively small numbers of curlew in the 2023/2024 survey period for intermittent foraging and that

[27] Eleven common and widespread species recorded in 2024/2025 across all 18 survey visits

[28] Mander, L. 2023. Understanding space and habitat use of the Near Threatened Eurasian curlew to inform the value of habitat restoration schemes for the species' conservation. University of Hull.

[29] [Online] Available at: https://www.tandfonline.com/doi/pdf/10.1080/00063657.2022.2144129 [accessed 27/07/2025]

	curlew have not been experienced in the most recent 2024/2025 survey period. The Site is therefore not considered functionally linked; curlew are not reliant on it to act as a supporting function to the SPA. The proposed project would therefore not undermine this objective.
The structure and function of the habitats of the qualifying features	As outlined above, the proposals would result in the loss of approximately 6.35ha of habitat which was very rarely used by curlew for brief foraging in 2023/2024 and was not experienced as being utilised by curlew in the 2024/2025 period. The Site comprises intensively managed arable farmland, primarily used for combinable crops such as wheat, barley, oilseed rape, peas, and beans. This consistent arable use, dating back at least to 2003, has resulted in high nutrient soils that inhibit soil invertebrate diversity. Consequently, the habitat is considered sub-optimal for curlew, requiring them to expend unnecessary energy to forage in an area offering limited foraging opportunities.
The supporting processes on which the habitats of the qualifying features rely	The development does not directly affect the supporting processes such as sediment transport, tidal flow, and water quality as there are no direct hydrological connections between the Site and the Humber Estuary. Therefore, these processes will remain unaltered.
The population of each of the qualifying features	The development would not result in any direct impact on the numbers of curlew or other qualifying features associated with the Humber Estuary because it is not considered functionally linked habitat.
The distribution of the qualifying features within the Site	The Humber Estuary itself would remain physically unaffected due to the distance (1.7km north) from the Site.

5.46. On the basis of the above, it is evident that curlew are not reliant on the Site to act as supplementary foraging grounds outside of the estuary, only small numbers of curlew were recorded on three occasions across 51 surveys undertaken over a three year period. The proposed loss of approximately 6.35 hectares is not considered significant within the context of the wider agricultural landscape available to curlew, including areas in closer proximity to the estuary. As such, it can be concluded that the Site does not represent land that could be classified as being important supporting habitat associated with the Humber Estuary (i.e. it is not functionally linked land).

Stage 1 (Screening) Conclusion

5.47. The Site is not functionally linked to the NSNSs. Therefore, impacts on functionally linked land have been scoped out of stage 2, and no mitigation is required in relation to this aspect.

5.48. Construction phase impacts have been scoped out, as no pathways for significant effects on the NSNSs have been identified during this phase. This conclusion is supported by the embedded mitigation, which provides implementation of the Construction Management Plan (Dated: July 2025) and CEMP (Ref: 220776/CEMP/6 Date: 25th July 2025), which ensures

that best practice measures are in place to avoid any indirect effects such as noise, dust, or pollution.

5.49. Additionally, no LSEs are expected in relation to air quality as confirmed in the assessment (Ref: J10-15231B-10), which confirms pollutant levels will remain well below thresholds, with negligible impact from operational traffic.

5.50. The assessment has scoped in potential recreational impacts during the operational phase, which are considered further in **Section 6**, including any relevant mitigation measures and the potential for adverse effects on NSNS integrity.

Section 6: Shadow Appropriate Assessment (HRA Stage 2)

Approach to Appropriate Assessment

6.1. Where significant effects are likely, or it is uncertain if there would be significant effects, an Appropriate Assessment (AA) is required under the Conservation of Habitats and Species Regulations 2017 (as amended).

6.2. For an AA, the implication of the plan/project on each affected site must be assessed in light of its conservation objectives. The development of conservation objectives is required by the 1992 Habitats' Directive (92/43/EEC); an objective of this legislation is to achieve 'favourable conservation status' (see Box 6.1) of the habitats and / or species features for which the site is designated.

Box 6.1: Favourable conservation status, as defined in the Habitats Directive

Conservation status for habitats is defined in Article 1(e) as:

"[The] *conservation status of natural habitats* [is] *the sum of influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species... The conservation status of natural habitats will be taken as 'favourable' when:*

- *its natural range and areas it covers within that range are stable or increasing; and*
- *the species structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and*
- *the conservation status of its typical species is favourable*."

Conservation status for species is defined in Article 1(i) as:

"[The] *conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within* [its] *territory...The conservation status of species will be taken as 'favourable' when:*

- *population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; and*
- *the natural range of the species is neither being reduced for the foreseeable future; and*
- *there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis."*

Assessment Methodology

6.3. Following the screening described in Section 3, the need for an AA has been identified for the Humber Estuary SAC/SPA/Ramsar. In this section, an assessment of the implications for the Site in view of the Humber Estuary conservation objectives is made, in terms of the magnitude, duration, location and extent of effects.

6.4. The Humber Estuary is screened in for a further assessment for potential recreation impacts.

Mitigation Measures

6.5. The 'Information to Inform an AA' section also looks at potential mitigation measures which would be required to determine if the magnitude, duration, location and extent of effects can be reduced/removed. These mitigation measures (see **section 6.11** below) would form part of the planning consent, including related planning conditions, for the proposed scheme, if approved. Mitigation measures can include both avoidance measures and reduction measures, but the former approach is preferred.

In-Combination Impacts

6.6. In-combination assessment of impacts is also made in light of the proposed development and other relevant plans / projects (see **Section 6.14** below**)**.

Integrity Test

6.7. The integrity test as outlined within the Conservation of Habitats and Species Regulations 2017 (as amended) requires the competent authority to ascertain if the proposed development (alone and in combination with other plans / projects) will not have a significant adverse effect on a site's integrity, which is defined as:

"the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the level of populations for the species for which it was classified".

Information to Inform an Appropriate Assessment

6.8. As laid out in the scoping section, the scheme was identified as having potentially significant effects on NSNS(s) alone as a result of recreational pressures.

6.9. Information to inform an AA for each of these sites is given below. This information includes an impact assessment comprising descriptions of the qualifying features of the designated sites (**Table 4.2.)** and their conservation objectives (**Table 4.3**.), as well as in-combination mitigation measures.

Mitigation

The Proposed Development Alone

Recreational Pressure

6.10. To mitigate potential recreational impacts associated with Strata's proposed residential development and potential pressure placed upon the Humber Estuary, a financial contribution will be secured through a Section 106 agreement. The Council are yet to determine the exact figure to be paid by the developer through their local plan, but it is expected to be in line with that of East Riding of Yorkshire Council's price per dwelling[30] (of which currently stands at £320 per dwelling). This financial contribution will be invested by

[30] [Online] Available at: https://www.eastriding.gov.uk/planning-permission-and-building-control/planning-policy-and-the-local-plan/humber-strategic-access-management-and-mitigation-strategy/ [Accessed 30/07/2025]

the Council towards a strategically led mitigation strategy (also known as a Strategic Access Management and Monitoring Strategy (SAMMs) which will provide a long-term framework for managing visitor pressure and protecting the integrity of the designated site.

6.11. Strata will also provide each homeowner with an information pack on the sensitivities of the Humber Estuary, of which will set out how to enjoy the area sustainably (i.e. countryside code) and directing residents towards walking routes which would draw people away from the most sensitive areas of the estuary. It is acknowledged that homeowner information packs are a widespread and common mitigation option utilised to help mitigate recreational pressure and encourage the sustainable use of the estuary.

The Proposed Development In-Combination

6.12. The LSEs identified in **Section 5** in relation to recreational pressure are considered to be fully mitigated through the implementation of a financial contribution, secured via a Section 106 agreement.

6.13. The proposed development Site will be bisected by the Barton-upon-Humber Link Road scheme. The Link Road (planning consent granted on 6 September 2024) has been subject to its own HRA, which concluded that no likely significant effects would occur either alone or in combination with other plans or projects. Natural England agreed with this position.

6.14. Non-breeding bird surveys have been undertaken for both the Link Road and Strata's residential development upon the Site itself and recorded no functional link between the Site and NSNS. These surveys provide a robust evidence base for assessing in-combination effects.

6.15. The survey methodologies and timeframes used by North Lincolnshire Council for their bird surveys and Strata for their bird surveys have been consistent thus ensuring that cumulative impacts are appropriately considered. The Link Road HRA concluded that the project is unlikely to cause significant in-combination effects with this Site or other nearby allocations, including those identified in the North Lincolnshire Local Plan.

6.16. Based on the outcomes of the combined survey effort and the mitigation measures proposed, it is concluded that the proposed development will not result in adverse effects on the integrity of any NSNSs, either alone or in combination with other plans or projects.

Stage 2 Conclusion

6.17. It is concluded that, given the implementation of suitable mitigation (homeowner packs and a financial contribution to mitigate recreational pressure), as identified above and to be controlled via suitably worded planning conditions and/or Section 106 agreement, no adverse effect on integrity of any NSNSs will occur as a result of the proposed development. Therefore, assessment at further HRA stages (Stages 3 and beyond) is not considered necessary.

6.18. It is considered that the information provided within this section provides sufficient information to enable North Lincolnshire Council (the competent authority) to complete HRA Assessment of the proposed development.

Section 7: Conclusions

7.1. One National Site Network Site was considered for potential LSEs at the screening stage (**Section 5**); this being the Humber Estuary.

7.2. Potential LSEs were identified upon this NSNS in the absence of mitigation in relation to recreational pressure.

7.3. Extensive survey data for non-breeding birds across 51 surveys over the years 2022-2025 has demonstrated that the Site is not critical to, or necessary for, the ecological or behavioural functions of any qualifying features of the Humber Estuary SAC/SPA/Ramsar site. The Site is not frequently used by SPA species.

7.4. Additionally, given the distance of the Site from the Humber Estuary SAC/SPA/Ramsar and the implementation of a Construction Management Plan and Construction Environmental Management Plan no impacts are anticipated during the construction phase.

7.5. Recreational pressure will be mitigated against through a financial contribution, secured via a Section 106 agreement, to the Council's forthcoming SAMMs.

7.6. In light of the above mitigation, it is concluded that no adverse effect on the integrity of any NSNS will occur as a result of the proposed development.

7.7. The information provided in this sHRA report, as well as the other relevant documents referenced throughout, is considered to provide the competent authority with sufficient information to complete an Appropriate Assessment with the assurance that no adverse effects on integrity will occur on NSNSs as a result of the proposed developments and further HRA stages are not required.

Appendix 1: Site Plan

KEY

- Existing boundary hedge - see Arboricultural Report. Hedges to be cut back to create practical garden boundaries
- Existing trees to be retained - see Arboricultural Report.
- Semi mature tree as planted by local authority
- Proposed Extra heavy standard (14-16cm girth) tree
- Proposed heavy standard (12-14cm girth) tree
- Proposed selected standard (10-12cm girth) tree
- Proposed Beech hedging
- Proposed evergreen flowering hedge (Escallonia)
- Proposed native hedge
- Proposed mixed native species shrub planting
- Proposed ornamental shrub planting
- Proposed turf
- Rear gardens
- Amenity grass seeding as planted by local authority
- Species rich flowering grassland
- Wildflower meadow grass seeding
- Wetland wildflower meadow grass seeding
- Proposed mixed bulb planting
- Proposed 1800mm high screen wall (detailed by others)
- Proposed 1800mm high close boarded timber fencing (detailed by others)
- Proposed 1200mm high close boarded timber fencing (detailed by others)
- Proposed 450mm high timber trip rail (detailed by others)
- Proposed mown path of species rich meadow grassland
- Site boundary line

NOTES

PROTECTION OF EXISTING VEGETATION

Existing vegetation to be retained on site shall be protected where necessary during works by a tree protective barrier, secured to a scaffold tubing framework with fluorescent tape to the top rail. Protective fencing shall be erected on the canopy drip line wherever possible. Laminated, waterproof A4 signs shall be fixed to the fence posts at 10m intervals bearing the words 'PROTECTED TREE ZONE - NO STORAGE OR OPERATIONS WITHIN FENCED AREA'.

Tracking of machinery, storage of chemicals and building materials shall not be permitted within the protected area. Leaks or spills should be removed immediately and the contaminated soil replaced. No bonfires shall be lit within 5m of the canopy spread. Any excavation work beneath the canopy spread shall be carried out by hand.

All works affecting trees within the development shall be subject to BS 5837:2012.

TREE PLANTING

Tree planting to the front gardens of selected plots will break up the hard lines of the buildings and create focal points within the development. The tree species selected will maximise food and nectar sources for birds and invertebrates. Trees will be planted as Select and Heavy Standards to provide a reasonable degree of instant maturity to the development.

Extra heavy standards will be planted throughout the POS areas, at the entrance and along the spine road to create a green structure to the routes through the site.

Foundation design of new buildings shall accommodate proposed tree planting in accordance with NHBC guidelines.

Species to be selected from a typical list including:

Acer campestre (Ac)
Acer platanoides 'Laciniatum' (ApL)
Alnus incana (Ai)
Betula pubescens (Bpu)
Betula utilis var. jacquemontii (Buj)
Carpinus betulus (Cb)
Malus sylvestris (Ms)
Malus tschonoskii (Mt)
Prunus padus (Pp)
Prunus sargentii (Ps)
Prunus subhirtella 'Autumnalis Rosea' (PsAR)
Pyrus calleryana 'Chanticleer' (PcC)
Sorbus aria (Sa)
Sorbus aucuparia (Sau)
Sorbus 'Embley' (SE)
Sorbus 'Joseph Rock' (SJR)
Tilia x euchlora (Te)
Tilia cordata 'Green Spire' (TcGS)

SHRUB PLANTING

A mix of evergreen and deciduous shrubs will be planted in selected front gardens to soften the development and to provide a valuable food source for birds and invertebrates. A mix of medium/low shrubs will be planted to shrub beds with medium/large varieties used for informal hedging.

Species to be selected from: ( ) density/m2

Berberis frikartii 'Amstelveen'(5), Berberis thunbergii 'Atropurpurea Nana'(5), Bergenia cordifolia 'Silberlicht'(6), Ceanothus thrysiflorus repens(4), Chaenomeles superba 'Jet Trail'(4), Cornus alba 'Spaethii'(2), Cornus stolonifera 'Flaviramea'(2), Cytisus 'Allgold'(4), Elaeagnus pungens 'Maculata'(3), Escallonia 'Apple Blossom'(4), Euonymus fortunei 'Emerald Gaiety'(5), Festuca ssp(6), Geranium 'Johnson's Blue'(4), Hebe albicans 'Red Edge'(4), Hebe 'Autumn Glory'(4), Hypericum x moserianum(4), Juniperus sabina 'Tamariscifolia' (3), Lavandula 'Hidcote'(6), Lonicera 'Maygreen'(4), Lonicera 'Silver Beauty'(4), Nepeta faasenniii(4), Perovskia 'Blue Spire'(6), Phormium var, Potentilla 'Red Ace'(5), Prunus laurocerasus 'Zabeliana'(3), Pyracantha 'Orange Charmer'(3), Rubus x 'Betty Ashburner'(4), Spiraea 'Gold Flame'(4), Spiraea 'Shirobana'(4), Viburnum tinus 'Eve Price'(3)

HEDGE PLANTING

Hedges will be planted in selected plots to strengthen boundaries and improve screening. Ornamental hedge planting will consist of Beech, Escallonia & Laurel, which will contribute to all year round colour and texture. Beech hedges are to be planted as a double staggered row of 60-80cm high hedging plants. Hedges to plot frontages are to be maintained at a height of no more than 900mm to aid visibility from driveways.

NATIVE HEDGE PLANTING

Native hedgerows will be planted within the POS areas and where the existing hedgerow needs gapping up to improve wildlife foraging opportunities and extend existing hedgerow. Native hedge planting will consist of Blackthorn, Hawthorn, Dog rose, Guelder rose, Holly and Hazel. Hedges are to be planted as a single row of 60-80cm high hedging plants.

PUBLIC OPEN SPACE

The open space area at the front of the site contains elements that form part of the drainage strategy. Whilst this limits tree planting extensive wildflower meadow areas will be planted to enhance biodiversity and create an attractive entrance to the site. Where a neater result is required adjacent to footpaths the grass seed will be a species rich flowering lawn mix which can be mown more regularly whilst still producing flowers.

Rev.F: Drawing updated to revised Site Layout 14.04.25, POS area redesigned to accommodate drainage scheme (MBN) July 2025
Rev.E: Drawing amended to revised Planning layout drawing, Rev P (MBN) May 2025
Rev.D: Drawing amended to revised Planning layout drawing, Rev H (CS) August 2023
Rev.C: Amends to POS planting(SF) February 2023
Rev.B: Minor amends to client requirements (SF) February 2023
Rev.A: Tree survey added (SF) February 2023

Sue Farmer BA MALD MLI
Landscape Architect

fda landscape

Westleigh Hall
Wakefield Road
Denby Dale
Huddersfield HD8 8QJ
telephone 01484 861611
fax 01484 861616
isdn 01484 866900
email info@fdalandscape.co.uk
www.fdalandscape.co.uk

client: Strata Homes

project: Residential Development

BARTON ROAD,
BURTON UPON HUMBER, DONCASTER

drawing title: LANDSCAPE MASTERPLAN

scale	date	drwn by	drawing no
1:500 @A0	Jan 23	MBN/SF	R/2674/1F

Appendix 2: EcIA (Ref: 22077/EcIA/6)

Whitcher Wildlife Ltd.
Ecological Consultants.

BARROW ROAD, BARTON-UPON-HUMBER.

OS REF: TA 04218 21589.

ECOLOGICAL IMPACT ASSESSMENT.

Ref No: **220776/EcIA/6.**

Date: **28th July 2025**

Cliff Edge, Cliff Road, Darfield, Barnsley, S73 9HR.
Tel. 01226 753271. Fax. 01226 270993.
info@whitcher-wildlife.co.uk www.whitcher-wildlife.co.uk
Company No. 4401613.

TABLE OF CONTENTS.

1. INTRODUCTION.

1.1. Strata are applying for planning consent to build 196 new residential dwellings on an area of arable land to the south of Barrow Road, to the east of the town of Barton-upon-Humber.

1.2. Whitcher Wildlife Ltd have been commissioned to carry out a Preliminary Ecological Appraisal and bird surveys for the site to establish whether there are any ecological matters that may affect the proposed development.

1.3. All surveys have now been completed and landscaping plans have been finalised, which allows for the conversion of the Preliminary Ecological Appraisal into an Ecological Impact Assessment.

1.4. This document is designed to state the impact of the development on both habitats and wildlife.

1.5. Appendices I to II of this report provide additional information on specific species and are designed to assist the reader in understanding the contents of this report.

****

2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. The survey area was walked where access was agreed and public rights of way were used where no access was agreed. All habitats within and immediately around the survey area were documented and the dominant species within that habitat listed in line with the JNCC Handbook for Phase 1 Habitat surveys.

2.3. The survey area and immediate surrounding area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs in line with Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*. Mammal Society: -

* Badger setts.
* Badger latrines or dung pits.
* Badger snuffle holes and evidence of foraging.
* Badger paths.
* Badger prints in areas of soft mud.
* Badger hairs caught on fencing.

2.4. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 100m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Dean M, Strachen R, Gow D and Andres R (2016). *The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series).* Eds Fiona Mathews and Paul Chanin. The mammal Society, London: -

* Water vole burrows.
* Water vole faeces and latrines.
* Water vole feeding stations.
* Water vole runs.
* Water vole prints in areas of soft mud.
* Water vole lawns.
* Predator field signs.

2.5. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs in line with the P Chanin (2003). *Monitoring the Otter* and *Conserving Natura 2000 Rivers: Monitoring Series No10 Guidelines: -*

* Otter prints in soft mud.
* Otter spraints.
* Otter Holts.

2.6. The survey area was searched for watercourses and waterbodies. Where found, and where safe to enter the water, all were thoroughly searched for the presence of crayfish, for approximately 50m in each direction of the site, by searching under rocks and logs. Where stated, crayfish traps were also deployed into the watercourse. All survey work was carried out in accordance with the *Conserving Natural 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish*.

2.7. The survey area was searched for trees and structures and where found these were checked for potential bat roosting sites in line with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)* by looking for the following signs: -

* Holes, cracks or crevices.
* Bat Droppings.

2.8. The land immediately adjacent to the survey area was assessed for bat roosting potential and bat foraging potential. Connective routes and flight lines were also assessed whilst on site and using maps of the area.

2.9. The area within 500m of the survey site was cross referenced to maps to highlight all ponds close to the site. Where possible, all ponds identified were accessed using agreed access or public rights of way to assess the potential for great crested newts (*Triturus cristatus*) to be present.

2.10. The survey area was assessed for the potential for reptiles and suitable reptile habitats. Where applicable the area was also searched for the presence of reptiles.

2.11. Where appropriate, the habitat within and surrounding the survey area was searched for species such as hazel, oak, honeysuckle, bramble and other species which may provide potential habitat for hazel dormice (*Muscardinus avellanarius*). Field signs such as feeding remains and nests were also searched for where possible, in line

with P Bright, P Morris and T Mitchell-Jones *The Dormouse Conservation Handbook 2nd Edition*.

2.12. Where appropriate, the area within and surrounding the survey area was assessed for its potential to house habitat for red squirrels. Field signs of red squirrels were searched for at least every 50m, looking for any dreys, feeding signs or sightings of red squirrels.

2.13. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.14. This document is prepared in line with The National Planning Policy Framework (NPPF). This sets out the government policy on biodiversity and nature conservation and places a duty on Planning Authorities to give material consideration to the effect of a development on legally protected species when considering planning applications. The NPPF and the Planning Practice Guidance on "Natural Environment" also promote sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within the development.

2.15. This report is prepared in line with the Natural Environment and Rural Communities (NERC) Act that came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.

2.16. The survey was undertaken by Mitchel Greenhalgh, an ecological consultant with an array of experience in conducting surveys on a variety of flora and fauna in a professional capacity. Mitchel holds a level two Natural England survey licence in respect of both bats and great crested newts, a NatureScot licence in respect of bats and Natural England class licences for various invertebrates. He is also working towards gaining further survey licences. He has attended courses run by CIEEM and the FSC and also holds a BSc in environmental science attained from the University of Leeds. He is an associate member of CIEEM and he is therefore committed to continuous professional development.

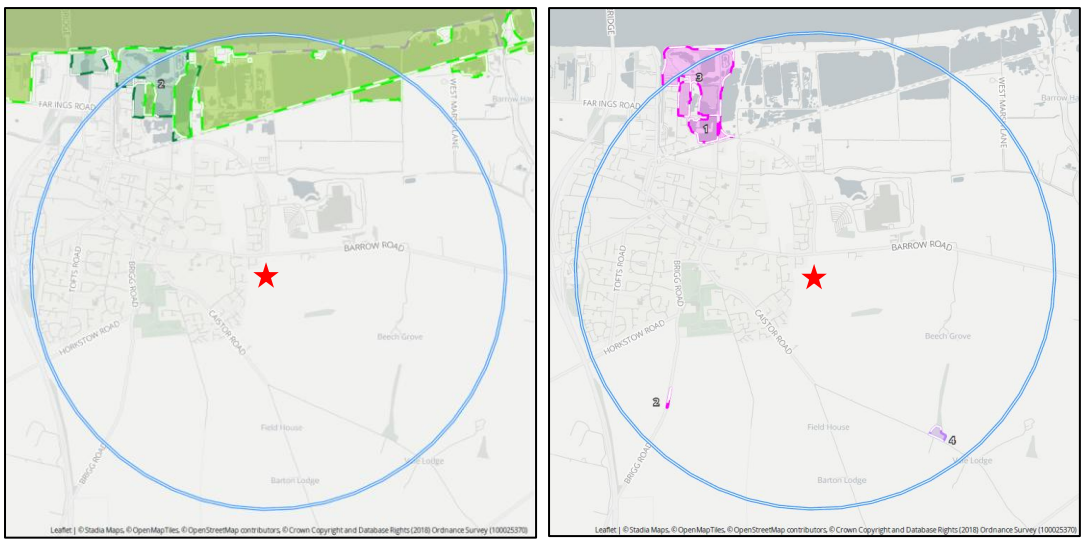
****

3. BASELINE ECOLOGY.

3.1. Data Search Results.

3.1.1. A request was submitted to the Greater Lincolnshire Nature Partnership (GLNP) to identify the presence of any protected species or designated sites within a 2km radius of the site.

3.1.2. GLNP provided the below maps, showing the proximity of both statutory and non-statutory sites to the survey area. None of these sites are relevant to the survey area and most refer to the Humber Estuary a Special Protection Area (SPA), Special Area of Conservation (SAC), Ramsar site and Site of Special Scientific Interest (SSSI); a Shadow HRA is provided separated by the applicant and considers the impact of the scheme on the Humber Estuary. Statutory sites are shown in the map to the left, and non-statutory sites are shown in the map to the right.



3.1.3. GLNP provided records of common bat species. The closest of these is of a noctule bat, located approximately 250m west, although most grid references provided are unspecific.

3.1.4. GLNP provided records of water vole, otter, badger. However, none of these records are relevant to the survey area.

3.1.5. GLNP provided thousands of records of bird species within a 2km radius. However, the vast majority of these are from a small number of sites, such as the

Humber Estuary, Barton Pits or Barrow Haven Reedbed. None are located directly within the site and the associated survey area.

3.1.6. GLNP provided no other records of protected species within a 2km radius of the survey area.

3.1.7. The data search cannot be made public but is available to the client upon request.

3.2. The Survey Area.

The survey area comprises the section of land including, and mostly to the south of Barrow Road / A1077 shown in the aerial image below.

3.3. Description of Habitats.

Appendix III of this report contain annotated maps marked up with the varying habitats that are cross referenced to target notes in Appendix IV of this report. The habitats on and adjacent to the site are: -

- Arable Land
- Species-poor, Intact Hedgerow
- Species-poor, Defunct Hedgerow
- Ornamental Hedgerow
- Improved Grassland
- Tall Ruderals
- Fence
- Bare Ground

3.3.1. Arable Land.

3.3.1.1. The site comprises almost entirely arable land, which at the time of the survey had a wheat crop.

3.3.1.2. There is no condition assessment criteria for arable land.

3.3.2. Species-poor, Intact Hedgerow.

3.3.2.1. There are a number of hedgerows bordering the site. These are all listed and described individually below and are mapped and labelled in an anti-clockwise order in the map shown in appendix III.

3.3.2.2. **Hedgerow A (T3). –** Hedgerow A runs the western border of the site and backs on to the rear gardens of the properties of Danson Close. This hedge comprises predominantly hawthorn (*Crataegus monogyna*) along with elder (*Sambucus nigra*),

bramble (*Rubus fruticosus*) and cherry laurel (*Prunus laurocerasus*). One ash (*Fraxinus excelsior*) tree is also present within the hedgerow and Virginia creeper (*Parthenocissus quinquefolia*) is overgrowing from a neighbouring garden.

3.3.2.3. **Hedgerow B (T4). –** Hedgerow B is the longest length of hedge on site and extends most of the southern boundary. It comprises almost entirely hawthorn (*Crataegus monogyna*) along with small amounts of dog rose (*Rosa canina*).

3.3.2.4. **Hedgerow C (T5).** – Hedgerow C comprises the southern half of the eastern boundary. The hedgerow is mainly hawthorn (*Crataegus monogyna*) with some elder (*Sambucus nigra*).

3.3.2.5. **Hedgerow G (T9)**. Hedgerow G is a small length of beech (*Fagus sylvatica*) hedge between the field and a property on Glebe Way.

3.3.2.6. The habitat condition for these hedgerows is shown below. All four hedgerows score 'poor'.

Attributes and functional groupings (A, B, C, D & E)	**Criteria (the minimum requirements for 'favourable condition'**	**Pass/Fail**			
		A	**B**	**C**	**G**
A1. Height	>1.5 m average along length	**P**	**P**	**F**	**P**

A2. Width	>1.5 m average along length	**F**	**F**	**F**	**F**
B1. Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	**P**	**P**	**P**	**P**
B2. Gap - hedge canopy continuity	· Gaps make up <10% of total length and · No canopy gaps >5 m	**P**	**F**	**P**	**P**
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · measured from outer edge of hedgerow, and · is present on one side of the hedge (at least)	**F**	**F**	**F**	**F**
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	**F**	**F**	**F**	**F**
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	**P**	**P**	**P**	**P**
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	**F**	**F**	**F**	**F**
Condition		**Poor**	**Poor**	**Poor**	**Poor**

3.3.3. Species-poor, Defunct Hedgerow.

3.3.3.1. **Hedgerow D (T6).** Hedgerow D is classed as the northern half of the eastern hedgerow. This section is consistently gappy and intensively managed.

3.3.3.2. **Hedgerow E (T7).** This hedgerow makes up the northern boundary of the site. It comprises of newly planted hawthorn (*Crataegus monogyna*) that are not yet of a density to class the hedgerow as intact.

3.3.3.3. The habitat condition for these hedgerows is shown below. Both hedgerows score 'poor'.

Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition'.	Pass/Fail	
		D	E

A1. Height	>1.5 m average along length	**F**	**F**
A2. Width	>1.5 m average along length	**F**	**F**
B1. Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	**F**	**F**
B2. Gap - hedge canopy continuity	· Gaps make up <10% of total length and · No canopy gaps >5 m	**F**	**F**
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · measured from outer edge of hedgerow, and · is present on one side of the hedge (at least)	**P**	**F**
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	**F**	**F**
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	**P**	**P**
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	**F**	**F**
Condition		**Poor**	**Poor**

3.3.4. Ornamental Hedgerow.

3.3.4.1. **Hedgerow F (T8)**. At the north-west corner of the site, close to Barrow Road, there is a very small length of Leyland Cypress hedgerow. This is classified as a non-native, ornamental hedgerow.

3.3.4.2. No condition assessment is required for ornamental hedgerow as they automatically score as 'poor'.

3.3.5. Improved Grassland.

3.3.5.1. **IG1.** Between the site borders and the crop, there is a strip of grassland averaging approximately 1m in width. A species list was gathered during the initial survey, but by the September bird survey, this had all been cut. Species within this habitat include false oat grass (*Arrhenatherum elatius*), perennial rye grass (*Lolium perenne*), common oat (*Avena sativa*), barren brome (*Bromus sterilis*), nettle (*Urtica dioica*), cow parsley (*Anthriscus sylvestris*), creeping thistle (*Cirsium vulgare*), curled dock (*Rumex crispus*), hogweed (*Heracleum sphondylium*) and field bindweed (*Convolvulus arvensis*).

3.3.5.2. **IG2.** To the north of the site, there are areas of grassland which form the grass verges along the roadway. These comprise predominantly perennial rye grass (*Lolium perenne*) and other common species, but the sward is far too short to survey properly.

3.3.5.3. The condition assessment for this habitat is shown below. Both IG1 and IG2 pass three of the seven criteria and are therefore assessed as being 'poor' condition.

Grassland – low value (modified grassland)

	Description of criteria.	**Pass / Fail**	
1	There must be 6-8 species per m^2. Note - if a grassland has 9 or more species per m^2 it should be classified as a moderate distinctiveness grassland habitat type. **NB - this criterion is non-negotiable for achieving good condition.**	**F**	**F**
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which	**F**	**F**

	provide opportunities for insects, birds and small mammals to live and breed.		
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	**P**	**P**
4	Physical damage evident in less than 5% of total grassland area, such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities.	**F**	**F**
5	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	**F**	**F**
6	Cover of bracken less than 20%.	**P**	**P**
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and undesirable species[1] make up less than 5% of ground cover.	**P**	**P**
Condition		**Poor**	**Poor**

3.3.6. Tall Ruderals.

3.3.6.1. Between the southern boundary hedgerow and the south-west corner of the site, there is a strip of tall ruderals. Species here inlcude false oat grass (*Arrhenatherum elatius*), nettle (*Urtica dioica*) and hogweed (*Heracleum sphondylium*).

3.3.6.2. The condition assessment for this habitat is shown below. The habitat passes one of the three criteria and is therefore assessed as being ‘poor’ condition.

Sparsely vegetated land - Ruderal/ephemeral

	Description of criteria.	**Pass / Fail.**
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	**Fail**
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife).	**Fail**
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	**Pass**
Condition		**Poor**

3.3.7. Fence.

Fences are frequently present throughout the site, typically forming the boundaries between the survey area and residential gardens, although they often cannot be seen for the hedgerows.

3.3.8. Bare Ground.

Barrow Road and its associated pavements are present to the northern end of the survey area. These areas are all classified as bare ground.

3.4. Description of Fauna.

3.4.1. No badger setts or their field signs were identified within the survey area and no records of badger are present close to the site.

3.4.2. There is no watercourse within or close to the site to provide suitable habitat for otter, water vole or white-clawed crayfish.

3.4.3. There are no structures within the survey area to provide potential features for roosting bats.

3.4.4. There are no trees within the survey area to provide potential features for roosting bats.

3.4.5. The habitat within the survey offers poor suitability for foraging and commuting bats due to its extensive arable nature. However, the hedgerows are likely to be used to some extent for commuting and foraging.

3.4.6. There are no ponds within a 500m radius of the survey area to provide suitable breeding habitat for great crested newts and other amphibians. Furthermore, there are no records of great crested newts close to the site.

3.4.7. *Birds.*

3.4.7.1. The habitat on site offers moderate habitat for nesting birds within the nesting season, which extends from March to August inclusive. This is due to the site's potential for both arable nesting birds along with smaller hedge nesting species around the perimeter. The site is situated within 2km of the Humber Estuary and therefore also has potential for use by migratory birds.

3.4.7.2. More details regarding bird surveys are listed in section 3.5 of this report.

3.4.8. The habitat offers limited suitable habitat for reptiles due to its arable nature and lack of water sources. However, suitable grassland habitat is present immediately east of the site which could be used by reptiles.

3.4.9. The survey area lies outside of the known natural home range of both red squirrel and hazel dormouse.

3.4.10. Virginia Creeper (*Parthenocissus quinquefolia*), which is an invasive, non-native plant species listed on schedule 9 of the Wildlife and Countryside Act (1981) is present within the western hedgerow on the site.

3.5. Bird Surveys.

3.5.1. As the site lies approximately 1.8km south of the Humber Estuary RAMSAR site, bird surveys were undertaken to understand how the land is used by various species.

3.5.2. Surveys were initially undertaken between August and October in 2022, with subsequent wintering bird surveys between November 2023 and March 2024, and October 2024 and March 2025. The findings of these surveys have been appended to this report.

3.5.3. The site has potential to provide suitable habitat for arable and hedge nesting species.

3.5.4. The results from the bird surveys have been appended to this report and a shadow HRA is being prepared separately to this EcIA.

****

4. IMPACT ASSESSMENT, MITIGATION AND RESIDUAL EFFECTS.

4.1. Designated Sites.

4.1.1. Assessment.

The data search results show that the survey area lies approximately 1.8km south of the Humber Estuary. A Shadow HRA is therefore provided separately by the applicant and considers the impact of the scheme on the integrity of the Humber Estuary.

4.1.2. Mitigation.

A Shadow HRA is provided separately by the applicant in relation to this matter.

4.1.3. Residual Effect.

There will be **no negative impacts** on any of the designated sites in the area at a local level.

4.2. Habitats.

4.2.1. Assessment.

4.2.1.1. The habitats on site are of low value, with the exception of the hedgerows. The vast majority of the site is arable with only a small grassland margin, which does not qualify as an arable margin priority habitat as it is not managed in the interest of wildlife. The only remaining habitat is a small strip of ruderals.

4.2.1.2. The majority of the on-site habitat is to be lost to facilitate the development. The area will be mostly replaced by residential housing and associated vegetated gardens, along with some areas of scrub planting, both native and ornamental, and small areas of grassland.

4.2.1.3. Biodiversity calculations were carried out using the Biodiversity Metric 3.1, which was the metric in use at the time of site survey. The baseline on the site was

calculated at 12.39 Habitat Biodiversity Units and 1.55 Hedgerow Biodiversity Units as shown in the tables below.

Habitat Type	Area (ha)	Distinctiveness	Condition Assessment	Biodiversity Units.
Cereal Crops	5.6755	Low	N/A	11.35
Modified Grassland	0.2908	Low	Poor	0.58
Modified Grassland	0.1993	Low	Poor	0.4
Ruderal/Ephemeral	0.0273	Low	Poor	0.05
Developed Land	0.3684	V.Low	N/A	0
Total	6.56			12.39

*The metric only shows biodiversity units to two decimal places and will round up or down accordingly, which is why the above can total to 12.39 as opposed to 12.38.

Hedgerow Type	Length (km)	Distinctiveness	Condition Assessment	Biodiversity Units.
Native Hedgerow	0.774	Low	Poor	1.55
Total	0.774			1.55

4.2.2. Mitigation.

4.2.2.1. Mitigation will be provided by the creation of new areas of grassland and scrub, predominantly throughout the northern area of the site. A variety of species-rich and amenity grasslands will be seeded around the development and a section of native scrub will be planted too. Eighty-three new trees are also included within the development and will be scattered throughout to increase wildlife connectivity. These created habitats will deliver a score of 9.55 as shown in the table below.

Habitat Type	Area (ha)	Distinctiveness	Condition Assessment	Biodiversity Units.
Developed Land; Sealed Surface (Created)	3.3655	Low	N/A	0.00
Developed Land; Sealed Surface (Retained)	0.3146	Low	N/A	0.00
Vegetated Garden	1.8793	Low	N/A	3.63
Mixed Scrub	0.0281	Medium	Poor	0.11

Modified Grassland (created)	0.0916	Low	Poor	0.18
Modified Grassland (retained)	0.1151	Low	Poor	0.23
Other Neutral Grassland	0.7651	Medium	Moderate	5.12
Urban Trees*	0.1017	Medium	Poor	0.28
Total	6.56			9.55

*Urban trees not included in area calculation.

4.2.2.2. The majority of the hedgerows on site are to be retained, with the exception of two sections where the new road is to be installed. However, these sections will be mitigated for by the creation of 81m of new native hedgerow. The linear habitats will deliver a score of 1.15 as shown in the table below.

Hedgerow Type	Length (km)	Distinctiveness	Condition Assessment	Biodiversity Units.
Native Hedgerow (Retained)	0.498	Low	Poor	1.00
Native Hedgerow (Created)	0.081	Low	Poor	0.16
Total	0.589			1.15

*The metric only shows biodiversity units to two decimal places and will round up or down accordingly, which is why the above can total to 1.15 as opposed to 0.16.

4.2.3. Residual Effect.

4.2.3.1. Overall, there will be a residual net loss of 2.84 (-22.9%) habitat units and there will be a residual net loss of 0.4 (25.56%) linear/hedgerow units. This is assessed to have a **moderate negative residual impact** on the biodiversity value at a site level.

4.3. Species – Bats.

4.3.1. Assessment.

The site offers no suitability for roosting bats due to its current lack of trees or structures. The extensive arable nature of the site also makes for poor commuting and foraging habitat, although the hedgerows do provide wildlife corridors which may be used by small numbers of bats.

4.3.2. Mitigation.

4.3.2.1. All hedgerows which could be of value to bats are to be retained, with the only substantial sections to be removed being those that are already currently roadside, immature and well illuminated, making them unlikely to be used by bats. Furthermore, an additional 81m of native species hedgerow is to be planted around the site, increasing the potential of the site for use by foraging and commuting bats.

4.3.2.2. Any new lighting to be implemented around the perimeters of the site will be in the form of a sensitive lighting scheme, comprising downward directional lighting that does not directly illuminate any of the external hedgerows around the site. This will also benefit other species who use the hedgerows around the site.

4.3.3. Residual Effect.

With the above mitigation in place there will be **no negative impact** on either roosting bats or foraging and commuting bats.

4.4. Species – Birds.

4.4.1. Assessment.

4.4.1.1. The survey area is entirely arable but does offer some suitable habitat for arable ground nesting birds, although this is hampered by its close proximity to the main road.

4.4.1.2. Due to the proximity of the site to the Humber Estuary RAMSAR site, the site has been considered for its potential to host migratory birds. Bird surveys have therefore been undertaken by Whitcher Wildlife between August-October 2022, November 2023-March 2024 and October 2024-March 2025. The results of these surveys are found in Appendix VII, VIII and IX of this report.

4.4.2. Mitigation.

4.4.2.1. Where possible, the works will be carried out outside the nesting bird season. If it is necessary to undertake works within the nesting season, they will be immediately preceded by a nesting bird survey and in the event that any active bird nests are found, they along with a suitable buffer around them will be left undisturbed until the young have fledged.

4.4.2.2. Any new lighting to be implemented around the perimeters of the site will be in the form of a sensitive lighting scheme, comprising downward directional lighting that does not directly illuminate any of the external arable fields around the site. This will allow any birds nesting in surrounding fields to remain undisturbed.

4.4.2.3. All hedgerows which may be used by hedge nesting birds will be retained. Along with this, 81m of new hedgerow will be planted, and 281m^2 of native scrub will be planted within the site. This will offer new opportunities for scrub and hedge nesting birds within the site.

4.4.2.4 A Shadow HRA is provided separately by the applicant and considers the impact of the scheme on the integrity of the Humber Estuary and associated species.

4.4.3. Residual Effect.

By implementing the above mitigation measures and ensuring no impact on neighbouring arable fields, there will be **no negative impact** on birds.

4.5. Species – Invasive Plants.

4.5.1. Assessment.

One Virginia creeper plant was identified within the survey area, overgrowing the hedgerow at the south-west of the site. This is an invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981).

4.5.2. Mitigation.

Prior to any works commencing within a 10m radius of the plant, it will be cut back as far as is reasonably possible. The cuttings will then be collected and then disposed of in a biosecure manner.

4.5.3. Residual Effect.

With the above mitigation in place, the works will have a **positive residual impact** on invasive species.

5. COMPENSATION AND ENHANCEMENT MEASURES.

5.1. Biodiversity enhancements will be provided within the development in line with the requirements of the NPPF. These are detailed within the accompanying Biodiversity Enhancement Management Plan

****

Prepared by:	
Mitchel Greenhalgh. BSc, ACIEEM.	Date: 28th July 2025.

Checked by:	
Ruth Georgiou. BSc, MCIEEM.	Date: 28th July 2025

6. REFERENCES.

Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Preliminary Ecological Appraisal, Second Edition.*** CIEEM, Hampshire.

Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Ecological Report Writing, Second Edition.*** CIEEM, Hampshire.

1981. ***Wildlife and Countryside Act.*** *http://www.legislation.gov.uk/ukpga/1981/69* (accessed 18/02/16)

2000. ***Countryside and Rights of Way Act.*** *http://www.legislation.gov.uk/ukpga/2000/37/contents.*

2017. ***The Conservation of Habitats and Species Regulations.*** *http://www.legislation.gov.uk/uksi/2010/490/contents/made.*

2012. ***National Planning Policy Statement.*** *https://www.gov.uk/government/publications/national-planning-policy-framework--2*

Anon. 1995. ***Biodiversity: the UK Steering Group report. Vol 2: Action Plans.*** HMSO, London.

Joint Nature Conservation Committee. 2004 (ed.). ***Handbook for Phase 1 habitat survey: A technique for environmental audit.*** JNCC, Peterborough.

1992. ***Protection of Badgers Act.*** *https://www.legislation.gov.uk/ukpga/1992/51/contents.*

Harris S, Cresswell P and Jefferies D. 1989. ***Surveying Badgers.*** Mammal Society. London.

Dean M, Strachen R, Gow D and Andres R (2016). ***The Water Vole Mitigation Handbook*** (The Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. The mammal Society, London

Chanin P. 2003(a). ***Ecology of the European Otter.*** Conserving Natura 2000, Ecology Series No.10. English Nature, Peterborough.

Chanin P. 2003(b) ***Monitoring the Otter Lutra lutra.*** Conserving Natura 2000 Rivers Monitoring Series No. 10. English Nature, Peterborough.

Peay S. 2003. ***Monitoring the White-Clawed Crayfish Austropotamobius pallipes.*** Conserving Natura 2000 Rivers Monitoring Series No. 1. English Nature, Peterborough.

English Nature. 2001. ***Great Crested Newt Mitigation Guidelines.***

Langton T, Beckett C, Foster J. 2001. ***Great Crested Newt: Conservation Handbook.*** Froglife, Suffolk.

Oldham et al. 2000. ***Great Crested Newt Habitat Suitability Assessment. ARG UK Advice Note 5, May 2010.***

Collins J. (ed.) 2016. ***Bat Surveys for Professional Ecologist: Good Practice Guidelines.*** 3rd ed. The Bat Conservation Trust, London.

English Nature. 2004. ***Bat Mitigation Guidelines.*** English Nature, Peterborough, UK.

BTHK 2018. ***Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals.*** Exeter: Pelagic Publishing.

BOCC4 Eaton et al. 2015. ***Birds of Conservation Concern 4: The Population Status of Bird's in the UK, Channel Islands and Isle of Man.***

Joint Nature Conservation Committee. 2004. ***Common Standards Monitoring Guidance for Birds.*** 2004 ed. JNCC, Peterborough.

Froglife. 1999. ***Froglife Advice Sheet 10: Reptile Survey.*** Froglife, London.

Bright P, Morris P, Mitchell-Jones T. 2006. ***The Dormouse Conservation Handbook*** 2nd edition. English Nature, Peterborough.

Joint Nature Conservation Committee. 2004 (ed.). ***Common Standards Monitoring Guidance for: Reptiles and Amphibians.*** JNCC, Peterborough.

Joint Nature Conservation Committee. 1996. ***UK Strategy for Red Squirrel Conservation.*** JNCC, Peterborough.

Appendix I. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub, but others are ground nesting or prefer man- made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1.-(5) of the Act states that:- If any person intentionally:- disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix II. INVASIVE PLANT SPECIES INFORMATION.

Ecology

The Government has acknowledged the problems that can be caused by non-native invasive species. In 2008 the Government launched "The Invasive Non-Native Species Framework Strategy for Great Britain". The strategy provides a framework for a more co-ordinated approach to invasive species management. It seeks to create a stronger sense of shared responsibility across government, key organisations, land managers and the public.

The Non-Native Species Secretariat has been established to oversee the implementation of the strategy. Details of the secretariat including risk assessments and action plans for some species are available at www.nonnativespecies.org.

In general, there are four basic methods of controlling weeds; mechanical, chemical, natural and environmental.

- ***Mechanical control*** *includes cultivation, hoeing, pulling, cutting, raking, dredging or other methods to uproot or cut weeds.*
  Where this method is used all plant material must be considered "controlled waste" and must be disposed of properly.
- ***Chemical control*** *uses approved herbicides.*
- ***Natural control*** *uses pests and diseases of the target weed to weaken it and prevent it from becoming a nuisance.*
- ***Environmental control*** *works by altering the environment to make it less suitable for weed growth, for example by increasing or decreasing water velocity.*

Surveys

A site will be searched for invasive plant species growing on site, from mature plants to new shoots. A site will also be searched for dead stems indicating that plants that may have seasonally died back are present.

Legislation

Invasive species listed under Schedule 9 are prohibited from release into the wild. Schedule 9, Section 14(2) prohibits 'planting' or 'causing to grow' in the wild of any plant listed in Part 2 of Schedule 9.

The following is a list of all the species of plant listed under Schedule 9 of The Wildlife and Countryside Act 1981.

Common Name	**Scientific Name**	**England & Wales**	**Scotland**
Alexanders, Perfoliate	*Smyrnium perfoliatum*	✓	
Algae, Red	*Grateloupia luxurians*	✓	
Archangel, Variegated Yellow	*Lamiastrum galeobdolon subsp. Argentatum*	✓	
Azalea, Yellow	*Rhododendron luteum*	✓	
Balsam, Himalayan	*Impatiens glandulifera*	✓	
Cotoneaster	*Cotoneaster horizontalis*	✓	
Cotoneaster, Entire Leaved	*Cotoneaster integrifolius*	✓	
Cotoneaster, Himalayan	*Cotoneaster simonsii*	✓	
Cotoneaster, Hollyberry	*Cotoneaster bullatus*	✓	
Cotoneaster, Small Leaved	*Cotoneaster microphyllus*	✓	
Creeper, False Virginia	*Parthenocissus inserta*	✓	
Creeper, Virginia	*Parthenocissus quinquefolia*	✓	
Dewplant, Purple	*Disphyma crassifolium*	✓	
False-acacia	*Robinia pseudoacacia*		✓
Fanwort	*Cabomba caroliniana*	✓	✓
Fern, Water	*Azolla filiculoides*	✓	✓
Fig, Hottentot	*Carpobrotus edulis*	✓	✓
Garlic, Three-Cornered	*Allium triquetrum*	✓	
Hogweed, Giant	*Heracleum mantegazzianum*	✓	✓
Hyacinth, water	*Eichhornia crassipes*	✓	✓
Kelp, Giant	*Macrocystis angustifolia*	✓	✓
Kelp, Giant	*Macrocystis integrifolia*	✓	✓
Kelp, Giant	*Macrocystis laevis*	✓	✓
Kelp, Giant	*Macrocystis pyrifera*	✓	✓
Kelp, Japanese	*Laminaria japonica*	✓	✓
Knotweed, Giant	*Fallopia sachalinensis*	✓	

Knotweed, Hybrid	*Fallopia japonica x Fallopia sachalinensis*	✓	
Knotweed, Japanese	*Fallopia japonica*	✓	
Knotweed, Japanese	*Polygonum cuspidatum*		✓
Leek, Few-flowered	*Allium paradoxum*	✓	✓
Lettuce, water	*Pistia stratiotes*	✓	✓
Montbretia	*Crocosmia x crocosmiiflora*	✓	
Parrot's-feather	*Myriophyllum aquaticum*	✓	
Pennywort, Floating	*Hydrocotyle ranunculoides*	✓	
Potato, Duck	*Sagittaria latifolia*	✓	
Primrose, Floating Water	*Ludwigia peploides*	✓	
Primrose, Water	*Ludwigia grandiflora*	✓	
Rhododendron	*Rhododendron ponticum*	✓	
Rhubarb, Giant	*Gunnera tinctorial*	✓	
Rose, Japanese	*Rosa rugosa*	✓	
Salvinia, Giant	*Salvinia molesta*	✓	✓
Seafingers, Green	*Codium fragile*	✓	
Seafingers, Green	*Codium fragile tomentosoides*		✓
Seaweed, Californian Red	*Pikea californica*	✓	✓
Seaweed, Hooked Asparagus	*Asparagopsis armata*	✓	✓
Seaweed, Japanese	*Sargassum muticum*	✓	✓
Seaweeds, Laver (except native species)	*Porphyra sp. except -* *P. amethystea* *P. leucosticta* *P. linearis* *P. miniata* *P. purpurea* *P. umbilicalis*	✓	✓
Shallon	*Gaultheria shallon*		✓
Stonecrop, Australian swamp	*Crassula helmsii*	✓	✓
Wakame	*Undaria pinnatifida*	✓	✓
Waterweed, Curly	*Lagarosiphon major*	✓	✓
Waterweeds	*All species of the genus Elodea*	✓	

Appendix III. ANNOTATED MAP OF THE SURVEY AREA - BASELINE

Site: Barrow Road / Baseline

Reference: 220776

Date: 01.09.2023

Produced by: Mitchel Greenhalgh

Appendix IV. TARGET NOTES.

T1. Barrow Road.

T2. Location of Virginia creeper.

T3. Hedgerow A.

T4. Hedgerow B.

T5. Hedgerow C.

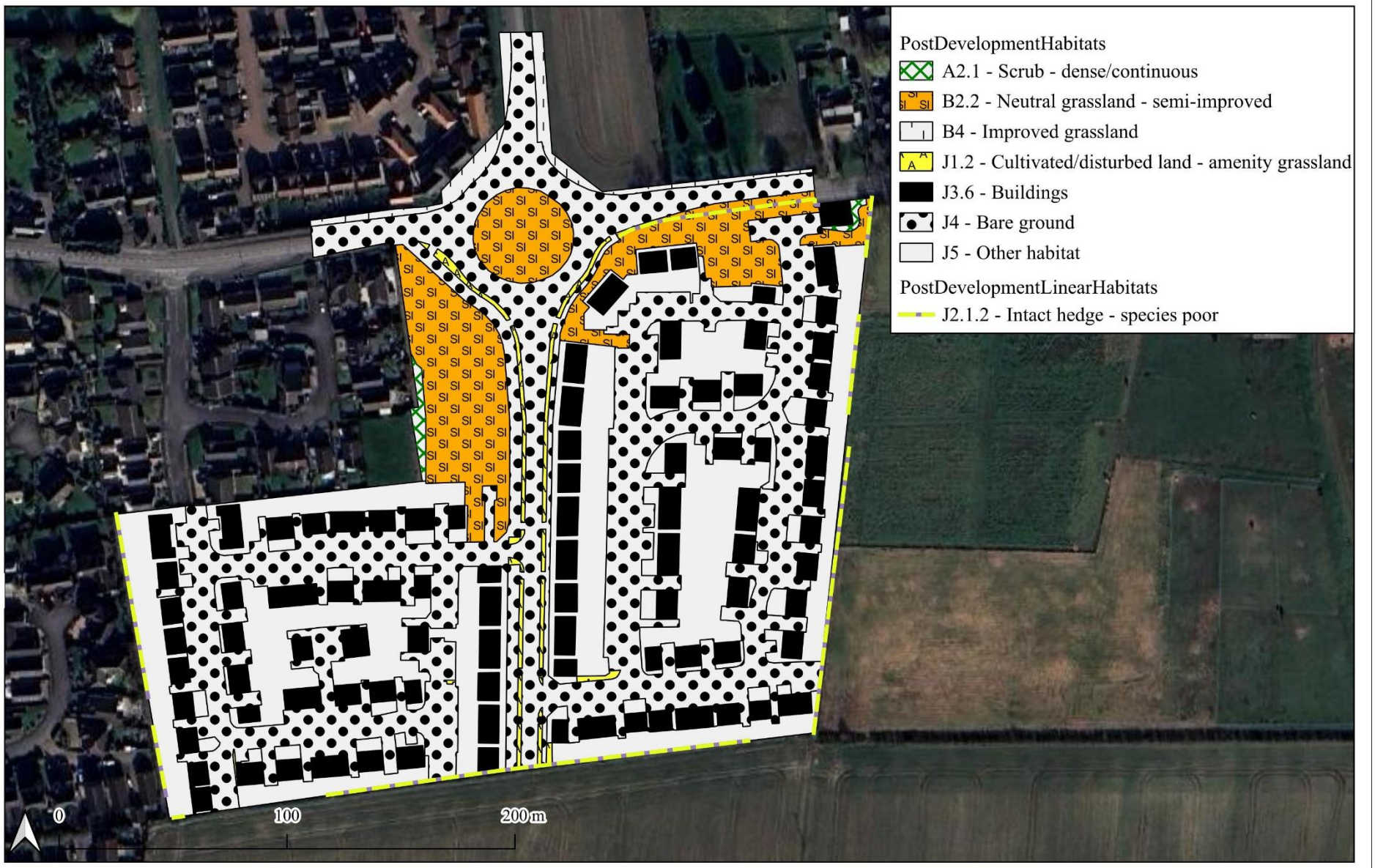
T6. Hedgerow D.

T7. Hedgerow E.

T8. Hedgerow F.

T9. Hedgerow G.

Appendix V. ANNOTATED MAP OF THE SURVEY AREA. – POST DEVELOPMENT.



Site: Barrow Road / Post

Reference: 220776

Date: 17.07.2025

Produced by: Samuel Bentley

Appendix VI. LANDSCAPING MASTERPLAN.

Appendix VII. BIRD SURVEY RESULTS 2022.

3.5.4.1. Survey One.

3.5.4.1.1. The first survey was undertaken alongside the preliminary ecological appraisal on August 1st, 2022, between the hours of 07:00 and 08:00 with a temperature of 18℃ with a light breeze.

3.5.4.1.2. Birds seen on site were wood pigeon (30), carrion crow (3), linnet (1), house sparrow (2).

3.5.4.1.3. Birds seen flying over site were kestrel (1), magpie (2), wood pigeon (18).

3.5.4.1.4. Further house sparrows could be heard singing from hedgerows, along with a brief call from a greenfinch.

3.5.4.1.5. This survey was largely quiet with bird activity at a minimum. The weather had been warm and dry for a prolonged period of time which likely reduced activity.

3.5.4.1.6. The site contained a wheat crop at the time, reducing what could be seen on the ground.

3.5.4.2. Survey Two.

3.5.4.2.1. The second survey was undertaken on September 9th, 2022, between the hours of 06:30 and 07:30 with a temperature of 15℃ with a light breeze and mist in the air.

3.5.4.2.2. Birds seen on site were wood pigeon (60), carrion crow (1), collared dove (2), house sparrow (20), starling (100+), magpie (1).

3.5.4.2.3. Birds seen flying over site were wood pigeon (30), black headed gull (3), herring gull (1), skylark (1).

3.5.4.2.4. Calls heard on site were predominantly from house sparrows within hedgerows, with one curlew heard calling to the east.

3.5.4.2.5. This survey was still largely quiet with bird activity low, but higher than the first survey, likely due to better recent weather conditions. The only birds using the site in large

numbers are wood pigeon and starling, although the starlings were mainly perching on the telephone wires.

3.5.4.2.6. The site had also been cropped, which meant ground visibility was much higher than the first survey.

3.5.4.3. Survey Three.

3.5.4.3.1. The third survey was undertaken on October 24th, 2022, between the hours of 07:30 and 08:30 with a temperature of 12℃ with a moderate breeze and mist in the air.

3.5.4.3.2. Birds seen on site were carrion crow (6), starlings (50+), herring gull (50+), blackbird (6), house sparrow (14), pheasant (5), long-tailed tit (10) and skylark (1).

3.5.4.3.3. Birds seen flying over the site were kestrel (1), herring gull (20+), starlings (50+), wood pigeon (3), magpie (3).

3.5.4.3.4. Calls heard on site included pheasant, curlew from the east and blackbirds and house sparrows in the hedgerows surrounding the site.

3.5.4.3.5. This survey showed slightly higher levels of activity than the previous two, likely due to the wet conditions. The birds using the site in large numbers were starlings and herring gulls.

Whitcher Wildlife Ltd.
Ecological Consultants.

BARROW ROAD, BARTON-UPON-HUMBER.

OS REF: TA 04218 21589.

WINTERING BIRD SURVEY RESULTS.

Ref No: **220776/WinteringBirds/Rev1.**

Date: **18th March 2024.**

Cliff Edge, Cliff Road, Darfield, Barnsley, S73 9HR.
Tel. 01226 753271.
info@whitcher-wildlife.co.uk www.whitcher-wildlife.co.uk
Company No. 4401613.

TABLE OF CONTENTS.

1. INTRODUCTION.

1.1. Strata Homes are in the process of buying a piece of arable land to the south of Barrow Road, with the intention of creating a new residential housing estate comprising 172 dwellings.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out wintering and passage bird surveys of the site to establish whether there are any issues that may affect the proposed works.

1.3. Three surveys were carried out each month between 30th November 2023 and 15th March 2024, and this report outlines the findings of that survey and makes appropriate recommendations.

****

2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. Vantage Point Surveys

2.2.1. Vantage point (VP) surveys were carried out, broadly following NatureScot methodology.

2.2.2. Vantage points were chosen to cover all open arable land within the site boundary as well as immediately adjacent fields. All of the flight activity survey area was covered in less than 2km from the vantage point.

2.2.3. Surveys began immediately on commission by the client in November 2023, and two surveys per month were conducted between December 2023 and March 2024.

2.2.4. The timing of surveys was varied to take in different times of day and different tidal states to suit the variety of species known to use the Humber Estuary. Surveys were timed to include one hour before and one hour after dusk and dawn respectively. Each survey lasted for three hours, totalling twenty-seven hours of vantage point watches. This is less than the recommended thirty-six hours due to missed survey opportunities in October and early November, but is still considered to be a good sample of the flight behaviour due to the good coverage of all other months within the survey period in combination with other survey methods used for further surveys throughout the winter months.

2.2.5. All species detected by song, call, or visually were identified to species and their locations recorded on a field-map. The activity of each registration was assigned a behaviour code in accordance with standard BTO methodology. Additional commentary was made on birds landing and taking off from within and out of the development site.

2.3. Nocturnal Surveys

2.3.1. In addition to vantage point surveys, and due to the potential for waders and/or waterfowl to use the site, nocturnal surveys were also carried out between December 2023 and March 2024.

2.3.2. The surveys were carried out at least one hour after dusk, when no daylight was visible, and each survey lasted until the whole survey area had been thoroughly searched.

2.3.3. All species encountered on the site or adjacent land were recorded. The approximate locations of priority species were plotted on a site map together with behavioural notation where appropriate. Counts of secondary species were recorded separately and based on the highest number of each species in a distinct location.

2.3.4. A thermal imaging camera capable of covering large distances and recording photos/videos was used to assist with nighttime visual identification of species.

2.4. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice, in combination with advice provided by Natural England regarding survey expectations for this site specifically.

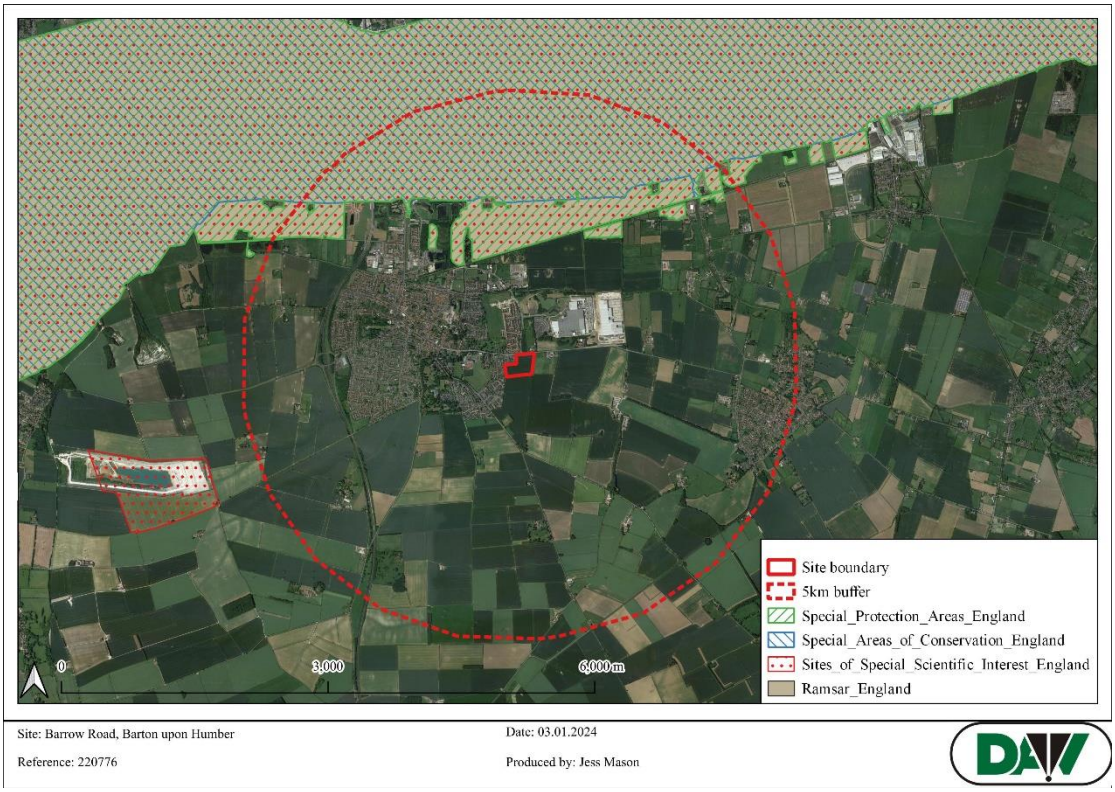
2.5. All surveys were carried out by Jess Mason MSc ACIEEM FRGS. Since 2018 Jess has had experience in a professional capacity as an Ecologist carrying out protected species and habitat surveys. Jess holds Natural England survey licences in respect of bats and great crested newts, and a Scottish Natural Heritage survey licence in respect of barn owls. She has also successfully completed a number of courses run by FSC and CIEEM in the relative protected species and carrying out site assessment using vegetation and has a MSc in Biological Recording. Jess is an Associate member of the Chartered Institute of Ecological and Environmental Management (CIEEM).

****

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A search of publicly available records shows that the site lies approximately 1.1km to the south of the Humber Estuary SPA, RAMSAR, and SSSI, shown on the map below, which are all designated for bird species.



3.1.2. Humber Estuary SPA

3.1.2.1. The site qualifies under article 4.1 of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:

Annex I species	**Count and season**	**Period**	**% of GB population**
Avocet *Recurvirostra avosetta*	59 individuals – wintering	5 year peak mean 1996/97 – 2000/01	1.7%
Bittern *Botaurus stellaris*	4 individuals – wintering	5 year peak mean 1998/99 – 2002/03	4.0%
Hen harrier *Circus cyaneus*	8 individuals – wintering	5 year peak mean 1997/98 – 2001/02	1.1%
Golden plover *Pluvialis apricaria*	30,709 individuals – wintering	5 year peak mean 1996/97 – 2000/01	12.3%

Bar-tailed godwit *Limosa lapponica*	2,752 individuals – wintering	5 year peak mean 1996/97 – 2000/01	4.4%
Ruff *Philomachus pugnax*	128 individuals – passage	5 year peak mean 1996-2000	1.4%
Bittern *Botaurus stellaris*	2 booming males – breeding	3 year mean 2000-2002	10.5%
Marsh harrier *Circus aeruginosus*	10 females – breeding	5 year mean 1998-2002	6.3%
Avocet *Recurvirostra avosetta*	64 pairs – breeding	5 year mean 1998 – 2002	8.6%
Little tern *Sterna albifrons*	51 pairs – breeding	5 year mean 1998-2002	2.1%

3.1.2.2. The site qualifies under article 4.2 of the Directive (79/409/EEC) as it is used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention) in any season:
In the non-breeding season, the area regularly supports 153,934 individual waterbirds (five year peak mean 1996/97 – 2000/01), including dark-bellied brent goose *Branta bernicla bernicla*, shelduck *Tadorna tadorna*, wigeon *Anas penelope*, teal *Anas crecca*, mallard *Anas platyrhynchos*, pochard *Aythya ferina*, scaup *Aythya marila*, goldeneye *Bucephala clangula*, bittern *Botaurus stellaris*, oystercatcher *Haematopus ostralegus*, avocet *Recurvirostra avosetta*, ringed plover *Charadrius hiaticula*, golden plover *Pluvialis apricaria*, grey plover *P. squatarola*, lapwing *Vanellus vanellus*, knot *Calidris canutus*, sanderling *C. alba*, dunlin *C. alpina*, ruff *Philomachus pugnax*, black-tailed godwit *Limosa limosa*, bar-tailed godwit *L. lapponica*, whimbrel *Numenius phaeopus*, curlew *N. arquata*, redshank *Tringa totanus*, greenshank *T. nebularia* and turnstone *Arenaria interpres*.

3.1.3. Humber Estuary RAMSAR

The following bird species are listed as feature of the designation:

- Bar-tailed godwit, *Limosa lapponica* – Wintering
- Black-tailed godwit, *Limosa limosa* – Passage
- Black-tailed godwit, *Limosa limosa* – Wintering
- Dunlin, *Calidris alpina* – Passage
- Dunlin, *Calidris alpina* – Wintering
- Golden plover, *Pluvialis apricaria* – Passage
- Golden plover, *Pluvialis apricaria* – Wintering
- Knot, *Calidris canutus* – Passage
- Knot, *Calidris canutus* – Wintering

- Redshank, *Tringa totanus* – Passage
- Redshank, *Tringa totanus* – Wintering
- Shelduck, *Tadorna tadorna* – Wintering
- Waterbird assemblage - Wintering

3.1.4. Humber Estuary SSSI

The following bird species are listed as features of the designation:

Aggregations of non-breeding birds:

- Avocet, *Recurvirostra avosetta*
- Bar-tailed godwit, *Limosa lapponica*
- Bittern, *Botaurus stellaris*
- Black-tailed godwit, *Limosa limosa islandica*
- Brent goose (dark-bellied), *Branta bernicla bernicla*
- Curlew, *Numenius Arquata*
- Dunlin, *Calidris alpina alpina*
- Golden plover *Pluvialis apricaria*
- Goldeneye, *Bucephala clangula*
- Greenshank, *Tringa nebularia*
- Grey plover, *Pluvialis squatarola*
- Knot, *Calidris canutus*
- Lapwing, *Vanellus vanellus*
- Oystercatcher, *Haematopus ostralegus*
- Pochard, *Aythya farina*
- Redshank, *Tringa tetanus*
- Ringed plover, *Charadrius hiaticula*
- Ruff, *Philomachus pugnax*
- Sanderling, *Calidris alba*
- Scaup, *Aythya marila*
- Shelduck, *Tadorna tadorna*
- Teal, *Anas crecca*
- Turnstone, *Arenaria interpres*
- Whimbrel, *Numenius phaeopus*
- Wigeon, *Anas penelope*

3.2. The Surveyed Area.

3.2.1. The survey area comprises the section of land to the south of Barrow Road / A1077 shown in the aerial image below.

3.2.3. The survey area is situated within a semi-rural location and was surrounded by a mosaic of arable land, industrial units, and residential estates, with the Humber Estuary 1.1km to the north of the survey area.

3.3. Winter bird surveys results.

3.3.1. The dates, times and weather conditions of the vantage point surveys carried out are summarised in the table below:

Date	Start	End	Sunrise/ Sunset	Temp at start (°C)	Precipitation	Cloud cover (%)	Visibility	Wind (Beaufort)	High tide time	Low tide time
30/11/23	06:45	09:45	07:53	1	Snow at 09:30	70	Good	2	07:54 20:00	02:27 14:30
15/12/23	07:00	10:00	08:12	6	None	60	Good	2	07:41 19:55	02:12 14:24
20/12/23	14:30	17:30	15:42	11	None	80	Good	3	11:13 23:14	05:21 17:13
12/01/24	07:00	10:00	08:14	3	Light drizzle	100	Good	1	06:44 18:56	01:11 13:27
24/01/24	14:25	17:30	16:27	6	None	70	Good	2	06:08 18:14	00:36 12:43
16/02/24	06:15	09:15	07:19	8	None	100	Good	2	10:49 23:05	05:06 17:14
27/02/24	15:30	18:30	17:33	8	Occasional, light showers	100	Good	2	08:02 20:08	02:44 14:28
04/03/24	15:45	18:45	17:45	8	None	100	Good	3	00:21 13:01	06:48 19:41
15/03/24	05:15	08:15	06:15	10	Occasional, light showers	90	Good	2	09:33 21:52	04:03 16:14

3.3.2. The dates, time and weather conditions of the nocturnal surveys carried out are summarised below:

Date	**Start**	**End**	**Sunrise/ Sunset**	**Temp at start (°C)**	**Precipitation**	**Cloud cover (%)**	**Visibility**	**Wind (Beaufort)**	**High tide time**	**Low tide time**
20/12/23	18:30	19:30	15:42	9	None	80	Good	3	11:13 23:14	05:21 17:13
24/01/24	18:30	19:15	16:27	6	None	70	Good	2	06:08 18:14	00:36 12:43
27/02/24	19:30	20:15	17:33	8	Occasional, light showers	100	Good	2	08:02 20:08	02:44 14:28
04/03/24	19:45	20:30	17:45	8	None	100	Good	3	00:21 13:01	06:48 19:41

3.3. Vantage point surveys

3.3.1. Survey 1 – 30th November 2023.

No birds were recorded on the ground or taking off/landing within the survey area or immediately adjacent habitats. A flock of up to forty black-headed gulls was recorded circling a wide area covering the residential estate to the west of the survey area, occasionally passing over the survey area. This behaviour continued throughout the duration of the survey. In addition, a flock of up to sixty jackdaws was recorded flying towards the estuary from a copse of woodland approximately 350m to the southeast of the survey area, but not interacting with the survey area.

3.3.2. Survey 2 – 15th December 2023.

3.3.2.1. As in the first survey, both jackdaws and black-headed gulls were observed circling large areas throughout the survey, occasionally overlapping the site boundary. However, neither species was observed interacting with, landing, or taking off from within the site boundary or from immediately surrounding habitats. Maximum counts of 34 black-headed gulls and 28 jackdaws were recorded.

3.3.2.2. At 08:55, two curlews landed within the survey area, arriving from the west, and began foraging behaviour. At 09:08, a further forty curlews arrived from the west and landed in the open field. All forty-two curlews remained feeding within the field until 09:27, when fifteen curlews took off from the field and flew as a flock in a northwards direction towards the estuary until no longer visible. The remaining twenty-seven curlew remained in the field and were still feeding when the survey ended.

3.3.3. Survey 3 – 20th December 2023.

3.3.3.1. A flock of up to twenty-six black-headed gulls was recorded circling a wide area covering the residential estate to the west of the survey area, occasionally passing over the survey area. This behaviour continued throughout the duration of the survey. In addition, a flock of up to thirty-four jackdaws was feeding on the ground within the survey area or adjacent fields throughout the duration of the survey. Jackdaws were occasionally landing and taking off from within the site throughout the survey.

3.3.4. Survey 4 – 12th January 2024.

3.3.4.1. Seven species were recorded during this survey including black-headed gull, fieldfare, redwing, rook, jackdaw, curlew and pink-footed geese.

3.3.4.2. Black-headed gulls were recorded circling over the survey area and surrounding fields and residential areas throughout the duration of the survey, and frequently landed in the fields within the survey area to forage.

3.3.4.3. Large numbers of jackdaws, peaking at fifty-six birds, were present within the survey area or adjacent fields throughout the duration of the survey. These birds were occasionally landing and taking off from within the site throughout the survey.

3.3.4.4. A mixed flock of fieldfares and redwings, totalling approximately forty birds, was recorded flying west over the site towards the residential areas at 07:31. No birds showed any interaction with the site. Smaller numbers of rooks, totalling up to six birds, were recorded within the flocks of jackdaws.

3.3.4.5. Three skeins of pink-footed geese were recorded passing close the site at 07:46, 08:06, and 08:13. All three skeins were recorded flying at high altitude in an easterly direction, at a distance of 300m to 500m from the survey area, with between twenty and fifty birds recorded per skein. None of the birds showed any interaction with the site, and none passed directly over the site.

3.3.4.6. A flock of thirty-nine curlew landed on the site at 08:44 and began foraging. All birds remained within the site boundary until 09:40, when all birds departed in a northerly direction. At 09:46, twenty-nine curlew landed on the site and began foraging behaviours. These birds were still foraging on the site when the survey ended.

3.3.5. Survey 5 – 24th January 2024

3.3.5.1. At 16:13, approximately fifty-five lapwings were seen circling over the site, arriving from the east and circling the site and the immediately adjacent fields three times, before settling on land to the south of the site. The lapwings stayed on this land, immediately to the south of the survey area and separated from the survey area by a hedgerow, for approximately fifteen minutes before leaving the area after being disturbed by a person walking in the field.

3.3.5.2. Large numbers of rooks, peaking at thirty-eight birds, were present within the survey area or adjacent fields throughout the duration of the survey. These birds were occasionally landing and taking off from within the site throughout the survey.

3.3.5.3. Two black-headed gulls and twelve jackdaws were periodically observed passing over the survey area, but not interacting with the site.

3.3.6. Survey 6 – 16th February 2024

3.3.6.1. No birds were recorded on the ground or taking off/landing within the survey area or immediate adjacent habitats. A skein of twenty-six greylag geese flew at a high altitude from west to east over the survey area, but did not stop or interact with the site in any way. In addition, a flock of up to thirty-two jackdaws was recorded flying towards the estuary from a copse of woodland approximately 350m to the southeast of the survey area, but not interacting with the survey area.

3.3.7. Survey 7 – 27th February 2024

3.3.7.1. No birds were recorded taking off/landing within the survey area or immediate adjacent habitats.

3.3.7.2. However, three grey partridges were observed passing through the field on the ground, occasionally calling. The partridges were seen sporadically in different areas of the field and hedgerow throughout the duration of the survey.

3.3.7.3. Other species recorded passing over the site, but not landing or interacting with the site, included: a flock of up to twelve jackdaws, skeins of fifteen and five greylag geese, and three black-headed gulls.

3.3.8. Survey 8 – 4th March 2024

3.3.8.1. No birds were recorded on the ground or taking off/landing within the survey area or immediately adjacent habitats. Species recorded passing over the site, but not landing or interacting with the site, included: a flock of up to twenty-four jackdaws, three black-headed gulls, and five woodpigeons.

3.3.9. Survey 9 – 15th March 2024

3.3.9.1. At 05:40, six rooks were recorded passing over the site, and appeared to be leaving a roost approximately 350m to the southeast of the survey area, passing straight over the site without stopping or showing any interaction with the site.

3.3.9.2. At 06:05, a flock of eight curlew flew over the site in a southerly direction, without stopping or showing any interaction with the site, followed immediately by two herring gulls flying in the same direction.

3.3.9.3. Other species recorded flying over or close to the site without showing any interaction with the site included one magpie, thirteen starling, two woodpigeon, and a flock of twenty-eight black-headed gulls.

3.3.10 Summary of vantage point survey results

A summary of the peak counts of individual birds recorded during the surveys is provided in the table below.

Species		**Peak no. of individual birds observed roosting/foraging within the survey area**								
Common name	***Latin name***	**30/11/23**	**15/12/23**	**20/12/23**	**12/01/24**	**24/01/24**	**16/02/24**	**27/02/24**	**04/03/24**	**15/03/24**
Curlew	*Numenius arquata*	0	42	0	39	0	0	0	0	0
Grey partridge	*Perdix perdix*	0	0	0	0	0	0	3	0	0
Lapwing	*Vanellus vanellus*	0	0	0	0	55	0	0	0	0
Rook	*Corvus frugilegus*	0	0	0	0	38	0	0	0	0
Species		**Peak no. of individual birds observed in flight passing over the survey area (not roosting/foraging)**								
Common name	***Latin name***	**30/11/23**	**15/12/23**	**20/12/23**	**12/01/24**	**24/01/24**	**16/02/24**	**27/02/24**	**04/03/24**	**15/03/24**
Black-headed gull	*Chroicocephalus ridibundus*	40	34	26	20	2	0	3	3	28
Curlew	*Numenius arquata*	0	0	0	0	0	0	0	0	8
Fieldfare	*Turdus pilaris*	0	0	0	~20	0	0	0	0	0
Greylag goose	*Anser anser*	0	0	0	0	0	26	15	0	0
Herring gull	*Larus argentatus*	0	0	0	0	0	0	0	0	2
Jackdaw	*Corvus monedula*	60	28	34	56	12	32	12	24	0
Magpie	*Pica pica*	0	0	0	0	0	0	0	0	1
Pink-footed goose	*Anser brachyrhynchus.*	0	0	0	50	0	0	0	0	0
Redwing	*Turdus iliacus.*	0	0	0	~20	0	0	0	0	0
Starling	*Sturnus vulgaris*	0	0	0	0	0	0	0	0	13
Woodpigeon	*Columba palumbus*	0	0	0	0	0	0	0	5	2

3.4. Nocturnal surveys

3.4.1. Survey 1 – 20th December 2023.

The survey area was searched from a vantage point using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. No birds were observed. Transects were then walked through the survey area, scanning adjacent fields, which confirmed that no birds were roosting within the survey area or immediately adjacent habitats.

3.4.2. Survey 2 – 24th January 2024

The survey area was searched from a vantage point using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. No birds were observed. Transects were then walked through the survey area, scanning adjacent fields, which confirmed that no birds were roosting within the survey area or immediately adjacent habitats.

3.4.3. Survey 3 – 27th February 2024

The survey area was searched from a vantage point using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. No birds were observed. Transects were then walked through the survey area, scanning adjacent fields, which confirmed that no birds were roosting within the survey area or immediately adjacent habitats.

3.4.4. Survey 4 – 5th March 2024

The survey area was searched from a vantage point using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. Two grey partridges were observed roosting in the stubble. No other birds were observed. Transects were then walked through the survey area, scanning adjacent fields, which confirmed that no further birds were roosting within the survey area or immediately adjacent habitats.

****

Prepared by:	
Jess Mason MSc ACIEEM FRGS.	Date: 18th March 2024.

Checked by:	
Ruth Georgiou. BSc, MCIEEM.	Date: 19th March 2024.

4. REFERENCES.

Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Ecological Report Writing, Second Edition.*** CIEEM, Hampshire.

1981. ***Wildlife and Countryside Act.*** *http://www.legislation.gov.uk/ukpga/1981/69* (accessed 18/02/16)

2000. ***Countryside and Rights of Way Act.***
http://www.legislation.gov.uk/ukpga/2000/37/contents.

2017. ***The Conservation of Habitats and Species Regulations.***
http://www.legislation.gov.uk/uksi/2010/490/contents/made.

2012. ***National Planning Policy Statement.***
https://www.gov.uk/government/publications/national-planning-policy-framework--2

Anon. 1995. ***Biodiversity: the UK Steering Group report. Vol 2: Action Plans.*** HMSO, London.

BOCC4. 2021. ***Birds of Conservation Concern 5: The Population Status of Bird's in the UK, Channel Islands and Isle of Man.***

Joint Nature Conservation Committee. 2004. ***Common Standards Monitoring Guidance for Birds.*** 2004 ed. JNCC, Peterborough.

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

Appendix I. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub but others are ground nesting or prefer man- made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix II. DEVELOPMENT PLAN.

Whitcher Wildlife Ltd.
Ecological Consultants.

BARROW ROAD, BARTON-UPON-HUMBER.

OS REF: TA 04218 21589.

WINTERING BIRD SURVEY RESULTS.

Ref No: **220776/WinteringBirds2025/Rev1.**

Date: **28th March 2025.**

The Business Village, Cudworth, Barnsley, S72 8RP
info@whitcher-wildlife.co.uk www.whitcher-wildlife.co.uk
Company No. 4401613.

TABLE OF CONTENTS.

1. INTRODUCTION.

1.1. Strata are currently progressing the planning application PA/2023/1607 of which relates to a proposed residential development at land to the south of Barrow Road.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out wintering bird surveys upon the site to establish whether there are any issues that may affect the proposed works.

1.3. Three surveys were carried out each month between October 2024 and March 2025, and this report outlines the findings of each survey and makes appropriate recommendations.

1.4. It must be noted that in September 2024, the planning application PA/2023/1981 was approved, granting planning permission for the erection of a major roundabout and development of link road infrastructure directly through the site. Natural England did not object to this application.

1.5. It is anticipated that construction works to such infrastructure will commence in May 2025, therefore permanently altering and disturbing the site and its existing landscaping setting.

****

2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. Vantage Point Surveys

2.2.1. Vantage point (VP) surveys were carried out, broadly following NatureScot 'amended' vantage point surveys methodology, as recommended in advice provided by Natural England in their planning consultation response (November 2023).

2.2.2. Vantage points were located at a central high point of the site and was chosen to cover all open arable land within the site boundary.

2.2.3. Two vantage point surveys per month were conducted between October 2024 and March 2025.

2.2.4. The timing of surveys was varied to take in different times of day and were conducted within three hours either side of low tide and high tide respectively. Each survey lasted for three hours, totalling thirty-six hours of vantage point watches.

2.2.5. All of the flight activity was recorded as well as birds landing or taking off within the development boundary. Additional commentary was made on birds landing and taking off from within and out of the development site. All species detected by song, call, or visually were identified to species and their locations recorded on a field-map. The activity of each registration was assigned a behaviour code in accordance with standard BTO methodology.

2.3. Nocturnal Surveys

2.3.1. In addition to vantage point surveys, and due to the potential for waders and/or waterfowl to use the site, nocturnal surveys were also carried out between October 2024 and March 2025.

2.3.2. The surveys were carried out at least one hour after dusk, when no daylight was visible, and each survey lasted until the whole survey area had been thoroughly searched.

2.3.3. All species encountered on the site were recorded. The approximate locations of priority species were plotted on a site map together with behavioural notation where appropriate. Counts of secondary species were recorded separately and based on the highest number of each species in a distinct location.

2.3.4. A thermal imaging camera capable of covering large distances and recording photos/videos was used to assist with nighttime visual identification of species.

2.4. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice, in combination with advice provided by Natural England regarding survey expectations for this site specifically.

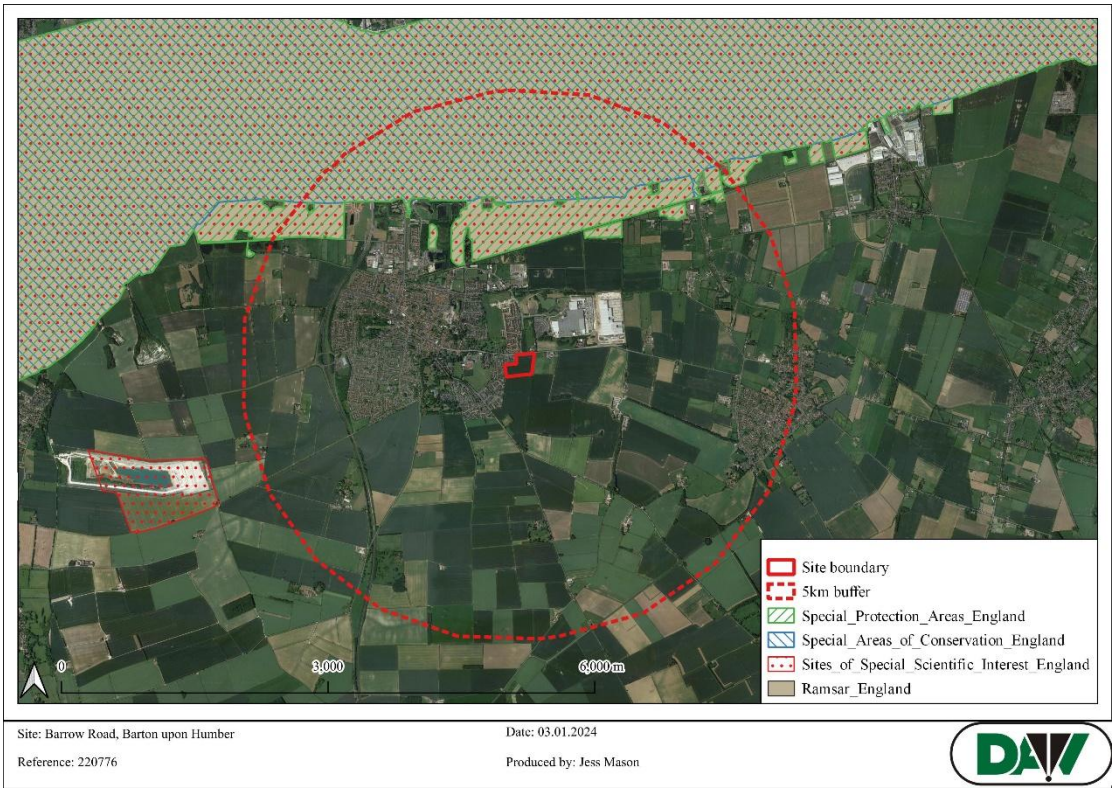
2.5. All surveys were carried out by Jess Mason MSc ACIEEM FRGS. Since 2018 Jess has had experience in a professional capacity as an Ecologist carrying out protected species and habitat surveys. Jess holds Natural England survey licences in respect of bats, barn owls and great crested newts, and a Scottish Natural Heritage survey licence in respect of barn owls. She has also successfully completed a number of courses run by FSC and CIEEM in the relative protected species and carrying out site assessment using vegetation and has a MSc in Biological Recording. Jess is an Associate member of the Chartered Institute of Ecological and Environmental Management (CIEEM).

****

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A search of publicly available records shows that the site lies approximately 1.1km to the south of the Humber Estuary SPA, RAMSAR, and SSSI, shown on the map below, which are all designated for bird species.



3.1.2. Humber Estuary SPA

3.1.2.1. The Humber Estuary qualifies under article 4.1 of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:

Annex I species	**Count and season**	**Period**	**% of GB population**
Avocet *Recurvirostra avosetta*	59 individuals – wintering	5 year peak mean 1996/97 – 2000/01	1.7%
Bittern *Botaurus stellaris*	4 individuals – wintering	5 year peak mean 1998/99 – 2002/03	4.0%
Hen harrier *Circus cyaneus*	8 individuals – wintering	5 year peak mean 1997/98 – 2001/02	1.1%
Golden plover *Pluvialis apricaria*	30,709 individuals – wintering	5 year peak mean 1996/97 – 2000/01	12.3%

Bar-tailed godwit *Limosa lapponica*	2,752 individuals – wintering	5 year peak mean 1996/97 – 2000/01	4.4%
Ruff *Philomachus pugnax*	128 individuals – passage	5 year peak mean 1996-2000	1.4%
Bittern *Botaurus stellaris*	2 booming males – breeding	3 year mean 2000-2002	10.5%
Marsh harrier *Circus aeruginosus*	10 females – breeding	5 year mean 1998-2002	6.3%
Avocet *Recurvirostra avosetta*	64 pairs – breeding	5 year mean 1998 – 2002	8.6%
Little tern *Sterna albifrons*	51 pairs – breeding	5 year mean 1998-2002	2.1%

3.1.2.2. The Humber Estuary qualifies under article 4.2 of the Directive (79/409/EEC) as it is used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention) in any season:
In the non-breeding season, the area regularly supports 153,934 individual waterbirds (five year peak mean 1996/97 – 2000/01), including dark-bellied brent goose *Branta bernicla bernicla*, shelduck *Tadorna tadorna*, wigeon *Anas penelope*, teal *Anas crecca*, mallard *Anas platyrhynchos*, pochard *Aythya ferina*, scaup *Aythya marila*, goldeneye *Bucephala clangula*, bittern *Botaurus stellaris*, oystercatcher *Haematopus ostralegus*, avocet *Recurvirostra avosetta*, ringed plover *Charadrius hiaticula*, golden plover *Pluvialis apricaria*, grey plover *P. squatarola*, lapwing *Vanellus vanellus*, knot *Calidris canutus*, sanderling *C. alba*, dunlin *C. alpina*, ruff *Philomachus pugnax*, black-tailed godwit *Limosa limosa*, bar-tailed godwit *L. lapponica*, whimbrel *Numenius phaeopus*, curlew *N. arquata*, redshank *Tringa totanus*, greenshank *T. nebularia* and turnstone *Arenaria interpres*.

3.1.3. Humber Estuary RAMSAR

The following bird species are listed as feature of the designation:

- Bar-tailed godwit, *Limosa lapponica* – Wintering
- Black-tailed godwit, *Limosa limosa* – Passage
- Black-tailed godwit, *Limosa limosa* – Wintering
- Dunlin, *Calidris alpina* – Passage
- Dunlin, *Calidris alpina* – Wintering
- Golden plover, *Pluvialis apricaria* – Passage
- Golden plover, *Pluvialis apricaria* – Wintering
- Knot, *Calidris canutus* – Passage
- Knot, *Calidris canutus* – Wintering

- Redshank, *Tringa totanus* – Passage
- Redshank, *Tringa totanus* – Wintering
- Shelduck, *Tadorna tadorna* – Wintering
- Waterbird assemblage - Wintering

3.1.4. Humber Estuary SSSI

The following bird species are listed as features of the designation:

Aggregations of non-breeding birds:

- Avocet, *Recurvirostra avosetta*
- Bar-tailed godwit, *Limosa lapponica*
- Bittern, *Botaurus stellaris*
- Black-tailed godwit, *Limosa limosa islandica*
- Brent goose (dark-bellied), *Branta bernicla bernicla*
- Curlew, *Numenius Arquata*
- Dunlin, *Calidris alpina alpina*
- Golden plover *Pluvialis apricaria*
- Goldeneye, *Bucephala clangula*
- Greenshank, *Tringa nebularia*
- Grey plover, *Pluvialis squatarola*
- Knot, *Calidris canutus*
- Lapwing, *Vanellus vanellus*
- Oystercatcher, *Haematopus ostralegus*
- Pochard, *Aythya farina*
- Redshank, *Tringa tetanus*
- Ringed plover, *Charadrius hiaticula*
- Ruff, *Philomachus pugnax*
- Sanderling, *Calidris alba*
- Scaup, *Aythya marila*
- Shelduck, *Tadorna tadorna*
- Teal, *Anas crecca*
- Turnstone, *Arenaria interpres*
- Whimbrel, *Numenius phaeopus*
- Wigeon, *Anas penelope*

3.2. The Surveyed Area.

3.2.1. The survey area comprises the section of land to the south of Barrow Road / A1077, shown in the aerial image below.

3.2.2. The survey area is situated within a semi-rural location and was surrounded by a mosaic of arable land, industrial units, and residential estates, with the Humber Estuary 1.1km to the north of the survey area.

3.3. Winter bird surveys results.

3.3.1. The dates, times and weather conditions of the vantage point surveys carried out are summarised in the table below:

Date	Start	End	High/low tide survey	High tide time	Low tide time	Sunrise/ Sunset	Temp at start (℃)	Precipitation	Cloud cover (%)	Visibility	Wind (Beaufort)
24/10/24	10:30	13:30	High	12:21 -	06:14 18:19	07:46 17:44	9	None	100	Good	2
31/10/24	10:15	13:15	Low	05:24 17:48	12:23 -	07:00 16:29	11	None	100	Good	3
07/11/24	09:00	12:00	High	09:36 21:46	03:45 15:57	07:13 16:16	10	None	100	Good	1
20/11/24	09:00	12:00	High	09:06 21:07	03:32 15:32	07:38 15:56	1	None	30	Good	1-2
02/12/24	11:00	14:00	Low	07:21 19:36	01:53 14:05	07:59 15:44	10	None	50	Good	2
19/12/24	08:45	11:45	High	09:35 21:28	03:59 15:45	08:16 15:42	5	None	10	Good	1
14/01/25	10:15	13:15	Low	06:26 18:36	00:57 13:08	08:11 16:31	6	None	50	Good	2
28/01/25	09:00	12:00	Low	05:27 17:40	12:00 -	07:53 16:36	8	Light showers	100	Good	1
10/02/25	09:00	12:00	Low	04:36 16:53	11:18 23:58	07:30 17:01	5	Light rain	100	Good	2-3
24/02/25	11:00	14:00	High	03:07 15:38	09:31 21:59	07:00 17:29	11	None	30	Good	2-3

Date	Start	End	High/low tide survey	High tide time	Low tide time	Sunrise/ Sunset	Temp at start (°C)	Precipitation	Cloud cover (%)	Visibility	Wind (Beaufort)
04/03/25	09:00	12:00	High	09:12 21:25	03:40 15:49	06:41 17:45	7	None	0	Good	1-2
21/03/25	13:00	16:00	Low	10:11 22:34	04:10 16:25	06:00 18:17	14	None	0	Good	2-3

3.3.2. Vantage point surveys

3.3.2.1. A summary of the peak counts of individual birds recorded during the surveys is provided in the table on the following page.

3.3.2.2. No birds were recorded foraging or roosting within the survey area or immediately adjacent habitats. No qualifying species of the Humber Estuary SPA were recorded within the survey area. Common species of such habitats such a common gull, black-headed gull, corvid species, and woodpigeon were recorded infrequently and at low abundance.

Species		Peak no. of individual birds observed											
Common name	***Latin name***	**24/10/24**	**31/10/24**	**07/11/24**	**20/11/24**	**02/12/24**	**19/12/24**	**14/01/25**	**28/01/25**	**10/02/25**	**24/02/25**	**04/03/25**	**21/03/25**
Black-headed gull	*Chroicocephalus ridibundus*	26	110**	4	3	5	1	2	2	0	2	1	0
Pink-footed goose	*Anser brachyrhynchus.*	24***	0	0	0	0	16***	0	0	0	0	0	0
Starling	*Sturnus vulgaris*	65	60	25	34	43	6	3	0	3	0	2	0
Woodpigeon	*Columba palumbus*	12	0	12	26	17	24	15	22	23	11	17	10
Carrion crow	*Corvus corone*	4	25**	4	7	16	13	12	2	8	6	2	3
Herring gull	*Larus argentatus*	4	6	2	3	6	1	0	0	1	0	0	0
Kestrel	*Falco tinunculus*	0	0	0	0	1	0	0	0	0	0	1	0
Pied wagtail	*Motacilla alba*	0	1	0	0	1	0	0	0	1	1	0	1
Magpie	*Pica pica*	2	0	1	0	1	1	0	1	0	1	2	0
Rook	*Corvus frugilegus*	3	0	6	0	0	2	0	0	0	4	0	0
Buzzard	*Buteo buteo*	0	0	1	0	0	0	1	0	0	0	0	1

SPA qualifying species or non-qualifying species of interest in bold

** Tractor and plough present at the start of the survey, fields ploughed on same day. Birds following tractor

*** Commuting over the site, showing no interaction with the survey area

3.3.3. Nocturnal surveys

3.3.3.1. The dates, time and weather conditions of the nocturnal surveys carried out are summarised below:

Date	**Start**	**End**	**High tide time**	**Low tide time**	**Sunrise/ Sunset**	**Temp at start (°C)**	**Precipitation**	**Cloud cover (%)**	**Visibility**	**Wind (Beaufort)**
29/10/24	19:30	20:40	04:06 16:39	11:02 23:16	06:56 16:34	13	None	60	Good	1-2
14/11/24	19:40	20:40	04:19 17:03	11:27 23:45	07:27 16:05	9	None	80	Good	1
11/12/24	19:30	20:30	01:46 14:49	08:47 21:12	08:09 15:41	6	None	100	Good	1-2
08/01/25	19:30	20:30	12:56 -	06:41 18:56	08:15 16:01	-2	None	0	Good	0-1
03/02/25	19:30	20:30	09:40 21:41	04:02 16:05	07:43 16:47	5	None	0	Good	2
13/03/25	20:30	21:30	11:58 -	05:41 18:45	05:55 06:20	4	None	10	Good	1

3.3.3.2. The survey area was searched using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. No birds were observed roosting within the survey area during any of the surveys.

3.4. Summary of results

3.4.1. Eleven species were recorded during the vantage point surveys, all of which are common species that can typically be expected in arable habitats within this geographical area. These species were recorded in numbers which are not considered notable.

3.4.2. No species listed as qualifying species for the Humber Estuary SPA were observed within the survey area during the vantage point or nocturnal surveys.

3.4.3. Overall, based on the low number of common species recorded, and the absence of SPA qualifying species, it is assessed that the site is not functionally linked to the Humber Estuary SPA.

****

Prepared by:	
Jess Mason MSc ACIEEM FRGS.	Date: 28th March 2025

Checked by:	
Ruth Georgiou BSc MCIEEM	Date: 28th March 2025

4. REFERENCES.

Bird Survey & Assessment Steering Group (2023). *Bird Survey Guidelines for assessing ecological impacts, v.1.1.1*. Available at https://birdsurveyguidelines.org (Accessed 15/04/2024)

CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester.

Department for Levelling Up, Housing and Communities (2023) *National Planning Policy Framework (NPPF).* Available at https://www.gov.uk/government/publications/national-planning-policy-framework--2 (Accessed: 15/04/2024).

Natural England (2014) *Protected species and development: advice for local planning authorities.* (updated 2021) Available at: https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications (Accessed: 05/03/2021).

Natural Environment and Rural Communities Act 2006 Available at https://www.legislation.gov.uk/uksi/2019/579/contents/made (Accessed: 15/04/2024). 25

Stanbury, A. et al (2021) *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747.* Available at https://britishbirds. co.uk/content/status-our-bird-populations (Accessed 15/04/2024)

Joint Nature Conservation Committee (2004). *Common Standards Monitoring Guidance for Birds.* 2004 ed. JNCC, Peterborough.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 Available at https://www.legislation.gov.uk/uksi/2019/579/contents/made (Accessed: 15/04/2024).

The Wildlife and Countryside Act 1981 (as amended). Available at http://www.legislation.gov.uk/ukpga/1981/69 (Accessed: 15/04/2024). JNCC, Peterborough.

Appendix I. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub but others are ground nesting or prefer man- made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix II. DEVELOPMENT PLAN.

Appendix 3: Natural England Correspondence

Date: 19 August 2024
Our ref: DAS/481293
Your ref: N/A

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

0300 060 3900

Kate Milnes
Strata Homes
Quay Point
Lakeside Boulevard
Doncaster
South Yorkshire
DN4 5PL

BY EMAIL ONLY

Dear Kate Milnes

Discretionary Advice Service (Charged Advice)
CT Ref: 31343
Development proposal and location: Residential development, Barrow Road, Barton upon Humber

Thank you for your consultation on the above dated 05 July 2024, which was received on 05 July 2024.

This advice is being provided as part of Natural England's Discretionary Advice Service. Strata Homes (Yorkshire) Limited has asked Natural England to provide advice upon:

- Potential impacts on designated or proposed designated sites
- Information for a draft Habitats Regulations Assessment
- The proposed mitigation strategy in relation to recreational pressure on the Humber Estuary SPA/SAC/Ramsar/SSSI

This advice is provided in accordance with the Quotation and Agreement dated 26 July 2024.

The following advice is based upon the information within *'Tyler Grange - Barrow Road, Barton-upon-Humber (PA/2023/1607 – North Lincolnshire Council) report'* dated 03 July 2024.

Protected sites

Recreational Pressure / Disturbance

Natural England notes that the assessment report concludes the proposed recreational disturbance mitigation measures would '*provide sufficient mitigation for recreational pressure both alone and in combination with other development in the absence of a strategic mitigation strategy being available*'. Having considered the assessment, and the measures proposed to mitigate for any adverse effects, it is the advice of Natural England that further assessment of whether the proposed mitigation measures are sufficient is needed, to ascertain that the proposal will not result in adverse effects on the integrity of the Humber Estuary SAC/SPA/Ramsar for recreational disturbance.

Natural England broadly welcomes the provision of financial contributions and upgrade measures to Far Ings National Nature Reserve (NNR) as a means to mitigate recreational disturbance impacts on the designated site. However, we advise that further detail is required at this stage to demonstrate with greater certainty that the scale and scope of these measures would provide

suitable mitigation for potential impacts of recreational pressure on the Humber Estuary, particularly for the additional population resulting from the proposed development. This is set out below:

1. Whilst we welcome the approach in principle, it is not currently clear how the scale of the measures proposed are sufficient to mitigation the development. We advise that mitigation should account for the additional population arising from the housing proposal, using a precautionary figure for calculations. Presently, an occupancy rate of 2.4 persons per dwelling is used to estimate population for housing developments, based on the 2017 Office for National Statistics figure for the average number of persons in all UK households. Therefore with 173 dwellings this will be 415 additional residents. Subsequently, we recommend that justification is provided to detail how the proposed mitigation measures are sufficient to address the increased footfall from this population. It may be helpful to set out what financial contribution will be made per dwelling.

2. Regarding the creation of the new 'red' footpath, set back from the bank of the Humber. We highlight that the area of the NNR is also part of the Humber Estuary SPA/ Ramsar/ SSSI, and therefore these works themselves would need to be assessed as part of the HRA, to determine whether the location of the footpath could impact on protected bird species using the NNR.

3. Based on the proposed measures, we assume that the measures are mostly for visitors that use the NNR car parks, as the proposed changes would keep them within the NNR itself. We note that there is a car park to the west of where the footpath access points are proposed to be closed (described as 'Chowder Ness View Point' on Google Maps). It would be helpful to understand the car park usage, as the proposed footpath changes would potentially mean that some people using this car park cannot access the NNR and therefore would have to walk along the stretch of the public footpath. It is unclear if access is proposed to be reduced in this location. It would be helpful to understand if this has been factored into the proposal.

4. We would welcome further detail around whether the proposal for the 'red' footpath is aiming to reduce bird disturbance impacts on the estuary itself or on the NNR section of the designated sites. This should be included as part of your evidence to show the effectiveness of the new footpath creation parallel to the Humber Bank path in reducing recreational disturbance impacts on the designated sites.

5. We note that the 'pink' footpath on the map is a public footpath, therefore it would be helpful to understand if permissions from the local authority are required to undertake the proposed improvements.

6. The proposal will mean that the NNR walking route called the 'tadpole trail' could no longer be used and therefore it is likely that the NNR will need to update its signage to reflect the changes to the footpaths.

Any measures used to inform your decision about the effects on the integrity need to be sufficiently secured, effective, reliable, timely, guaranteed to be delivered and maintained in the long-term. The competent authority, should be confident regarding:

- What the measure is, and based on scientific evidence, how it would avoid or reduce effects on the site (taking account of the expected duration of the effects and whether the mitigation would continue to work effectively over time)
- How it would be implemented and by whom
- The degree of confidence in its likely success
- The timescale of when it would be implemented, maintained and managed
- How the measure would be secured, monitored and enforced; and, if the measure failed, how the failure will be rectified by corrective measures.

Therefore, we advise that this information is provided as part of your information to inform the Habitats Regulations Assessment.

Natural England also notes additional mitigation proposals outlined in section 21: '*each new homeowner would be supplied with an information pack on the sensitivities of the Humber Estuary, how to enjoy the area sustainably (i.e. countryside code) and directing residents towards walking routes which would draw people away from the most sensitive areas of the estuary and associated FLL at Far Ings NNR'*. Natural England highlights that it is not possible to enforce that visitors use alternative walking routes, therefore, while we welcome the creation of information packs as a complimentary measure, our advice is that their effectiveness as mitigation cannot be secured or relied upon.

Functionally Linked Land

Natural England notes that over-wintering and passage bird surveys have been undertaken between November 2023 – March 2024 which recorded Curlew roosting and foraging within the survey area on two occasions in numbers greater than 1% of the Humber Estuary population (39 at 1.7% and 42 at 1.83%). In our previous advice (20/11/23), we recommended that full winter and passage surveys were undertaken. We note that this suite of surveys did not include August, September or October and only one survey was undertaken in November, instead of our preferred method of two surveys per month.

Although Natural England's preferred survey methodology was not followed, we note that one survey per month covering August, September and October 2022 (Whitcher Wildlife) were previously undertaken at the site. Therefore, we advise utilising the August – October 2022 surveys alongside the November 2023 – March 2024 surveys to inform the HRA. We advise this survey effort is sufficient only when a precautionary approach to the assessment is taken, as there is potential that the actual peak counts could have been missed due to incomplete survey coverage.

Your assessment concludes that the site '*is not considered functionally linked to the estuary and no mitigation to this regard is considered necessary', as these numbers of birds only occurred on two occasions*. However, Natural England considers that as over 1% of the Humber Estuary population of Curlew have been recorded using the site, that it is functionally linked to the Humber Estuary designated sites.

Policy DQE3: 'Biodiversity and Geodiversity' of the emerging North Lincolnshire Local Plan states '*Proposals which may affect an SPA, SAC or Ramsar site or functionally linked land supporting these sites will be assessed according to their implications for the site's conservation objectives. Proposals not directly connected with, or necessary for, the management of the site and which are likely to have a significant effect on the site, either individually or in combination with other plans or projects, shall be subject to an Appropriate Assessment'*. Therefore, Natural England advises that suitable mitigation measures will be required before a conclusion of no adverse effects on the integrity of the Humber Estuary SPA and Ramsar can be reached in this case. There are a number of examples where mitigation has been implemented successfully in the Humber region, both through the creation of mitigation sites and through changes in local agricultural practices to improve insect/ food availability for SPA birds. We recognise that birds were not recorded consistently across all surveys, but the birds that were recorded were in significant numbers and therefore mitigation should be proportionate.

Wider concerns about pressures on curlew populations in the Humber Estuary area

Natural England's advice is informed by the decline in the UK population of curlew and additional evidence relating to curlew numbers and behaviour in the Humber Estuary.

Curlew is listed as globally "Near Threatened" with extinction on the IUCN Red List of Threatened Species. This, in addition to the international importance of the UK's wintering sites, makes the curlew a high conservation priority for the UK. Based on data from 2012–17, the UK population of

wintering curlews is currently estimated to be 125,000 individuals, which represents 9–15% of the global population (Woodward *et al.* 2020; Wetlands International, 2016). The most recent Wetland Bird Survey (WeBS) Report shows that there has been a long-term decline of 30% between 1995/96 and 2020/21 in the UK wintering population (Austin *et al,* 2023). This trend is thought to be driven by declines in breeding populations in the UK and Europe, and in part by wintering range shifts due to climate change. These broad-scale reasons for decline can be exacerbated by site-based pressures including disturbance, loss of habitat, changes in grassland vegetation structure and land drainage. Based on WeBS counts, the Humber is the seventh most important site in the UK for wintering curlews (Frost *et al,* 2021). Natural England considers that it is important to avoid or mitigate for other potential impacts on curlew, given their conservation status.

Satellite tagging of curlews on the Humber has demonstrated that individuals are highly site faithful and forage within a short distance of their high tide roost sites. During the study period, curlew home ranges were found to be between 4.4 and 9.6 km2 (Cook *et al,* 2016). Displacement from foraging sites will therefore have consequences for the birds' fitness in terms of increased energy expenditure for flight, competition with other birds for food, and lack of knowledge of foraging resources in other areas which might make it more difficult to find food. Tagging work also showed that some individuals favoured foraging on intertidal mudflats and others on terrestrial fields. Therefore, maintaining both intertidal and terrestrial areas is important for supporting populations of curlew.

In this broader context, Natural England is concerned about the impact that the permanent loss of functionally linked land would have on curlew populations in the Humber Estuary SPA.

☐ The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

Yours sincerely,
John Hartney
Higher Officer – Sustainable Development
Yorkshire and Northern Lincolnshire

Cc commercialservices@naturalengland.org.uk

REFERENCES:

Austin, G.E., Calbrade, N.A., Birtles, G.A., Peck, K., Wotton, S.R., Shaw, J.M., Balmer, D.E. & Frost, T.M.2023.Waterbirds in the UK 2021/22: The Wetland Bird Survey and Goose & Swan Monitoring Programme. BTO/RSPB/JNCC. Thetford.

Cook, A.S.C.P., Turner, C., Burton, N.H.K. & Wright, L. J. (2016). *Tracking Curlew and Redshank on the Humber estuary*. BTO Research Report 688. British Trust for Ornithology, The Nunnery, Thetford, Norfolk IP24 2PU, UK.

WeBS core count methodology is to survey birds at high tide, which then forage at low tide either on intertidal mudflats or terrestrial fields.

Wetlands International. 2016. Waterbird Population Estimates. Available at: wpe.wetlands.org.

Woodward, I., Aebischer, N., Burnell, D., Eaton, M., Frost, T., Hall, C., Stroud, D.A. & Noble, D (2020). Population estimates of birds in Great Britain and the United Kingdom. British Birds 113: 69–104.

Annex 1
European Protected Species

A licence is required in order to carry out any works that involve certain activities such as capturing the animals, disturbance, or damaging or destroying their resting or breeding places. Note that damage or destruction of a breeding site or resting place is an absolute offence and unless the offences can be avoided (e.g. by timing the works appropriately), it should be licensed. In the first instance it is for the developer to decide whether a species licence will be needed. The developer may need to engage specialist advice in making this decision. A licence may be needed to carry out mitigation work as well as for impacts directly connected with a development. Further information can be found in Natural England's 'How to get a licence' publication.

If the application requires planning permission, it is for the local planning authority to consider whether the permission would offend against Article 12(1) of the Habitats Directive, and if so, whether the application would be likely to receive a licence. This should be based on the advice Natural England provides at formal consultation on the likely impacts on favourable conservation status and Natural England's guidance on how the three tests (no alternative solutions, imperative reasons of overriding public interest and maintenance of favourable conservation status) are applied when considering licence applications.

Natural England's pre-submission Screening Service can screen application drafts prior to formal submission, whether or not the relevant planning permission is already in place. Screening will help applicants by making an assessment of whether the draft application is likely to meet licensing requirements, and, if necessary, provide specific guidance on how to address any shortfalls. The advice should help developers and ecological consultants to better manage the risks or costs they may face in having to wait until the formal submission stage after planning permission is secured, or in responding to requests for further information following an initial formal application.

The service will be available for new applications, resubmissions or modifications – depending on customer requirements. More information can be found on Natural England's website.

Date: 20 September 2024
Our ref: DAS/481293
Your ref: N/A

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

0300 060 3900

Kate Milnes
Strata Homes
Quay Point
Lakeside Boulevard
Doncaster
South Yorkshire
DN4 5PL

BY EMAIL ONLY

Dear Kate Milnes

Discretionary Advice Service (Charged Advice)
CT Ref: 31343
Development proposal and location: Residential development, Barrow Road, Barton upon Humber

Thank you for your consultation on the above dated 05 July 2024, which was received on 05 July 2024.

This advice is being provided as part of Natural England's Discretionary Advice Service. Strata Homes (Yorkshire) Limited has asked Natural England to provide advice upon:

- Potential impacts on designated or proposed designated sites
- Information for a draft Habitats Regulations Assessment
- The proposed mitigation strategy in relation to recreational pressure on the Humber Estuary SPA/SAC/Ramsar/SSSI

This advice is provided in accordance with the Quotation and Agreement dated 26 July 2024.

The following advice is provided in response to the information within *'Tyler Grange - Barrow Road, Barton-upon-Humber (PA/2023/1607 – North Lincolnshire Council) report'* dated 10 September 2024.

Protected sites

Recreational Pressure / Disturbance

Natural England notes that you have not yet provided sufficient justification regarding the adequacy of the proposed mitigation measures in the context of a Habitats Regulations Assessment (HRA). Section 6 of Tyler Grange's report (dated 10 September 2024) states that 'the objective of the mitigation response is, therefore, to divert any users of the area from the more sensitive parts of Far Ings NNR to the Humber Bank'. However, we emphasise that, to meet the requirements of the Habitats Regulations, the mitigation must focus on reducing impacts on the Special Protection Area (SPA), not the NNR. Therefore, we recommend that information is provided on the specific sensitivities within the SPA, such as the relevant notified species, primarily breeding birds. In addition, justifications on how the proposed mitigation measures, such as the bird hide, will effectively reduce disturbance to these identified sensitivities should be provided.

In addition, we note that point 5 of the report, states “On average, interviewees were within the Humber Estuary SAC (of which Far Ings NNR is part) for less than a third of their total route…”. We wish to highlight that Far Ings NNR is primarily within the Humber Estuary SPA/ Ramsar and therefore clarification should be provided on the relevance of the SAC in this context.

In relation to the footpath on the Humber bank, point 6 of the report states there is a “lack of obvious routes to the river in this location which is not a well-used or sensitive part of the estuary for non-breeding bird populations”. As the Humber is also designated for breeding birds, it would be helpful to include consideration of breeding birds in the HRA.

We note that figure 14 of the Footprint Ecology Humber Estuary Visitor Survey (dated 18 August 2023) depicts ‘improvement to site access suggested by interviewees’ in which improving paths and repairing access tracks were commonly espoused by interviewees at Chowder Ness Viewpoint. We advise this information could be used to inform mitigation proposals within the HRA, if it is determined that inadequate paving is leading to disturbance within the Humber Estuary.

We welcome the proposal at point 12 of the report to include new signage and information highlighting the sensitivities of the Humber Estuary protected sites, particularly since the closure of the tadpole trail which subsequently makes the current signage outdated. We believe that this should be a key part of the mitigation plan. This approach is also supported by evidence in the Footprint Ecology report (2010), which suggests that promotion of existing signage could be an effective way to manage disturbances around the Humber Estuary. We have referenced the report in full below.

Given this, it would be helpful if you could provide a breakdown of where the £54,500 will be spent. As per the Footprint Ecology reports, we consider that the mitigation should be focused around the suggested improvements.

Point 11 of the report outlines plans to construct a raised boardwalk through grassland/ wet woodland as part of the mitigation measures. We recommend providing additional information to clarify whether the habitat being affected by the boardwalk is used by SPA birds. This should also include an assessment of whether the habitat designated as part of the SSSI differs from the SPA, and if so, how the footpath construction will impact it. Until the full detailed assessment is provided, Natural England are unable to agree with the approach in principle.

We note at point 16 of the report, reference is made to evidence prepared by the Humber Nature Partnership. With your permission, given that our discretionary advice service is confidential, we would like to discuss the mitigation proposal with Humber Nature Partnership as they have demonstrable experience around recreational disturbance issues in this area. Please let us know if you are happy for us to do so.

Functionally Linked Land

Point 28 of your response cites the Natural England 2021 North West of England study that used the GB population to determine significance of functionally linked land was deemed suitable at a regional-scale, however we do not consider this appropriate at development site level.

We are currently seeking specialist ornithological advice within Natural England in response to the points raised in the most recent letter. However, unfortunately we have not been able to secure this advice within the timeframes allowed. Therefore, we will provide further advice on this matter once we have received specialist ornithological advice. We apologise for the inconvenience.

☒ The advice provided in this letter has been through Natural England’s Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information

which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

Yours sincerely,
John Hartney
Higher Officer – Sustainable Development
Yorkshire and Northern Lincolnshire

Cc commercialservices@naturalengland.org.uk

Caals, Z., Bishop, E., and Saunders, P. 2023. Footprint Ecology: Humber Estuary Visitor Survey

Cruickshanks, K., Liley, D., Fearnley, H., Stillman, R., Harvell, P., Hoskin, R. & Underhill-Day, J. (2010). Desk Based Study on Recreational Disturbance to birds on the Humber Estuary. Footprint Ecology / Humber Management Scheme

Outlook

PA/2023/1607 Natural England Response

[redacted]

Dear Sir/Madam,

Thank you for your consultation on the above dated 09/04/25, 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.

Insufficient information provided

There is insufficient information to enable Natural England to provide a substantive response to this consultation as required under the Town and Country Planning (Development Management Procedure) (England) Order 2015. Please provide the information listed below and re-consult Natural England. Please note that you are required to provide a further 21 day consultation period, once this information is received by Natural England, for us to respond.

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 Protection Area (SPA) and Special Area of Conservation (SAC) which are European sites. The site is also listed as the Humber Estuary Ramsar site 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 have. 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.

There is currently insufficient information regarding the potential impacts that the proposal will have on the Humber Estuary SPA/Ramsar. We advise that you to complete a Habitats Regulation Assessment which includes the following;

- An assessment of all available bird survey data for the site: including 2022, 2023, and 2024 survey data.
- An assessment of potential direct and indirect impacts to land functionally linked to the Humber Estuary SPA/Ramsar.
- An assessment of potential visual/noise impacts on birds associated with the Humber Estuary SPA/Ramsar sites during construction and operation.
- An assessment of potential recreational disturbance impacts which may arise from the proposed development.

WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

Sites of Special Scientific Interest

No assessment has been provided of the potential impacts the proposal will have on the Humber Estuary SSSI. Our advice regarding the potential impacts upon the Humber Estuary SSSI coincide with our advice regarding the potential impacts upon the Humber Estuary SPA / SAC / Ramsar 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 28I (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.

Please note that we are not seeking further information on other aspects of the natural environment, although we may make comments on other issues in our final response.

On receipt of the information requested, we will aim to provide a full response within 21 days of receipt. Please be aware that if the information requested is not supplied, Natural England may need to consider objecting to the proposal on the basis of potential harm to the above designated site.

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

Yours sincerely,

Louis Jones

Higher Officer
Terrestrial Sustainable Development
Yorkshire and Northern Lincolnshire Area Team

www.gov.uk/natural-england

Plans:

Plan 1: National Site Network and Ramsar Protected Sites Plan

N

0 100 m

Legend

Boundaries

Redline boundary

Humber Estuary SPA/SAC/Ramsar

Google Satellite

Project	Barrow Road, Barton-upon-Humber
Drawing Title	Saturatory designated sites
Scale	1:6,000
Drawing No.	16539_P01
Date	July 2025
Checked	AHS

Tyler Grange

Tyler Grange Group Ltd

97 Icknield Street, Hockley, Birmingham, B18 6RU
T: 0121 828 4043 E: hello@tylergrange.co.uk
W: www.tylergrange.co.uk

Step into our world

www.tylergrange.co.uk

Tyler Grange

Landscape | Ecology | Arboriculture