Lincolnshire Lakes Site, Scunthorpe

Shadow Habitats Regulations Assessment – Stage 1 Screening

Keepmoat Homes

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Ecus Ltd

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Shadow Habitats Regulations Assessment – Stage 1 Screening

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Contents

Executive Summary

Ecus Limited (Ltd) was commissioned by the Keepmoat Homes in October 2023 to undertake a Shadow Habitats Regulations Assessment (HRA) Stage 1 Screening to inform the development of land located off Burringham Road, hereafter referred to in this report as 'the Site'. The Site is situated to the north of Burringham Road in Scunthorpe, Lincolnshire, centred on Ordnance Survey National Grid Reference (OS NGR) SE 86163 08625 (Figure 1).

Proposals for the Site are for the construction of 599 no. residential dwellings, a large surface water attenuation basin and other associated infrastructure, open spaces including a play area as annotated on the Nineteen47 '*Planning Layout*' (drawing ref. n1720-008-C, December 2023) (Appendix 1).

The Site lies approximately 12.1 km south of the Humber Estuary Special Protection Area (SPA), and 2.5 km south east of the Humber Estuary Special Area of Conservation (SAC), Ramsar and Site of Special Scientific Interest. It was consequently recommended that a HRA be undertaken to assess whether the proposed scheme would result in any Likely Significant Effects (LSEs) on the qualifying features or conservation objectives of the Humber Estuary SPA, SAC, Ramsar and SSSI.

Taking into account impacts, threats, objectives and qualifying features of the Humber Estuary SPA, SAC, Ramsar and SSSI it is considered that the proposed development is not likely to result in LSE to the qualifying features of the Humber Estuary SPA, SAC, Ramsar and SSSI.

This HRA screening assessment has concluded that in the absence of mitigation, there are no LSE predicted on the conservation objectives of the features of the Humber Estuary SPA, SAC, Ramsar and SSSI as a result of the proposed development, either alone or in-combination with any other plans or projects. It is therefore considered that there is not a requirement to undertake A Stage 2 Appropriate Assessment for the proposed development with respect to the Humber Estuary SPA, SAC, Ramsar and SSSI.

1. Introduction

1.1 Background

1.1.1 Ecus Limited (Ltd) was commissioned by the Keepmoat Homes in October 2023 to undertake a Shadow Habitats Regulations Assessment (HRA) Stage 1 Screening to inform the development of land located off Burringham Road, hereafter referred to in this report as 'the Site'. The Site is situated to the north of Burringham Road in Scunthorpe, Lincolnshire, centred on Ordnance Survey National Grid Reference (OS NGR) SE 86163 08625 (Figure 1).

1.1.2 Proposals for the Site are for the construction of 599 no. residential dwellings, a large surface water attenuation basin and other associated infrastructure, open spaces including a play area as annotated on the Nineteen47 '*Planning Layout*' (drawing ref. n1720-008-C, December 2023) (Appendix 1).

1.1.3 The Site lies approximately 12.1 km south of the Humber Estuary Special Protection Area (SPA), and 2.5 km south east of the Humber Estuary Special Area of Conservation (SAC), Ramsar and Site of Special Scientific Interest. It was consequently recommended that a HRA be undertaken to assess whether the proposed scheme would result in any Likely Significant Effects (LSEs) on the qualifying features or conservation objectives of the Humber Estuary SPA, SAC, Ramsar and SSSI.

1.1.4 The Humber Estuary SPA is designated under the European Council Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds (Directive 79/409/EEC as amended), known as the Birds Directive. The Humber Estuary SAC is designated under the European Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, known as the Habitats Directive. Paragraph 181 of the National Planning Policy Framework (NPPF) states that listed Ramsar sites are to be given the same protection as Habitat Sites.

1.2 Habitats Regulations Assessment

1.2.1 Whilst the regulatory requirement for HRA historically originated from European legislation, post the UKs formal departure from the European Union on the 31st December 2020, UK conservation legislation collectively known as the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 has been amended to maintain the requirements of the Habitats Directive and the Habitat Regulations. The legislation includes the provision that any plan or project that may result in a LSE on a European designated site (currently referred to as Habitats Sites), shall be subject to an appropriate assessment of its implications in view of the Site's conversation objectives.

1.2.2 As a statutory undertaker North Lincolnshire Council (NLC) is considered a section 28G authority under the Wildlife and Countryside Act 1981 (as amended). As such NLC is also a competent authority under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and as a competent authority must determine whether the plan or project may result in any LSE on Habitats Sites.

1.2.3 HRA is a process which evaluates the effects of plans on the conservation objectives and qualifying features of the designated Habitats Sites and determines whether they will have a LSE on these objectives or features.

1.2.4 UK Government Guidance on the use of HRA (2019) identifies a staged process to the assessment of the effects of plans or projects on these designated Habitats Sites. These stages are collectively referred to as the HRA. There are potentially up to four stages:

I. Screening for Likely Significant Effects (LSEs);

II. Appropriate Assessment (AA) and Mitigation;

III. Alternatives; and,

IV. Imperative Reasons of Overriding Public Interest (IROPI) and compensatory measure.

1.2.5 This report provides a summary of the shadow HRA Screening stage (stage 1). The shadow HRA Screening stage can provide the Local Planning Authority (LPA) with the information required so that they can conduct their own HRA Screening stage of the Site, or the LPA can 'adopt' this shadow HRA Screening stage if they agree to the assessment and conclusion. This report comprises the identification of LSE's on the interest features of any Habitats Sites. A significant effect is any effect that would undermine the conservation objectives and qualifying features for a Habitats Site. There must be a causal connection or link between the subject plan or project and the conservation objectives or qualifying features of the Habitats Site which could result in possible significant effects on the Habitats Site. The effects may be direct or indirect and the decision to the impact and scope of possible effects must be judged on a case-by-case basis (David Tyldesley Associates (2021) '*The Habitats Regulations Assessment Handbook*').

1.2.6 Designated Habitats Sites include SPAs and SACs. Also included are: Ramsar sites, as per paragraph 176 of NPPF (2019b); and, potential Special Protection Areas (pSPA), possible Special Areas of Conservation (pSACs) and proposed Ramsar Sites (pRamsar) for the purpose of considering plans and projects affecting them, as per paragraph 181 of the NPPF, 2021.

1.2.7 In accordance with the European Court of Justice Ruling following the 'People over Wind and Sweetman' case in 2018, mitigation at the Screening stage cannot be considered. Therefore, where LSEs are anticipated in the absence of mitigation, a Stage 2 Appropriate Assessment will

be required.

1.3 Proposed Development

1.3.1 The boundary of the Site is shown in Figure 1 with the proposed layout provided as Appendix 1. Proposals for the Site comprise 599 no. residential dwellings, a large surface water attenuation basin and other associated infrastructure including:

- Landscaping;
- Public open space and play area;
- Pedestrian and cycle links;
- A pumping station; and,
- A sub-station.

2. Habitat Sites

2.1 Humber Estuary SPA

Description and Qualifying Features

2.1.1 The Humber Estuary SPA covers an area of 37,630.24 ha and the SPA citation (Natural England, 2014b) states that:

'The Humber Estuary is located on the east coast of England and comprises extensive wetland and coastal habitats. The inner estuary supports extensive areas of reedbed, with areas of mature and developing saltmarsh backed by grazing marsh in the middle and outer estuary. On the north Lincolnshire coast, the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. Parts of the estuary are owned and managed by conservation organisations. The estuary supports important numbers of waterbirds (especially geese, ducks and waders) during the migration periods and in winter. In summer, it supports important breeding populations of bittern Botaurus stellaris, marsh harrier Circus aeruginosus, avocet Recurvirostra avosetta and little tern Sterna albifrons.'

2.1.2 Based on the SPA citation (Natural England, 2014b) and Conservation Objectives (Natural England, 2019) the Humber Estuary SPA 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 Annex I species in any season, detailed in Table 1 below:

Table 1: Qualifying species under Article 4.1 (Annex I species) of the Humber Estuary SPA

Code	Qualifying Feature
A021	Great bittern *Botaurus stellaris* (Non-breeding)
A021	Great bittern *Botaurus stellaris* (Breeding)
A048	Common shelduck *Tadorna tadorna* (Non-breeding)
A081	Eurasian marsh harrier *Circus aeruginosus* (Breeding)
A082	Hen harrier *Circus cyaneus* (Non-breeding)
A132	Pied avocet *Recurvirostra avosetta* (Non-breeding)
A132	Pied avocet *Recurvirostra avosetta* (Breeding)
A140	European golden plover *Pluvialis apricaria* (Non-breeding)
A143	Red knot *Calidris canutus* (Non-breeding)
A149	Dunlin *Calidris alpina alpina* (Non-breeding)
A151	Ruff *Philomachus pugnax* (Non-breeding)

Code	Qualifying Feature
A156	Black-tailed godwit *Limosa limosa islandica* (Non-breeding)
A157	Bar-tailed godwit *Limosa lapponica* (Non-breeding)
A162	Common redshank *Tringa totanus* (Non-breeding)
A195	Little tern *Sterna albifrons* (Breeding)

2.1.3 The qualifying features also include Waterbird assemblage, which is as follows, as described in the SPA citation (Natural England, 2014b):

'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, oystercatcher Haematopus ostralegus, avocet, ringed plover Charadrius hiaticula, golden plover Pluvialis apricaria, grey plover P. squatarola, lapwing Vanellus vanellus, knot, sanderling Calidris alba, dunlin, ruff, black-tailed godwit, bar-tailed godwit, whimbrel Numenius phaeopus, curlew N. arquata, common redshank, greenshank Tringa nebularia and turnstone Arenaria interpres.'

SPA Conservation Objectives

2.1.4 With regard to the SPA and its Qualifying Features, to ensure that the integrity of the Site is maintained or restored as appropriate, and ensure that the Site contributes to achieving the aims of the Wild Birds Directive, the Humber Estuary SPA has the following conservation objectives (Natural England, 2019) based on 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.

Recognised Potential Threats and Pressures

2.1.5 A list of recognised potential threats and pressures on the SPA is provided in Table 2. This information is taken from the 'Natura 2000 - Standard Data Form' for the Humber Estuary SPA (JNCC, 2018b).

Table 2: Potential Threats and Pressures on the Humber Estuary SPA

Threat Code	Description	Origin of Pressure(s)
K01	Abiotic (slow) natural processes	Inside
I01	Invasive non-native species	Both
G01	Outdoor sports and leisure activities, recreational activities	Inside
M02	Changes in biotic conditions	Both
M01	Changes in abiotic conditions	Both

2.2 Humber Estuary SAC

Description and Qualifying Features

2.2.1 As detailed in the SAC citation (Natural England, 2014a), the Humber Estuary SAC covers an area of 36,657.15 ha and:

"is the second largest coastal plain Estuary in the UK, and the largest coastal plain estuary on the east coast of Britain. The estuary supports a full range of saline conditions from the open coast to the limit of saline intrusion on the tidal rivers of the Ouse and Trent. The range of salinity, substrate and exposure to wave action influences the estuarine habitats and the range of species that utilise them; these include a breeding bird assemblage, winter and passage waterfowl, river and sea lamprey, grey seals, vascular plants and invertebrates.'

2.2.2 As outlined in the SAC Citation (Natural England, 2014a) and the SAC conservation objectives (Natural England, 2018), the Humber Estuary SAC is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I (Annex I priority habitats are denoted with *) and species listed in Annex II, detailed in Table 3 below:

Table 3: Qualifying Habitats of the Humber Estuary SAC.

Code	Qualifying Feature
Annex I Habitats	
1130	Estuaries
H1140	Mudflats and sandflats not covered by seawater at low tide
1330	Atlantic salt meadows (*Glauco-Puccinellietalia maritimae)*

1150	Coastal lagoons
2160	Dunes with *Hippophae rhamnoides*
2110	Embryonic shifting dunes
2130	Fixed Dunes with herbaceous vegetation (‘grey dunes’)
H1310	*Salicornia* and other annuals colonising mud and sand
H1110	Sandbanks which are slightly covered by sea water all the time
2130	Shifting dunes along the shoreline with *Ammophila arenaria* (‘white dunes’)
Annex II Species	
1095	Sea lamprey *Petromyzon marinus*
1099	River lamprey *Lampetra fluviatillis*
1364	Grey seal *Halichoerus grypus*

SAC Conservation Objectives

2.2.3 To ensure that the integrity of the Habitats Site is maintained or restored as appropriate, and ensure that the Site contributes to achieving the Favourable Conservation Status of its Qualifying Features, the Humber Estuary SAC has the following conservation objectives (Natural England, 2018) based on 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.

Recognised Potential Threats and Pressures

2.2.4 The *'Natura 2000 - Standard Data Form'* (JNCC, 2018a) provides a list of potential pressures that can affect SACs (and other Habitats Sites). The Standard Data Form also identified whether the pressure is likely to be generated by impacts 'Inside', 'Outside' or from 'Both' inside and outside sources of the Habitats Site.

2.2.5 Potential pressures to the Humber Estuary SAC and whether impacts on the Habitats Site would come from Inside, Outside or Both of the Habitats Site are included in Table 4 below.

Table 4: Potential Sources of Pressure on the Humber Estuary SAC

Threat Code	Description	Origin of Pressure(s)
M01	Changes in abiotic conditions	Both
E02	Industrial or commercial areas	Outside
J02	Human induced changes in hydraulic conditions	Both
H02	Pollution to groundwater (point sources and diffuse sources)	Both
K01	Abiotic (slow) natural processes	Inside

2.3 Humber Estuary Ramsar

Description

2.3.1 Within the Information Sheet on Ramsar Wetlands (Joint Nature Conservation Council (JNCC), 2008), the Humber Estuary Ramsar is described and summarised as follows:

'The Humber Estuary is the largest macro-tidal estuary on the British North Sea coast. It drains a catchment of some 24,240 square kilometres and is the site of the largest single input of freshwater from Britain into the North Sea. It has the second-highest tidal range in Britain (max 7.4 m) and approximately one-third of the estuary is exposed as mud or sand flats at low tide. The inner estuary supports extensive areas of reedbed with areas of mature and developing saltmarsh backed in places by limited areas of grazing marsh in the middle and outer estuary. On the north Lincolnshire coast the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. The Estuary regularly supports internationally important numbers of waterfowl in winter and nationally important breeding populations in summer.'

Ramsar Criteria

2.3.2 A wetland can be considered internationally important if it meets any of the nine criteria stated within Annex II of the Explanatory Notes and Guidelines for the Criteria and guidelines for their application (adopted by Resolution VII.11 of the Ramsar Convention). The Humber Estuary Ramsar is internationally important as it meets five of the criteria within Annex II. The criteria that the Humber Estuary Ramsar site meets and reasoning is detailed below.

Criteria 1

2.3.3 The Humber Estuary Ramsar site is a representative example of a near-natural estuary with the following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons.

Criteria 3

2.3.4 The Humber Estuary Ramsar site supports a breeding colony of grey seals *Halichoerus grypus* at Donna Nook. It is the second largest grey seal colony in England and the furthest south regular breeding site on the east coast. The dune slacks at Saltfleetby-Theddlethorpe on the southern extremity of the Ramsar site are the most north-easterly breeding site in Great Britain of the natterjack toad *Bufo calamita*.

Criteria 5

2.3.5 Assemblages of international importance use the Humber Estuary Ramsar site: 153,934 waterfowl, non-breeding season (five year peak mean 1996/97 - 2000/2001).

Criteria 6

2.3.6 Species/populations occurring at levels of international importance. Qualifying species/populations (as identified at designation):

- Species with peak counts in spring/autumn:
    - European golden plover
    - Red knot
    - Dunlin
    - Black-tailed godwit
    - Common redshank
- Species with peak counts in winter:
    - Common shelduck
    - European golden plover

- Red knot
- Dunlin
- Black-tailed godwit
- Bar-tailed godwit

Criteria 8

2.3.7 The Humber Estuary acts as an important migration route for both river lamprey and sea lamprey between coastal waters and their spawning areas.

Recognised Potential Threats and Pressures

2.3.8 The 'Information Sheet on Ramsar Wetlands' for the Humber Estuary Ramsar (JNCC, 2008) states that there are factors adversely affecting the Ramsar site's ecological character, the details are summarised in Table 5 below. It also states that the Ramsar is subject to adverse ecological change.

Table 5: Factors (past, present or potential) adversely affecting the Site's ecological character

Adverse Factor	Description of the problem (Newly reported Factors only)	On-Site / Off-Site / Both	Major Impact?
Disturbance to vegetation through cutting / clearing	Reedbeds being cut and cleared on margins of pits associated with angling. Management agreements and enforcement to address.	On-Site	No
Vegetation succession	Lack of reedbed management leading to scrub encroachment. Management agreement to address.	On-Site	No
Water diversion for irrigation/domestic/industrial use	Abstraction causes reduced freshwater input. Review of consents well advanced but not yet implemented.	Both	No
Overfishing	Substantial lamprey by-catch in eel nets in River Ouse.	Off-Site	No
Pollution – domestic sewage	Reduced dissolved oxygen in River Ouse is a barrier to fish migration. Review of consents well	Both	Yes

Adverse Factor	Description of the problem (Newly reported Factors only)	On-Site / Off-Site / Both	Major Impact?
	advanced but not yet implemented.		
Pollution – agricultural fertilisers	Reduced dissolved oxygen in River Ouse is a barrier to fish migration. To be addressed through Catchment Sensitive Farming Initiatives and implementation of Water Framework Directive.	Both	Yes
Recreational/tourism disturbance (unspecified)	Particularly illegal access by motorised recreational vehicles and craft. Control through management scheme.	On-Site	No
Other factor	Coastal squeeze causing loss of intertidal habitats and saltmarsh due to sea level rise and fixed defences. The Humber Flood Risk Management Strategy has been developed and is being implemented.	On-Site	Yes

3. Data Review

3.1 Site Context

3.1.1 The Site is situated between the south-western outskirts of Scunthorpe. The Site is immediately surrounded by agricultural farmland to the north with the town of Scunthorpe to the east and the M181 to the west and Burringham Road to the South.

3.2 Site Habitats

3.2.1 A Preliminary Ecological Appraisal (PEA) was produced for the Site in 2022 (Ecus PEA, 2022).

3.2.2 The Site is two arable fields separated by a ditch, to the east of the M181 in Scunthorpe, North Lincolnshire (Figure 1).

3.2.3 The Site is 23.94 ha and comprises mainly arable farmland with additional habitats including dense bramble scrub, semi-improved grassland, ditches and a hedge.

3.3 Environmental Records Centre Data

3.3.1 Data was requested from the Lincolnshire Environmental Records Centre (LERC) as part of the Ecus PEA (2022) from within 2 km of the Site. Relevant records for the qualifying features of the Humber Estuary SPA, SAC and Ramsar site were collected and are detailed below.

3.3.2 No records of natterjack toad, grey seal, sea lamprey, or river lamprey were returned by LERC within 2 km of the Site.

3.3.3 A total of 815 records of birds were provided by NEYEDC for locations within 2 km of the Site dated between 2007 and 2019. These relate to a total of 76 different species, however, only three of those species are qualifying features of the Humber Estuary SPA, SAC, Ramsar, SSSI including:

- Eurasian Marsh Harrier - six records of this species have recorded within 2 km of the Site between 2002 and 2017;
- Ruff - one record of this species have recorded within 2 km of the Site and date back to 2002; and,
- Common Redshank - 31 records of this species have recorded within 2 km of the Site between the years of 1983 and 2011.

4. Screening for Likely Significant Effects

4.1 Methodology

4.1.1 The screening stage comprises the identification of any LSEs on the qualifying features of a Habitats Site. An LSE is any effect that may be reasonably predicted as a consequence of a project that may affect the conservation objectives and the qualifying features of the Habitats Site, but excluding inconsequential effects.

4.1.2 In consideration of the LSEs, the assessment must be made of the proposed works alone and in combination with other plans and projects. The assessment must also be made based on the best available data.

4.1.3 The likelihood of an LSE is not defined; however, in line with the precautionary principle, it is not necessary to determine that a significant effect is certain. In accordance with the European Court of Justice Ruling on the 'People over Wind and Sweetman' case in 2018, mitigation at the Screening stage cannot be considered.

4.1.4 The qualifying features of the Humber Estuary Ramsar site coincide with those of the Humber Estuary SPA and SAC, therefore relevant information and assessment has been collated where applicable to minimise repetition within this report. As a result, where impacts to the SPA and SAC are considered, impacts to the Ramsar site are also automatically considered.

4.2 Baseline Information

4.2.1 The baseline information to inform this Shadow HRA is that which is detailed in Section 4 of this report, namely comprising data collated as part of the PEA (Ecus, 2022), including desk study data from LERC.

4.3 Likely Significant Effects Assessment

4.3.1 Although the Site is approximately 12.1 km from the Humber Estuary SPA and 2.5 km from the Humber Estuary SAC, Ramsar and SSSI, species for which the Habitats Sites are designated are not confined to within them, i.e. birds have the ability to travel into the wider landscape, and as a consequence they may be affected by processes occurring outside of the Habitats Sites boundaries. For example, designated species may travel from the Humber Estuary to forage and could be disturbed by proposed development on the Site.

4.3.2 In addition, threats to the Habitats Sites include outside threats. Of the threats mentioned in Section 3, Tables 3 and 5, six threats relate to those from outside of the Habitats Sites and, therefore, the proposed development on the Site could contribute to:

- Changes in biotic conditions;

- Changes in abiotic conditions;
- Human induced changes in hydraulic conditions;
- Pollution to groundwater (point sources and diffuse sources);
- Water diversion for irrigation/domestic/industrial use;
- Pollution – domestic sewage.

4.3.3 The principal adverse effects predicted to result from the proposed development at the Site which could affect qualifying features of the Habitats Sites are considered to be:

- Potential for loss of functionally linked land associated with the Humber Estuary SPA, SAC and Ramsar;
- Potential for construction/operational impacts on birds using functionally linked land adjacent the Site. This may include increased levels of noise and physical disturbance which may be temporary during the construction stage and permanent during the operational stage.

Site Habitat Value for Qualifying Features

4.3.4 The Site is described in Section 4.2 with an assessment of the likely effect on individual bird species which form part of the qualifying features detailed in Table 6 below. Overall it is considered that the Site is unlikely to support these bird species or form functionally linked land as part of the Habitats Sites for the following reasons:

- Studies have shown that different wading bird species have varying tolerances to human disturbance (Smit and Visser, 1993). Each time a bird reacts to disturbance it uses up energy resources, which can have an impact to wintering birds at the time of year when food resources are scarcer. Given the presence of existing development and human activity surrounding the Site, it is considered unlikely that bird species which form the qualifying features of the Habitats Sites will currently use the Site as they are likely to avoid areas where greater levels of disturbance occur.
- It is also considered that the immediate adjacent land surrounding the Site is unlikely to be functionally linked land as part of the Habitats Site. This is because during the PEA (Ecus, 2022), the land to the immediate west, south and east of the Site was identified to comprise urban residential dwellings and two main roads. This is considered unsuitable supporting habitat for the qualifying bird species of the Habitats Site as wading birds and waterfowl would not likely choose to land and use the habitat for breeding, feeding or sheltering purposes.

4.4 Stand-Alone Effects

4.4.1 Tables 6 and 7 on the following pages present the findings of the Screening Assessment for LSE

from the proposed development on the conservation objectives and qualifying features of the Humber Estuary SPA, SAC, Ramsar and SSSI. Table 6 and Table 7 primarily list the conservation objectives and qualifying features of the SPA and SAC, however, these encompass the Ramsar and SSSI designated features therefore the potential for LSE to occur to the Ramsar and SSSI designations is also included within the tables.

4.4.2 The stand-alone effects consider the potential for LSE to the Habitats Sites resulting from this proposed development. The potential for the proposed development at the Site to have LSE in combination with any other projects in the area are considered further in Section 5.6.

4.4.3 Where a LSE was not identified, further assessment of effects on the qualifying features has been scoped out, and where LSE have been identified, the qualifying feature has been scoped in to the HRA screening.

Table 6: Summary of the Potential for LSE on the Humber Estuary SPA and relevant Ramsar and SSSI Features – Stand-Alone

Conservation Objective	LSE – Stand-Alone	
	Likely Effect	**Significance**
Maintain the extent and distribution of the habitats of the qualifying features	There will be no direct loss of / impact to SPA / Ramsar habitat as a result of the proposed development. All development will remain within the Site boundary, which is approximately 2.5 km and 12.1 km from the Humber Estuary. As a result it is considered that the extent and distribution of the habitats will be maintained.	No LSE are anticipated.
Maintain the structure and function of the habitats of the qualifying features, Maintain the supporting processes on which the habitats of the qualifying features rely	The Site is located approximately 2.5 km and 12.1 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site has no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. Construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biodiversity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and presence of an action plan should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site. Construction of the proposed development will involve using large machinery and vehicles which will increase air	No LSE are anticipated.

	pollution around the Site. Guidance[1] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 12.1 km from the SPA boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SPA.	
Maintain the population of each of the qualifying features	There will be no loss of habitat within the SPA/Ramsar. Each of the qualifying species are detailed further below in this table. Overall it is considered that the Site and the land surrounding the Site do not offer suitable breeding or wintering habitat for the qualifying species, and are not functionally linked land. This is as a result of the habitat requirements of the species and the habitats present at the Site, which differ from those habitats required.	No LSE are anticipated.
Maintain the distribution of the qualifying features within the Site	The activities relating to the proposed development will not result in any loss or direct physical impact to the Habitats Site. Nor will they result in increased noise or visual disturbance during the operational phase of the proposed development to the bird species using the Humber Estuary at its closest point to the Site. Whilst there is expected to be increased noise and visual disturbance during the construction phase, the surrounding habitats and land use will screen the noise and visual impacts from the Habitats Site. The Site itself and the land to the east and north are considered not to form functionally linked land to the Habitats Site. The land to the immediate west and south could be considered to support potential functionally linked land, however, the majority of the qualifying features would not use the habitats on or adjacent the Site and they are	No LSE are anticipated.

[1] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	unsuitable for foraging and breeding. Therefore considering all of the above, it is considered that the distribution of the qualifying features of the Habitats Site will be maintained.	
Species		
Great bittern (non-breeding and breeding)	The Site and adjacent fields do not contain suitable habitat for this species, which exclusively breeds in reedbeds (Svensson *et al.,* 2009) and also winters in reedbeds and small wetlands with stands of *Phragmites* (Wotton *et al*. 2011). Within data provided by LERC, this species has not been recorded within 2 km of the Site. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will shield bitterns associated with the habitats in the Habitats Site from visual or noise disturbance which may result from construction or operational activity.	No LSE are anticipated.
Common shelduck (non-breeding)	Non-breeding shelduck favour habitats with extensive mudflats which provide a food resource and protection from predators and human disturbance (Green, Burton and Cook, 2019). The Site and adjacent land do not support this habitat therefore are considered unlikely to be used by non-breeding shelduck. Within data provided by LERC, this species has not been recorded within 2 km of the Site. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site and disturbance to common shelduck associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.
Eurasian marsh harrier (breeding)	The Site and adjacent fields do not contain suitable nesting or foraging habitat for Eurasian marsh harrier, which breeds on shallow freshwater lakes or rivers and nests in tall reedbeds (Svensson *et al.* 2009). Marsh harrier have	No LSE are anticipated.

	been known to use agricultural land for hunting, and are threatened by human disturbance. Within data provided by LERC, six records of this species have recorded within 2 km of the Site between 2002 and 2017. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to marsh harrier associated with the habitats of the Habitats Site will be negligible.	
Hen harrier (non-breeding)	Whilst the habitats in the wider area are considered to offer suitable habitat for hen harriers, the Site itself and the adjacent land are considered unlikely to support this species due to existing levels of disturbance from human activity to foraging hen harriers and discourage this species from foraging within the Site. No records of this species were provided by LERC for locations within 2 km of the Site. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to hen harrier associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.
Pied avocet (non-breeding and breeding)	Pied avocets are most frequently found in mudflats, lagoons and sandy beaches (Robinson, 2005). These habitats are not present in the Site or within the land adjacent the Site, therefore this species is considered unlikely to be directly impacted via loss of supporting habitat as a result of the proposed development. No records were returned by LERC for this species within 2 km of the Site. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to pied avocet associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.

European golden plover (non-breeding)	During winter, golden plover will use arable farmland and various grassland types where they can find a range of food sources (Gillings and Fuller 1999). It is unlikely that large numbers of this species will use the Site due to its enclosure by mature scrub vegetation and hedgerow habitats, which would reduce the ability of the species to look out for predators. No records were returned by NEYEDC for this species within 2 km of the Site. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to European golden plover associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.
Red knot (non-breeding)	This species winters on wide tidal flats and occasionally in small numbers on freshwater pools near the coast (Svensson *et al*. 2009). The Site and adjacent fields do not support these habitats and, therefore, are considered unsuitable for this species. No records were returned by LERC for this species within 2 km of the Site. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to red knot associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.
Dunlin (non-breeding)	In winter this species is mostly found on tidal flats or on banks of seaweed on shallow shores (Svensson *et al*. 2009). The Site and adjacent fields do not support these habitat types therefore the Site is considered unsuitable for this species. No records were returned by LERC for this species within 2 km of the Site. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will	No LSE are anticipated.

	provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to dunlin associated with the habitats of the Habitats Site will be negligible.	
Ruff (non-breeding)	In winter and on passage this species forages in shallow water around lakes and wetland areas around the coast (The Wildlife Trust, Undated). The Site and adjacent fields do not support these habitats, therefore are considered unsuitable for this species. Within data provided by LERC, 1 record of this species have recorded within 2 km of the Site and date back to 2002. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to ruff associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.
Black-tailed godwit (non-breeding)	On passage and in winter this species favours estuaries, coastal mudflats, lagoons and inland marshes (Svensson *et al.* 2009). The Site and adjacent fields do not contain these habitats, therefore are considered unsuitable for this species. No records were returned by LERC for this species within 2 km of the Site. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to black-tailed godwit associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.
Bar-tailed godwit (non-breeding)	This species favours open mudflats during winter (Svensson *et al.* 2009). The Site and adjacent fields do not contain this habitat, therefore are considered unsuitable for this species. No records were returned by NEYEDC for this species within 2 km of the Site. WeBS data does not show high	No LSE are anticipated.

	levels of this species at the closest sectors of the Humber Estuary SPA. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to bar-tailed godwit associated with the habitats of the Habitats Site will be negligible.	
Common redshank (non-breeding)	On passage and in winter this species is typically found on or near the coast (Svensson *et al.* 2009), most often around estuaries and coastal lagoons where they forage in soil and mud (RSPB, Undated). The Site and adjacent land are considered unlikely to offer suitable foraging opportunities for this species. Within data provided by LERC, 31 records of this species have recorded within 2 km of the Site between the years of 1983 and 2011. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to common redshank associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.
Little tern (breeding)	The Site and adjacent fields do not contain suitable habitat for this species, which breeds along sandy, shallow coasts or islands with shingle and shells and low grass, also at lakes and wide rivers (Svensson, 2009). Little terns forage close to their breeding grounds (JNCC, 2021) therefore due to the distance between the Site and the Humber Estuary, and lack of supporting habitat on Site, impacts to breeding little tern are unlikely. No records were returned by LERC for this species within 2 km of the Site. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to little tern associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.

Waterbird assemblage (including species listed in paragraph 3.2.4 which are not discussed above)	Whilst the majority of the waterbird assemblage are unlikely to use the habitats at the Site due to the absence of the coastal and estuarine habitats, species such as wigeon, mallard, lapwing, whimbrel and curlew can use agricultural and grassland habitats for foraging and breeding. However, the habitats surrounding the Site would shield the presence of possible predators to the assemblage. It is considered that existing development and woodland/lines of trees between the Site and the Habitats Site will provide a barrier from visual or noise disturbance likely to result from construction or operational activities on the Site, and disturbance to the waterbird assemblage associated with the habitats of the Habitats Site will be negligible.	No LSE are anticipated.

Table 7: Summary of the Potential for LSE on the Humber Estuary SAC and relevant Ramsar and SSSI Features – Stand-Alone

Conservation Objective	LSE – Stand-Alone	
	Likely Effect	**Significance**
Maintain the extent and distribution of qualifying natural habitats and habitats of qualifying species	There will be no direct loss of / impact to SAC / Ramsar habitat as a result of the proposed development. All development will remain within the Site boundary, which is approximately 2.5 km from the Humber Estuary. As a result it is considered that the extent and distribution of the qualifying features will be maintained.	No LSE are anticipated.
Maintain the structure and function (including typical species) of qualifying natural habitats; Maintain the structure and function of the habitats of qualifying species; and, Maintain the supporting processes on which qualifying natural habitats and habitats of qualifying species rely	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site has no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biodiversity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native	No LSE are anticipated.

	species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[2] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC.	
Maintain the populations of qualifying species	The activities relating to the proposed development will not directly physically impact the qualifying species. The qualifying species are highly unlikely to be associated with the habitats on the Site and this is also reflected in the data received from LERC. Therefore, it is considered that the distribution of the qualifying species of the Habitats Site will be maintained.	No LSE are anticipated.
Maintain the distribution of qualifying species within the site	The activities relating to the proposed development will not directly physically impact the Habitats Site. The qualifying species are highly unlikely to be associated with the habitats on the Site and this is also reflected in the data received from LERC. Therefore, it is considered that the distribution of the qualifying species of the Habitats Site will be maintained.	No LSE are anticipated.

[2] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)*' (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

Habitats		
H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biodiversity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[3] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is	No LSE are anticipated.

[3] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
H1130. Estuaries	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biodiversity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[4] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there	No LSE are anticipated.

[4] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biodiversity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[5] advises that emissions from point sources more than	No LSE are anticipated.

[5] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2.5 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
H1150. Coastal lagoons*	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biosecurity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[6] advises that emissions from point sources more than	No LSE are anticipated.

[6] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department

	200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biosecurity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will	No LSE are anticipated.

of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	increase air pollution around the Site. Guidance[7] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biosecurity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site.	No LSE are anticipated.

[7] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[8] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
H2110. Embryonic shifting dunes	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biosecurity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native	No LSE are anticipated.

[8] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[9] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
H2120. Shifting dunes along the shoreline with Ammophila arenaria ("white dunes"); Shifting dunes with marram	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biosecurity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident occur.	No LSE are anticipated.

[9] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[10] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland*	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biosecurity /PPM will not guarantee that no pollutants will enter the water system but it will reduce the risk of this occurring through specific methodology and have an action plan in place should an incident	No LSE are anticipated.

[10] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[11] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
H2160. Dunes with Hippophae rhamnoides; Dunes with sea-buckthorn	The Site is located approximately 2.5 km from the Habitats Site therefore direct physical impacts which may impact the structure or function are considered unlikely as a result of the proposed development. Given the proximity of the Site to the Habitats Site, the proposed development is not expected to have hydrological connectivity to the Habitats Site. The ditches on and adjacent to the Site have no expected connectivity to the Humber Estuary and the proposed development will not remove the ditch that is currently present on the Site, although some small sections will be culverted. The construction of the proposed development will follow a CEMP: Biodiversity which will include Pollution Prevention Measures (PPM), therefore pollutants will be managed and a plan for containing any spill will be in place. The CEMP: Biosecurity /PPM will not guarantee that no pollutants will enter the water system but it will reduce	No LSE are anticipated.

[11] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	the risk of this occurring through specific methodology and have an action plan in place should an incident occur. As part of the CEMP: Biodiversity, biosecurity protocols will be implemented for invasive non-native species therefore the risk will be managed at the Site. The construction of the proposed development will involve using large machinery and vehicles which will increase air pollution around the Site. Guidance[12] advises that emissions from point sources more than 200 m from the boundary of a Habitats Site can be considered negligible (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). Given that the Site is located over 2 km from the SAC boundary it is considered that the movement of vehicles around the Site would not contribute to air pollution that would affect the SAC. Therefore it is not expected that there will be an LSE to this habitat.	
Species		
Sea lamprey and river lamprey	No records of sea or river lamprey have been provided by LERC for locations within 2 km of the Site. Sea and river lamprey have specific conditions in which they need to breed and feed. These can be found on slow flowing rivers with gravel and silt beds (Maitland, 2003). On the Site, one ditch is present, which connects to three further ditches outside the site boundary, however, these do not form part of a wider network of ditches. The Site is approximately 2 km west of the River Trent, which eventually discharges in the River Hull, with no direct watercourse connectivity. As such it is considered that the	No LSE are anticipated.

[12] The 200 m impact zone has been identified from Natural England guidance *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)'* (2018) and '*Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (NECR200)'* (2016), the Department of Transport's Transport Analysis Guidance (https://www.gov.uk/guidance/transport-analysis-guidance-tag) and Highways England '*The Design manual for roads and bridges DMRB LA 105 - Air quality'* (2019).

	sea and river lamprey are highly unlikely to migrate and use the ditches on the Site for breeding or feeding. The Site is not expected to have hydrological connectivity to the Site and the development will not change the hydrology of the Site, nor will it remove the ditch that is currently present on the Site. The construction of the proposed development will follow a CEMP: Biosecurity therefore PPM will be followed and no pollutants are expected to enter into the hydrological system. Overall it is considered unlikely that negative impacts to sea lamprey or river lamprey will occur as a result of the proposed development.	
Grey seal	The Site is not considered suitable for this species due to the lack of supporting habitat on the Site (i.e. estuarine/aquatic habitats) and due to the distance and lack of ecological connectivity between the Site and the Humber Estuary. The presence of existing commercial development and mature trees and other vegetation are considered to act as a barrier to minimise impacts associated with visual disturbance to the Habitats Sites.	No LSE are anticipated.

4.5 Summary of Potential Impacts to the Humber Estuary SPA, SAC, Ramsar

4.5.1 Taking into account the above information in Section 5.3 and Section 5.4, it is considered that the proposed development is *not* likely to result in LSE to the qualifying features of the Humber Estuary SPA, SAC, Ramsar and SSSI.

4.5.2 The Site and adjacent land are not considered to form functionally linked land as part of the Humber Estuary SPA, SAC, Ramsar, and SSSI Habitats Site, and the proposed development, whilst it would change the land use of the Site, it is not likely to have a significant effect on any of the conservation objectives or qualifying features of the Humber Estuary SPA SAC, Ramsar site and SSSI.

4.6 Consideration of In-Combination Effects

4.6.1 The interaction between the proposed development on the Site and other plans/projects has been considered in relation to potential in-combination effects on the Humber Estuary SPA, SAC, Ramsar and SSSI. The search considered planning applications from the North Lincolnshire Council (NLC) Planning Portal submitted during 2022 and 2023 within a 1 km radius of the Site as these development are considered to have greater interactivity with the proposed development.

4.6.2 A search identified that all planning applications are for small/ localised private developments, such as alterations to existing residential properties, including house extensions, amendments of previous planning applications and the felling of trees.

5. Conclusion

5.1.1 This Shadow HRA Stage 1 Screening assessment has concluded that in the absence of mitigation, there are no LSE predicted on the conservation objectives or the qualifying features of the Humber Estuary SPA, SAC, Ramsar and SSSI, as a result of the proposed development alone or in-combination with any other plans or projects. It is therefore considered that there is *not* a requirement to undertake a Stage 2 Appropriate Assessment for the proposed development with respect to the Humber Estuary SPA, SAC, Ramsar and SSSI.

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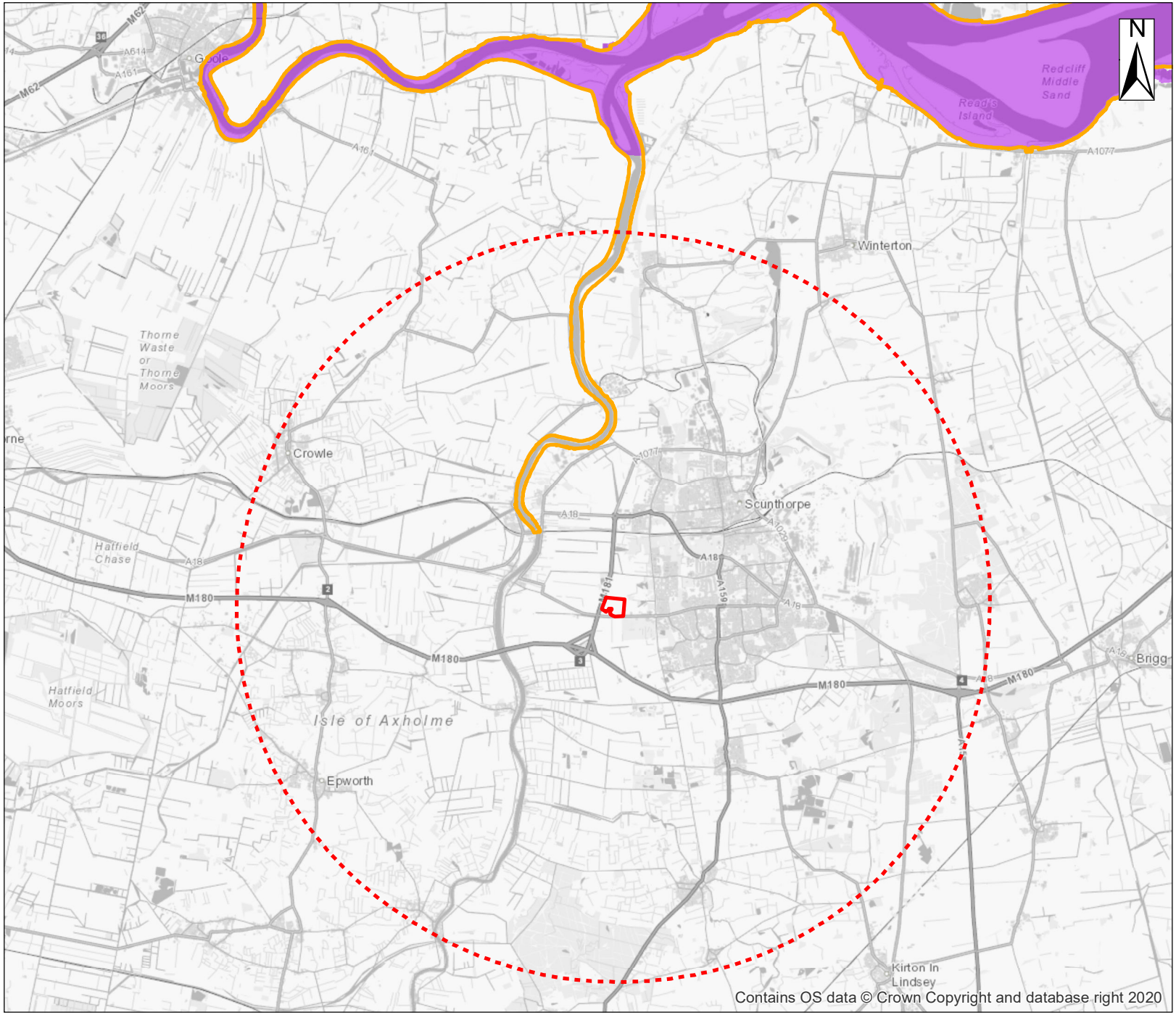
Figure 1: Site Location Plan and Humber Estuary SPA, SAC, Ramsar, SSSI Boundary



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Legend

- Site boundary
- 10km Study Area
- Humber Estuary SAC, RAMSAR & SSSI
- Humber Estuary SPA

0 3 6
Kilometers

Keepmoat Homes

Lincolnshire Lakes Site, Scunthorpe

Figure 1

Site Location Plan and Humber Estuary SPA, SAC, Ramsar, SSSI Boundary

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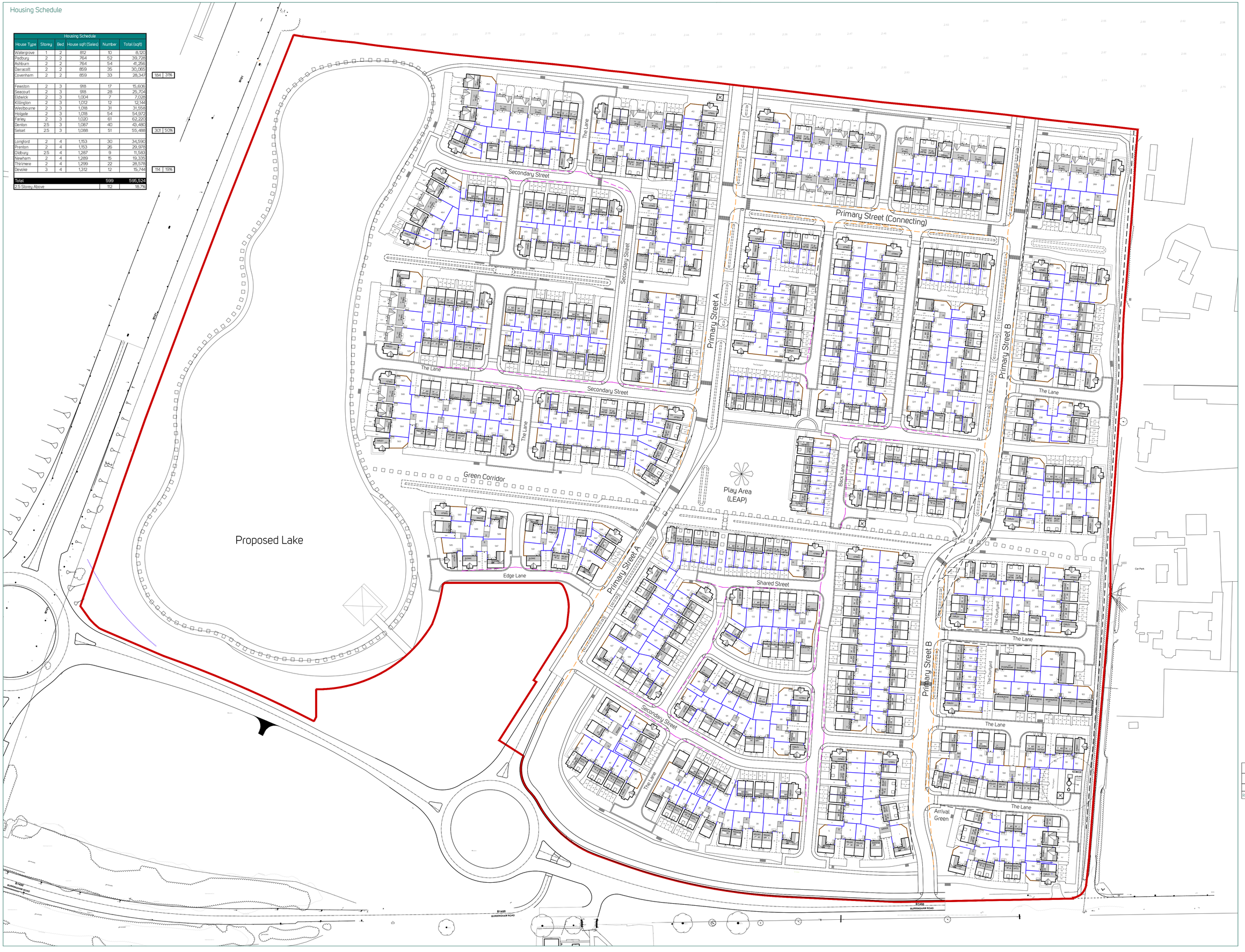
Date: December 2023 | Scale: 1:150,000@A3 | Drg.Ref: TL/22450/1

Appendix 1: Site Plan

Housing Schedule

Housing Schedule					
House Type	Storey	Bed	House sqft (Sales)	Number	Total (sqft)
Watergrove	1	2	812	10	8,120
Padbury	2	2	764	52	39,728
Ashburn	2	2	764	54	41,256
Darracott	2	2	859	35	30,065
Covenham	2	2	859	33	28,347
				184	31%
Fewston	2	3	918	17	15,606
Seacourt	2	3	918	28	25,704
Eldwick	2	3	1,004	7	7,028
Killington	2	3	1,012	12	12,144
Westbourne	2	3	1,018	31	31,558
Holgate	2	3	1,018	54	54,972
Farley	2	3	1,020	61	62,220
Denton	2.5	3	1,087	40	43,480
Selset	2.5	3	1,088	51	55,488
				301	50%
Longford	2	4	1,153	30	34,590
Prenton	2	4	1,153	26	29,978
Oldbury	2.5	4	1,287	9	11,583
Newham	2	4	1,289	15	19,335
Thirlmere	2	4	1,299	22	28,578
Devoke	3	4	1,312	12	15,744
				114	19%
Total				599	595,524
2.5 Storey Above				112	18.7%



Key

- Application boundary
- Private bin storage
- Shared drive bin collection point (only to be used on collection days)
- Indicates block paving areas
- Gates
- 1.8m high screen wall
- 1.8m high timber fence
- 1.5m high timber fence with 0.3m trellis & 1.8m high privacy panel between dwellings

Revision	Date	Revision Note	Issued
C	18.12.23	Layout amended to accommodate highway changes	n47
B	Nov 2023	Amendments to highway made and layout updated accordingly	n47
A	-	Planning Layout Issue Revision	n47

Keepmoat Homes

nineteen47
CHARTERED TOWN PLANNERS & URBAN DESIGNERS

Project
Lincolnshire Lakes

Drawing Title
Planning Layout

Project Code	Drawing Nr	Rev.	Drawing Scale
n1720	008	C	1:1000 @ A1

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