# Appendix 5.1

**Preliminary Ecological Appraisal** 

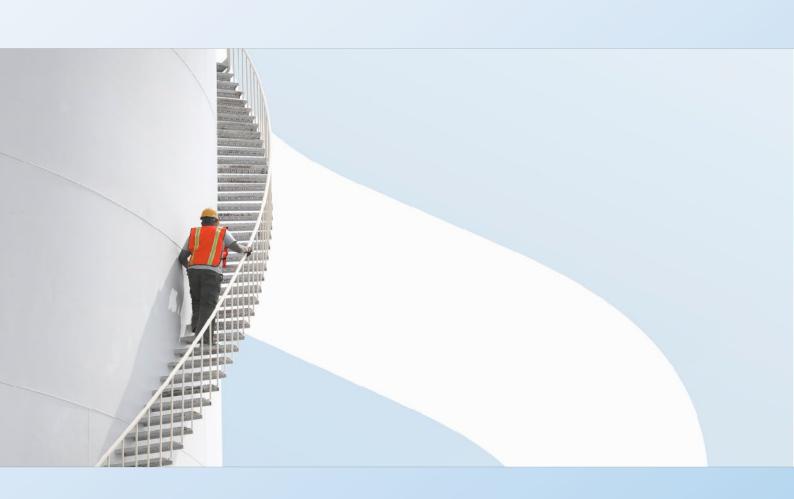
(Part 1 of 3)



## C.GEN Killingholme Limited

# NORTH KILLINGHOLME POWER PROJECT

Preliminary Ecological Appraisal





## C.GEN Killingholme Limited

### NORTH KILLINGHOLME POWER PROJECT

## Preliminary Ecological Appraisal

**PUBLIC** 

**PROJECT NO. 70055743** 

**OUR REF. NO. PEA** 

**DATE: MAY 2020** 

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### **EXECUTIVE SUMMARY**

WSP UK Limited (hereafter referred to as 'WSP') was commissioned by C.GEN Killingholme Limited (hereafter referred to as C.GEN) to undertake a Preliminary Ecological Appraisal of the North Killingholme Power Project

The purpose of this survey was to update the ecological baseline of the Site to support an amendment to the Development Consent Order (DCO) of the North Killingholme Power Project, granted in 2014. The project proposals include the construction and operation of a new 470 megawatt electrical (MWe) thermal generating station and associated development (hereafter referred to as the Project). The amendment includes a non-material change application to extend the lifetime of the DCO. In order to ensure the consent remains fit for purpose, other minor modifications to the Order are proposed. However, no changes are sought to the technology used, modes of operation or the Order Limits.

The aims of the PEA were:

- To identify the habitats on Site and to reconfirm their potential for supporting protected and/or notable species; and
- To identify any further surveys and assessments considered necessary to update the ecological baseline of the Site

The appraisal was completed using a desk study and a Site visit. The Site visit included an extended Phase 1 habitat survey and a ground level assessment of the suitability of structures and trees to support roosting bats.

Three European sites were identified within 10 km of the Site and two national sites within 5 km. Parts of the Humber Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar sites are located within the Site boundary.

The desk study also identified 8 non-statutory designated sites and a range of Habitats of Principal Importance (HPI) within 2 km of the Site. The desk study returned several records of protected and/or notable species within 5 km of the Site including badger *Meles meles*, bat species, water vole *Arvicola amphibius*, birds, great crested newt *Triturus cristatus* and reptiles.

The Site visit recorded a number of habitats including but not limited to dense and scattered scrub, scattered broad-leaved trees, semi-improved grassland, tall ruderal, swamp and marginal vegetation and waterbodies (which include ponds and ditches). These habitats continued to have potential to support badger, water vole, otter, bat species, breeding and wintering birds, great crested newts and reptiles. Buildings were identified with roosting features for bats.

Based on the results of the PEA, the following further surveys and assessments were proposed to update ecological baseline data:

- Further targeted badger surveys to reconfirm the level of badger activity within the Site;
- Presence/absence surveys for water vole and otter within the Site;
- Further surveys for bats including bat activity surveys comprising transects and static monitoring, internal inspections of structures and emergence/re-entry surveys of structures with bat roosting suitability;

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- Wintering bird surveys, autumn and spring passage surveys and breeding bird surveys;
- Further targeted surveys for reptiles in suitable habitat; and
- Environmental DNA (eDNA) surveys of waterbodies to confirm the presence/likely absence of great crested newt

Overall, the PEA has found that the ecological value of the site is likely to remain similar to that previously recorded for the Environmental Statement. A number of surveys, as specified above, need to be completed to confirm this.



#### 1 INTRODUCTION

#### 1.1 BACKGROUND

#### PROJECT BACKGROUND

- 1.1.1. WSP UK Limited (hereafter referred to as 'WSP') was commissioned by C.GEN Killingholme Limited ('C.GEN') to update the ecological baseline data in relation to a proposed amendment to the Development Consent Order ('DCO') granted for the North Killingholme Power Project in 2014. The project proposals include the construction and operation of a new 470 megawatt electrical (MWe) thermal generating station and associated development (the 'Project').
- 1.1.2. C.GEN now wishes to apply for a non-material change to extend the timeframe by which the authorised development shall commence. The Order limits, proposed plant and generation equipment, remain the same as described in the Environmental Statement (referred to as the Principal Project Area). The Principal Project Area is centred at National Grid Reference: TA 157 198; and hereafter referred to as the 'Site' (displayed on Figure 1).

#### 1.2 ECOLOGICAL BACKGROUND

- 1.2.1. This Site has been subject to a number of protected species surveys and previous assessment work. As part of the Environmental Impact Assessment for the North Killingholme Power Project produced in 2013, Parsons Brinckerhoff conducted the following supporting surveys:
  - Extended Phase 1 habitat survey;
  - Tree and building inspections for bats;
  - Bat activity surveys;
  - Breeding and wintering bird surveys;
  - Badger surveys;
  - Water vole surveys; and
  - Reptile surveys.
- 1.2.2. The survey results were used to inform the Ecology and Biodiversity Chapter of the North Killingholme Power Project Environmental Statement (C.GEN, 2013) and were undertaken between 2011 and 2013. All surveys were carried out within the existing Site boundary.
- 1.2.3. The previous surveys recorded a number of protected and/or notable species using the Site including water vole, foraging and commuting bats and breeding birds. Detailed information on the survey results can be seen in the Ecology and Biodiversity Chapter of the Environmental Statement (ES).

#### 1.3 SCOPE OF REPORT

- 1.3.1. C.GEN commissioned WSP to complete a Preliminary Ecological Appraisal (PEA) of the Site in May 2019. The brief was:
  - To provide update baseline ecological information of the Site and a surrounding study area with particular reference to whether legally protected and/or notable sites, species or habitats are present or likely to be present;
  - To undertake preliminary ground level assessments for bats of all trees and structures on Site;
  - To identify any changes in the ecological baseline relevant to the Project; and



If necessary, to identify the need for further ecological surveys to provide updated baseline information relevant to the Project.

#### 1.4 RELEVANT LEGISLATION AND POLICY

- 1.4.1. The appraisal has been compiled with reference to the following relevant nature conservation legislation, planning policy and the UK Biodiversity Framework from which the protection of sites, habitats and species is derived in England. The context and applicability of each item is explained as appropriate in the relevant sections of the report and additional details are presented in Appendix A.
  - The Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations);
  - The Wildlife and Countryside Act 1981 (as amended) (WCA);
  - Countryside Rights of Way Act 2000;
  - The Natural Environment and Rural Communities (NERC) Act 2006 (England);
  - The Protection of Badgers Act 1992;
  - The Hedgerow Regulations 1997;
  - The Wild Mammals (Protection) Act 1996;
  - The UK Post-2010 Biodiversity Framework (2011-2020) (JNCC and DEFRA, 2012);
  - Biodiversity 2020: A strategy for England's wildlife and ecosystem services (DEFRA, 2011);
  - UK Biodiversity Action Plan (UKBAP)<sup>1</sup>;
  - The National Planning Policy Framework (NPPF) 2019 (Ministry of Housing Communities & Local Government, February 2019); and
  - Lincolnshire Biodiversity Action Plan 2011-2020 (3<sup>rd</sup> edition).

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<sup>&</sup>lt;sup>1</sup> The UK BAP has now been replaced by the UK Post-2010 Biodiversity Framework, however, it contains useful information on how to characterise important species assemblages and habitats which is still relevant.



#### 2 METHODS

#### 2.1 OVERVIEW

- 2.1.1. This appraisal has been prepared with reference to good practice guidance published by the Chartered Institute for Ecology and Environmental Management (CIEEM, 2017), and Joint Nature Conservation Committee (JNCC, 2010); and guidance contained in the British Standard Code of Practice for Biodiversity and Development BS42020:2013 (British Standards Institute (2013).
- 2.1.2. This PEA is based on the following data sources:
  - Existing survey data from the Environmental Impact Assessment and Habitats Regulations Assessment work completed for the DCO (2013);
  - An ecological desk study;
  - A Phase 1 habitat survey; and
  - A protected/notable species assessment.
- 2.1.3. All trees and structures on Site were subject to preliminary ground level roost assessments to assess their suitability for supporting roosting bats. The assessments were carried out in line with good practice guidelines (Collins, 2016).

#### 2.2 DESK STUDY

- 2.2.1. The desk study was undertaken in May 2019 to review existing ecological baseline information available in the public domain and to obtain information held by relevant third parties. For the desk study exercise, records were collated within various radii around the Site. This approach is consistent with current good practice guidance published by the CIEEM, 2013 and 2015. To provide the baseline data for the ecological desk study, the following information was requested from Greater Lincolnshire Nature Partnership (GLNP) through their Lincolnshire Environmental Records Centre (LERC) search service:
  - Records of legally protected and notable species;
  - Bat records:
  - Records of statutory sites designated for nature conservation value;
  - Records of non-statutory sites designated for nature conservation value; and
  - Habitats of Principal Importance (HPI)<sup>2</sup> and woodland listed on the Ancient Woodland Inventory<sup>3</sup>.
- 2.2.2. All records above were requested from GLNP within a 5 km radius of the centre of the Site. For the purposes of this assessment, non-statutory designated sites and HPIs outside 2 km have been

<sup>&</sup>lt;sup>2</sup> Mapped locations of HPI are usually not available, but HPI aligns in the most part with UKBAP habitats. Inventories of UKBAP habitat have been prepared by a variety of organisations and at a national (Natural England priority habitat inventory) and local scale (e.g. by local records centres). In some instances these are primarily based on aerial photograph analysis rather than field survey.

<sup>&</sup>lt;sup>3</sup> The ancient woodland inventory in England lists areas over two hectares in size which have been continuously wooded since at least 1600. Areas of woodland under two hectares are not usually captured.



- omitted as these are considered to be outside the likely zone of influence of the development and are therefore not considered relevant.
- 2.2.3. The search for European statutory designated sites was increased to 10 km due to the nature of the Project. Information outside of the 5 km search buffer from GLNP was obtained from freely available datasets.
- 2.2.4. In addition, aerial imagery was used to identify any existing water bodies and watercourses within 250 m of the Site.
- 2.2.5. The findings of the desk study have been incorporated within Section 3 and Appendix B of this report and are shown on Figures 2 and 3.
- 2.2.6. The ecological desk study was carried out by a full member of CIEEM, who has completed numerous ecological desk studies.

#### 2.3 **HABITAT SURVEY**

- 2.3.1. A Phase 1 habitat survey of the Site was carried out in May 2019. The survey covered the entire Site including boundary features. In addition, where accessible, a 20 m area around the Site was also surveyed from vantage points and aerial mapping to gather an overview of habitats surrounding the Site. The Site and the extended 20 m area is hereafter known as the 'Survey Area'. The Phase 1 habitat survey was carried out by two surveyors who are both full members of CIEEM and have experience of completing PEAs of sites containing similar habitat types.
- 2.3.2. Habitats were described and mapped following the standard Phase 1 habitat survey methodology (JNCC, 2010). Phase 1 habitat survey is a standard technique for classifying and mapping British habitats. The dominant plant species are recorded, and habitats are classified according to their vegetation types. Where appropriate consideration was given to whether habitats qualify, or could qualify, as a HPI following habitat descriptions published by the Joint Nature Conservation Committee (JNCC, 2008).
- 2.3.3. A list of plant species was compiled (**Appendix C**), with relative plant species abundance estimated using the DAFOR scale<sup>4</sup>. The scientific names for plant species follow those in the New Flora of the British Isles (Stace, 2019) and are also listed in Appendix C. Species composition was not recorded for habitats within the 20 m Survey Area outside of the Site as no access was possible.
- 2.3.4. Habitats were marked on a mobile mapping computer and were subsequently digitised using a Geographical Information System (GIS).
- 2.3.5. Target notes were made to provide information on specific features of ecological interest (e.g. a badger Meles meles sett) or habitat features too small to be mapped. These are included in Appendix D and shown on Figure 5.

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<sup>&</sup>lt;sup>4</sup> The DAFOR scale has been used to estimate the frequency and cover of the different plant species as follows: Dominant (D) - >75% cover, Abundant (A) - 51-75% cover, Frequent (F) - 26-50% cover, Occasional (O) - 11-25% cover, Rare (R) – 1-10% cover., The term 'Locally' (L) is also used where the frequency and distribution of a species are patchy and 'Edge' (E) is also used where a species only occurs on the edge of a habitat type.



- 2.3.6. Any invasive plant species listed on Schedule 9 of the WCA 1981 (as amended) which were evident during the Phase 1 habitat survey were also target noted. Detailed mapping of such species; or a full survey of the Site for all invasive plant species is beyond the scope of this commission.
- 2.3.7. Data collected as part of this Phase 1 Habitat survey is suitable for use in retrospective biodiversity unit calculations, if required.

#### 2.4 PROTECTED SPECIES ASSESSMENT

2.4.1. The potential for the Site to support legally protected and notable species was assessed using the desk study results and combined with field observations during the habitat survey. The assessment of habitat suitability for protected and notable species was based on professional experience and judgement. This was supplemented by standard sources of guidance on habitat suitability assessment for key faunal groups including birds (Gilbert et al, 1998 and Bibby et al, 2000), great crested newt (Gent and Gibson, 2003 and English Nature, 2001); reptiles (Froglife, 1999 and Gent and Gibson, 2003); bats (Collins, 2016 and Mitchell-Jones, 2004); badger (Harris et al, 1991 and Roper, 2010); hazel dormouse (English Nature, 2006); otter (Chanin, 2003); and water vole (Dean et al, 2016).

#### 2.5 PRELIMINARY GROUND LEVEL ROOST ASSESSMENT

- 2.5.1. All trees and structures were inspected from the ground to enable an assessment of their suitability for supporting bat roosts.
- 2.5.2. A visual inspection of trees/structures was completed to search for features which may provide potential roosting opportunities for bats. Where suitable features were noted, their location and a brief description of the character was recorded. Additionally, where possible, features were visually inspected for evidence indicating use by roosting bats such as droppings, urine staining, noises and odours from bats and staining around a hole that may be caused by the natural oils in bat fur.
- 2.5.3. Trees and buildings were categorised in line with the descriptions in **Table 2-1** below (adapted from Collins, 2016).

Table 2-1 - Bat Roosting Suitability Categorisation

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Category	Description
High	A structure or tree with one or more potential roost sites that are suitable for supporting large roosts on a regular basis/for longer periods of time because of their size, shelter, protection, conditions and suitable surrounding habitat.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable habitat to be used on a regular basis or by larger numbers of bats.  A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features that only offer limited roosting opportunities.



Category	Description
Negligible	Building/tree with no potential opportunities for roosting bats, or very few or minor features in an isolated/unsuitable location such that the presence of a roost is considered highly improbable. e.g. isolated from suitable foraging or commuting habitats.

#### 2.6 NOTES AND LIMITATIONS

- 2.6.1. Every effort has been made to provide a comprehensive description of the Site. However, the following specific limitations apply to this assessment:
  - Ecological survey data are typically valid for two years unless otherwise specified; for example, if conditions are likely to change more quickly due to ecological processes or anticipated changes in management.
  - Records held by local biological record centres and local recording groups are generally collected on a voluntary basis; therefore, the absence of records does not demonstrate the absence of species, it may simply indicate a gap in recording coverage.
  - A limited number of locations within the Site could not be accessed as land access was not granted to certain areas which restricted movement. These areas are displayed on Figure 4 by red hatching. A combination of vantage points and aerial imagery was used to identify the habitats present in these areas; however, no species lists were prepared for these habitats. It is considered that the Phase 1 habitat types were accurately identified.
  - The Phase 1 Habitat survey was carried out over the period of three days. As such, only a selection of all species that occur within the Site will have been recorded. However, through use of desk study information to supplement site survey data, it is considered that an accurate assessment of the potential for the Site to support protected species or those of conservation concern was possible.
  - The extended Phase 1 habitat map (Figure 4) has been reproduced from field notes and plans. Whilst this provides a sufficient level of detail to fulfil the requirements of a PEA, the maps are not intended to provide exact locations of key habitats and are not suitable for scaling.



#### 3 RESULTS

#### 3.1 DESIGNATED SITES

#### **STATUTORY SITES**

3.1.1. Three European sites were identified within 10 km of the Site. These sites are described in Table 2 below. The desk study identified two national sites within 5 km of the centre of the Site which are detailed in **Table 3-1** below. The Humber Estuary SAC, SPA and Ramsar sites share almost the same boundary. Parts of these sites are located within the Site.

Table 3-1 - Statutory Designated Sites of European or International Importance

Site Name	Designation	Size (ha)	Approximate Distance and Orientation from Site	Description
Humber Estuary	SPA	37630.24	0 km (part of the Site lies within the SPA)	Extensive wetland and costal habitat with extensive areas of reedbed, mature and developing saltmarsh backed by grazing marsh, and saltmarsh backed by low sand dunes with marshy slacks and brackish pools. The estuary supports important number of water birds (especially geese, ducks and waders) during the migration periods and in winter. In summer, it supports important breeding populations of bittern Botarus stellaris, marsh harrier Circus aeruginosus, avocet Recurvirostra avosetta and little tern Sterna albifrons.
Humber Estuary	SAC	36657.15	0 km (part of the Site lies within the SAC)	Annex I habitats that are a primary reason for selection for this site are estuaries. Annex I habitats that are present as a qualifying feature bit not primary reason for selection of this site are sandbanks which are slightly covered by sea water all the time, coastal lagoons, Salicornia and other annuals colonizing mud and sand, Atlantic salt meadows Glauco-Puccinellietalia maritimae, embryonic shifting dunes, shifting dunes along the shoreline with Ammophila arenaria, fixed coastal dunes with herbaceous vegetation and dunes with Hippopha rhamnoides. Annex II species present as a qualifying feature but not primary reason for site selection are sea lamprey



Site Name	Designation	Size (ha)	Approximate Distance and Orientation from Site	Description
				Petromyzon marinus, river lamprey Lampetra fluviatilis and grey seal Halichoerus grypus.
Humber Estuary	Ramsar	37630.24	0 km (part of the Site lies within the Ramsar site)	Largest macro-tidal estuary on British North Sea coast. Representative example of near-natural estuary with following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, salt marshes and coastal brackish/saline lagoons. The site supports a breeding colony of grey seals and dune slacks on the southern extremity of the Ramsar site are breeding site of natterjack toad <i>Bufo calamita</i> . There are assemblages of waterfowl of international importance.

**Table 3-2 - Statutory Designated Sites of National Importance** 

Site Name	Designation	Size (ha)	Approximate Distance and Orientation from Site (km)	Description
Humber Estuary	SSSI	37000.6	0 km (part of the Site lies within the SSSI)	The Humber Estuary is a nationally important site with a series of nationally important habitats. These are the estuary itself (with its component habitats of intertidal mudflats and sandflats and coastal saltmarsh) and the associated saline lagoons, sand dunes and standing waters. The site is also of national importance for the geological interest at South Ferriby Cliff (Late Pleistocene sediments) and for the coastal geomorphology of Spurn. The estuary supports nationally important numbers of 22 wintering waterfowl and nine passage waders, and a nationally important assemblage of breeding birds of lowland open waters and their margins. It is also nationally



Site Name	Designation	Size (ha)	Approximate Distance and Orientation from Site (km)	Description
				important for a breeding colony of grey seals <i>Halichoerus grypus</i> , river lamprey <i>Lampetra fluviatilis</i> and sea lamprey <i>Petromyzon marinus</i> , a vascular plant assemblage and an invertebrate assemblage.
North Killingholme Haven Pits	SSSI	20.61	0.01 km south east of the Site	The main reasons for notification of these pits are their importance as large saline lagoons with an exceptionally rich fauna, and their significance as roosting and feeding grounds for waterfowl, which occur in internationally important numbers in the Humber Estuary in winter.

#### **NON-STATUTORY SITES**

3.1.2. The desk study identified eight non-statutory designated sites within 2 km of the centre of the Site. A description of these sites is detailed in **Table 3-3** below. The closest non-statutory designated site is the Killingholme Haven Pits Lincolnshire Wildlife Trust site which is located 0.01 km to the South East of the Site.

**Table 3-3 - Non-Statutory Designated Sites** 

Site Name	Designation	Size (ha)	Approximate Distance and Orientation from Site (km)	Description
Burkinshaw's Covert	LWS	35.0	0.81 km south of the Site	Large flat wood (mid-20 <sup>th</sup> century plantation) lying approximately 5 m above sea level crossed by series of deep, old drains and very recently erected set of electricity transmission lines.
Chase Hill Wood	LWS	9.5	0.62 km south of the Site	Moderately sized rectangular wood on almost flat land with canopy of even aged trees that have not yet reached maturity.
East View Meadow	LWS	0.8	1.5 km north west of the Site	Small field of neutral grassland on ridge-and-furrow, surrounded by

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Site Name	Designation	Size (ha)	Approximate Distance and Orientation from Site (km)	Description
				thick un-managed hedges to the north and west.
Eastfield Road Railway Embankment	LWS	0.7	1.6 km south of the Site	Lincolnshire Wildlife Trust Nature Reserve on northern side of railway line creating a strip of sheltered, botanically rich woodland glades.
Halton Marsh Clay Pits	LWS	19.8	0.05 km north of the Site	Two lakes and several pools, damp pasture, ungrazed wetland, developing scrub and planted woodland.
Scrub Lane East Field	LWS	0.9	1.9 km west of the Site	Neutral grassland, with ridge and furrow. Overgrown dense hedges surround the field.
Swinster Lane Field	LWS	1.1	1.8 km west of the Site	Fishing lake and two small ponds with great crested newt recorded as present in 2006.
Killingholme Haven Pits	Lincolnshire Wildlife Trust Reserve	32	0.01 km south east of the Site	A complex of four flooded clay pits with associated rough grassland and scrub. The reserve is important for its saline lagoon habitat which supports several rare invertebrate species. It is important for migrant waders in spring and autumn. Spotted redshank, dunlin, greenshank, common sandpiper, little ringed plover, ruff and black-tailed godwit, the latter often in large numbers, are regular visitors.

#### OTHER HABITATS OF CONSERVATION IMPORTANCE

- 3.1.3. The desk study identified 11 HPIs within 2 km of the Site. These were coastal and floodplain grazing marsh, coastal saltmarsh, deciduous woodland (lowland mixed deciduous woodland), lowland meadows (including good quality semi-improved grassland), reedbeds, saline lagoons, no main habitat but additional habitats and mudflats (including intertidal mudflats). No Ancient Woodland Inventory (AWI) woodland was identified within 2 km of the Site.
- 3.1.4. The Phase 1 habitat survey recorded intertidal mudflats and coastal saltmarsh as being located within the Site, adjacent to the Humber Sea Terminal (displayed on **Figure 3**). Ponds and reedbeds were assessed as potential HPIs within the Survey Area, located to the north west and south west; however, these were not identified during the desk study. The desk study identified an area within



the Site as being deciduous woodland. No deciduous woodland was recorded within the Site during the habitat survey.

#### 3.2 PHASE 1HABITAT SURVEY

#### **OVERVIEW**

3.2.1. The following account summarises the findings of the Phase 1 habitat survey. 16 Phase 1 habitat types were identified in the Site. They are mapped on **Figure 4** and are listed in **Table 3-4** along with areas in hectares (or length for linear features). A description of the dominant and notable species, the composition and management of each habitat is provided below, and an indicative species list is provided in **Appendix C**. Target notes are provided in **Appendix D** and photographs in **Appendix E**. Alpha-numeric codes used in this section cross-refer to the JNCC Phase 1 habitat survey classification (JNCC, 2010). The order of the habitat descriptions below reflects their ordering in the Phase 1 habitat survey manual and does not reflect habitat importance. Photographs of habitats are located in **Appendix E**.

Table 3-4 - Phase 1 Habitat Areas within the Survey Area

Phase 1 Habitat	Area (ha)	Length (m)
A2.1 - Dense Scrub	6.06	-
A2.2 - Scattered Scrub	0.59	-
A3.1 - Parkland/Scattered Broadleaved Trees	0.24	-
B2.2 - Semi-Improved Grassland	0.03	-
C3.1 - Tall Ruderal	2.83	-
F1 - Swamp	0.28	-
F2 – Marginal Vegetation	0.17	-
G1 – Standing Water	1.61	-
J1.2 - Amenity Grassland	0.27	-
J2.3.4 - Fence	-	3,000
J2.3.6 – Dry Ditch	-	600
J2.3.8 – Earth Bank	0.04	-
J3.6 - Buildings	3.81	-



Phase 1 Habitat	Area (ha)	Length (m)
J4 - Bare Ground	1.21	-
J5 - Other Habitat	0.07	-
Hardstanding (no alpha-numeric code)	85.04	-
Habitats outside the Site but within Survey Area		
A2.2 – Dense Scrub	1.69	-
B4 – Improved Grassland	2.09	-
B5 – Marshy Grassland	0.24	-
G1 – Standing Water	1.89	-
H1.1 – Intertidal Mud/Sand	0.29	-
H1.2 - Intertidal Boulders/Rocks	0.39	-
H2.6 - Saltmarsh	0.50	-
J.1 – Arable	1.07	-
J3.6 - Buildings	0.18	-
J4 - Bare Ground	0.02	-
G2.6 – Running/Brackish Water	1.98	-
Hardstanding	3.04	-
TOTAL	115.95	

#### **HABITATS**

#### Dense Scrub - A2.1

3.2.2. Numerous parcels of dense scrub were recorded throughout the Site with the largest parcels located to the south west of the Site (see Photograph 11). All dense scrub habitats were made up of similar botanical species with varying levels of abundance.



- 3.2.3. The dense scrub located to the south west of the Site (south of Building 1) comprised dominant hawthorn *Cretaegus monogyna* and blackthorn *Prunus spinosa* with stands of abundant goat willow *Salix caprea* and ash *Fraxinus excelsior*. This habitat formed part of the south and south western boundary of the site. This habitat also formed mosaics with the neighbouring tall ruderal habitat to the east.
- 3.2.4. Dense scrub located along Clough Lane comprised similar species and formed a successional habitat with much taller scattered broadleaved trees. This habitat lined the standing water habitat also found along Clough Lane. This stretch of dense scrub was made up of dominant ash and abundant hawthorn and sycamore *Acer pseudoplatanus*.
- 3.2.5. A linear belt of dense scrub was also recorded to the north of the Site. This continuous stretch of dense scrub was located along the northern and north eastern boundaries of the Site. Ash and hawthorn were dominant species in this habitat with abundant sycamore.
- 3.2.6. A perimeter of dense scrub was also recorded around the northern waterbody. This perimeter of habitat comprised dominant hawthorn, abundant blackthorn and ash and frequent goat willow.

#### Semi-Improved Grassland - B2.2

3.2.7. Two short strips of semi-improved grassland were recorded to the south of the site, creating bankside habitats of a narrow stretch of standing water (see photograph 23). The sward length varied along the habitat. This habitat comprised dominant cock's foot *Dactylis glomerata*, Yorkshire fog *Holcus lanatus*, red fescue *Festuca rubra* and abundant common vetch *Vicia sativa* with occasional lesser trefoil *Trifolium dubium*.

#### Tall Ruderal - C3.1

- 3.2.8. Three sections of this habitat were recorded on site, with two of them forming a scattered scrub mosaic. A square section recorded in the south of Site (see Photograph 12). This habitat comprised dominant creeping and spear thistle *Cirsium vulgare* with abundant common nettle *Urtica dioica* and teasel *Dipsacus fullonum*, weld *Reseda luteola* and colt's-foot *Tusillago farfara* were also recorded as frequent species.
- 3.2.9. Another scattered scrub mosaic section was Icoated to the north, adjacent to Building 9 which comprised abundant dog rose, occasional prickly sow-thistle *Sonchus asper* and frequent common spotted orchid *Dactylorhiza fuchsia*, with frequent cow parsley and common hogweed. This habitat was bordered by hard standing on each side, see Photograph 18.
- 3.2.10. The western border of the Site comprised a similar composition of species and extended the length of the boundary, reaching the dense scrub habitat in the south west. This stretch of habitat comprised dominant sycamore saplings, abundant broadleaved dock *Rumex obtusifolius, frequent creeping thistle Cirsium arvense* and cow parsley along with a range of other forbs

#### Scattered Scrub - A2.2

- 3.2.11. A fringe of dominant hawthorn, abundant ash and bramble were recorded within the tall ruderal / scattered scrub mosaic to the north of the Site adjacent to Building 9.
- 3.2.12. Sycamore and ash saplings combined with bramble and occasional dog rose was recorded within the tall ruderal / scattered scrub mosaic along the western boundary of the Site.



#### Parkland/Scattered Trees, Broadleaved - A3.1

3.2.13. A narrow linear section of broadleaved trees was recorded in the south of the Site along Clough Lane. This habitat was dominated by ash and sycamore with rare pedunculate oak *Quercus robur*. The tree line height reached an approximate height of eight metres and is bordered by dense scrub and standing water habitats.

#### Swamp - F1

3.2.14. A wide section of reedbed habitat was recorded to the north of the waterbody in the south of the Site. This habitat was bordered by dense scrub to the north, east and west. The dominant vegetation in this habitat comprised common reed *Phragmites australis*, abundant yellow iris *Iris pseudacorus* and frequent reedmace *Typha latifolia*.

#### Marginal Vegetation - F2.1

3.2.15. Two sections of marginal reedbed habitats were recorded within the Site. These were located lining the southern part of the waterbody in the south of the Site and along the perimeter of the waterbody to the north of the site. These habitats were comprised of dominant common reed and occasional yellow iris and reedmace.

#### Standing Water - G1

- 3.2.16. A number of waterbodies were recorded on Site which include two ponds and a series of standing water ditches. One pond is located to the north west and one to the south west. Both of these waterbodies are irregularly shaped and comprise a margin dominated by common reed with occasional flag iris and reedmace. Both waterbodies are bordered by dense scrub.
- 3.2.17. The northern, southern and western banks of the pond to the north west are concrete lined and is fed by a drain that runs east and then north. The pond to the south west of the Site is shallow and is not fed by a drain.
- 3.2.18. Two very small waterbodies within the tall ruderal habitat to the south west of the Site were recorded, see TN4 on Figure 4. These were scrape like features with an accumulation of water.
- 3.2.19. Numerous standing water ditches are located throughout the Site. The majority of standing water ditches on Site are located within and/or between dense scrub habitats and have steep banks. One standing water ditch is located to the very south of the Site, immediately north of Haven Road and south of a large parcel of hardstanding. This ditch is lined by bankside semi-improved grassland.

#### Amenity Grassland - J1.2

3.2.20. Two small patches of amenity grassland habitats were recorded to the south of the Site and located outside of the C.RO Ports Killingholme Building just north of Haven Road. These grassland parcels were intensively mown and comprised dominant perennial rye-grass *Loleum perenne*, cock's foot *Dactylis glomerata*, common daisy *Bellis perennis* and abundant ribwort plantain *Plantago lanceolata*.

#### Fence - J2.3.4

3.2.21. A boundary fence runs along the western, northern and eastern Site boundary comprised of wire and concrete posts. A similar fence is also located running north to south along Clough Lane.



#### Dry Ditch - J2.6

- 3.2.22. Two dry ditches were recorded within the Site, one to the south east of the Site and one to the west. The south eastern ditch followed the public footpath along the coast and was lined by dense scrub.
- 3.2.23. The ditch to the south west was started in the south and continued north west. The ditch was set between dense hawthorn scrub.

#### Earth Bank - J2.3.8

3.2.24. An earth bank was recorded to the south west of the Site, adjacent to dense scrub and bare ground habitats (see photograph 19). The earth bank had a fringe of scrub species on top with an active sand martin burrow and rabbit burrows near the ground.

#### Buildings - J3.6

3.2.25. Due to the nature of the Site, buildings were recorded in all areas and were comprised mainly of industrial warehouse buildings made from steel. Other buildings recorded to the west of the site comprised brick, some of which were in a state of disrepair, see **Table D3** in **Appendix D** for a description of buildings.

#### Bare Ground - J4

3.2.26. A few sections of bare ground habitat are located to the south west of the site. These include three square shaped parcels north of Building 1 and a track that runs south of Building 1.

#### Hardstanding

3.2.27. Hardstanding dominated the Site which included roads, paths, and large storage areas for vehicles.

#### 3.3 PRELIMINARY GROUND LEVEL ROOST ASSESSMENT OF TREES

- 3.3.1. One tree on Site was identified as having low suitability to support roosting bats. The location of this tree with low bat roost suitability is show on Figure 4 (Sheet 7) as TN 11 and the full descriptions of its potential roosting features are given in Appendix D. Photos of the tree are shown in Appendix E.
- 3.3.2. All other trees on Site were assessed as having negligible suitability for supporting roosting bats and are therefore not considered further.

#### 3.4 PRELIMINARY GROUND LEVEL ROOST ASSESSMENT OF STRUCTURES

- 3.4.1. Seven structures on Site were assessed as having suitability to support roosting bats. One structure on Site (B5) was identified as having moderate suitability to support roosting bats with six structures identified on Site (B1, B4, B6, B7, B8, B9) as having low suitability to support roosting bats. All other structures on site were considered negligible for roosting bats.
- 3.4.2. The locations of structures that were assessed for roosting suitability are shown in **Figure 5** and the full descriptions of potential bat roosting features are given in **Appendix D**. Photos of the structures are shown in **Table E1** in **Appendix E**.

#### 3.5 PROTECTED AND NOTABLE SPECIES ASSESSMENT

3.5.1. The potential for the Site to support legally protected species and notable species has been assessed using the results of the desk study and observations made during the site survey of habitats within and immediately surrounding the Site. A summary of desk study information is



included within Appendix B. Desk study records have only been considered below if they are recent (from the last 10 years) and/or if they relate to species that may be supported by habitats at the Site. Habitats present within the Site are suitable for the following species; further consideration is given below to the likelihood for these species to be present within the Site:

- Badger;
- Dormouse;
- Otter:
- Water vole
- Bats:
- Reptiles;
- Amphibians; and
- Birds.
- 3.5.2. The Site does not provide suitable habitat for other protected or notable species. Other species, beyond those listed above, will not be considered further in this PEA.

#### **BADGER**

- 3.5.3. 42 records of badger were returned from the desk study within 5 km of the Site. The closest record to the Site for badger was within 70m of the Site.
- 3.5.4. Signs of badger were identified during the field survey, including badger setts. Detailed results are not presented here due to the sensitivity of badger records. Results of badger survey work will be reported separately in a confidential annex report; it is intended this be provided to PINs, Natural England, and the LPA Ecologist as part of the non-material amendment application.
- 3.5.5. Habitat in the form of dense and scattered scrub provided suitable areas for sett creation and the grasslands on Site provided suitable foraging and commuting habitat for badger.

#### **HAZEL DORMOUSE**

3.5.6. No records of dormouse *Muscardinus avellenaria* were returned from the desk study within 5 km of the Site. The Site contains suitable habitat for dormice; however, the Site is situated outside the known distribution of dormice in the UK and it is therefore considered highly likely that dormice are absent from the Site. This species will therefore not be considered any further within this report.

#### **OTTER**

- 3.5.7. Six records of otter *Lutra lutra* were returned from the desk study within 5 km of the Site. The closest record was 580 m north-east of the Site. Surveys carried out in 2012 found no evidence of otter within the Site or within habitat near the Humber Estuary.
- 3.5.8. Sub-optimal habitat was present within the Site for otter. Limited features for supporting resting places for otter were noted and ditches within the Site were largely ephemeral watercourses or with limited flow. Areas of dense scrub could provide temporary cover but are less likely to provide opportunities for building resting places or natal dens. Although under heavy disturbance from human activity, the Humber Estuary could provide foraging opportunities for otter. During field surveys in 2012, no otter evidence was recorded, and the Ecology and Nature Conservation chapter stated that the Site was considered to be of negligible conservation value to otters.
- 3.5.9. No evidence of otters, such as spraints or resting places, were recorded during the Phase 1 habitat of the Site in 2019.



#### **WATER VOLE**

- 3.5.10. 104 records of water vole *Arvicola amphibius* were returned from the desk study within 5 km of the Site, the closest record was 260 m east of the Site. During the previous water vole surveys undertaken in 2011<sup>5</sup> presence of water voles within the Site was confirmed.
- 3.5.11. Optimal habitat for water vole was identified on Site during the Phase 1 habitat survey, in the form of standing water ditches and ponds.

#### **BATS**

- 3.5.12. In total, 72 records of bats were identified as part of the desk study within 5 km of the Site over the last 10 years. The records comprised five species, which were brown Long-eared Bat *Plecotus auritus*, Noctule Bat *Nyctalus noctula*, Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, and Natterer's Bat *Myotis nattereri*. No records of bat roosts were returned within the Site.
- 3.5.13. During previous ecological surveys of the site in 2011, no roosts were found. The site was found to contain some suitable habitat for foraging and commuting bats. Some buildings within the Site were identified as having potential to be used by low numbers of roosting bats in the future<sup>6</sup>.
- 3.5.14. The closest record was of a noctule bat, soprano pipistrelle, common pipistrelle and myotis bat species recorded 269 m south of the site at Chase Hill Wood. This included a roost record for noctules.
- 3.5.15. During the field survey, one tree and seven structures were assessed as providing suitable roosting habitat for bats. All other buildings on Site were considered to have low or negligible suitability for roosting bats.
- 3.5.16. The Site also provided suitable habitat for foraging and commuting bats in the form of dense scrub, scattered broadleaved trees, standing water ditches and ponds.

#### **REPTILES**

3.5.17. No records of reptile were returned as part of the desk study within the last 10 years. However suitable habitat for reptiles was recorded to the west of the Site in the form of scattered and dense scrub, a mosaic of tall herb and fern and scrub interfaces, waterbodies, south facing slopes and waste material that could be used for refuge and basking. This habitat had changed in structure since the initial assessment in 2013, with a greater extent of suitable reptile habitat recorded during the 2019 Phase 1 habitat survey. No reptiles were recorded as part of the reptile surveys carried out in 2011.



#### **AMPHIBIANS**

- 3.5.18. 179 records of amphibian were identified during the desk study. These included great crested newt *Triturus cristatus*, palmate newt *Lissotriton helvetica*, smooth newt *Lissotriton vulgaris*, common toad *Bufo bufo* and common frog *Rana temporaria*. The closest record identified during the desk study was of a great crested newt, 894 m from the Site (no orientation provided). Presence of common toad was confirmed during the Phase 1 habitat survey.
- 3.5.19. Suitable habitat for amphibians was recorded on Site in the form of ditches, ponds and a mosaic of terrestrial habitat such as tall ruderal and scrub. A further five ponds were located outside of the Site boundary within 250 m which could provide a network of breeding ponds for great crested newt potentially connecting to the Site. No great crested newts were recorded as part of the previous surveys carried out in 2011 on ponds within the Site.

#### **BIRDS**

- 3.5.20. The desk study returned 1,467 records of 85 protected and/or notable bird species within 5 km of the Site. A total of 20 species listed under Schedule 1 of the Wildlife and Countryside Act 1981. See Appendix B, Table 8 for a list of protected and notable bird species identified during the desk study.
- 3.5.21. Sand martin *Riparia riparia*, willow warbler *Phylloscopus trochilus*, reed warbler *Acrocephalus scirpaceus*, coot *Fulica atra*, mute swan *Cygnus olor*, yellowhammer *Emberiza citrinella*, linnet *Linaria cannabina*, chaffinch *Fringilla coelebs*, swallow *Hirundo rustica*, swift *Apus apus*, blue tit *Cyanistes caeruleus*, reed bunting *Emberiza shoeniclus*, house sparrow *Passer* domesticus, little grebe *Tachybaptus ruficollis*, song thrush *Turud philomelos*, starling *Sturnus vulgaris* and wood pigeon *Columba palumbus* were noted displaying behaviour typical of breeding within the Site during the PEA survey.
- 3.5.22. Much of the habitat on Site was suitable for nesting birds, including the trees, scrub, buildings, and waterbodies which provided nesting opportunities for waterfowl. The Site also provided a wide variety of foraging opportunities. Parts of the site, specifically the scrub areas and ponds in the south and north west may provide roosting opportunities for waterfowl and wading birds.

#### **INVASIVE NON-NATIVE PLANT SPECIES**

3.5.23. Five records of Japanese knotweed *Reynoutria japonica* were identified during the desk study within 5 km. No invasive non-native plant species were identified during the Phase 1 habitat survey.



#### 4 DISCUSSION

#### 4.1 STATUTORY DESIGNATED SITES

- 4.1.1. Three European sites were identified within 10 km of the Site with two national sites within 5 km of the centre of the Site.
- 4.1.2. The three European Sites which are the Humber Estuary SAC, SPA and Ramsar site form the Humber Estuary European marine site<sup>7</sup> part of which is located within the Site Boundary. Two nationally designated sites, North Killingholme Haven Pits SSSI and Humber Estuary SSSI, are also located adjacent to and within the Site (respectively). The Humber Estuary SSSI underpins the Humber Estuary SAC, SPA and Ramsar sites and shares the same boundary. The Humber Estuary is an extensive area of wetland and coastal habitat with reedbed, mature and developing saltmarsh backed by grazing marsh, and saltmarsh backed by low sand dunes with marshy slacks and brackish pools. The estuary supports important numbers of water birds (especially geese, ducks and waders) during the autumn and spring migration periods and over winter. In summer, it supports important breeding populations of bittern, marsh harrier, avocet and little tern.
- 4.1.3. North Killingholme Haven Pits SSSI consists of large saline lagoons with an exceptionally rich fauna, used as roosting and feeding grounds for waterfowl, which occur in internationally important numbers in the Humber Estuary in winter. The Humber Estuary SPA and Ramsar Sites also includes the North Killingholme Haven Pits SSSI within their boundaries (the Humber Estuary SAC does not).
- 4.1.4. No additional European Sites or SSSI have been designated within 10 or 5km of the Site respectively, since the DCO was granted.

#### 4.2 NON-STATUTORY DESIGNATED SITES

- 4.2.1. There are 8 non-statutory designated sites within 2 km of the Site; the closest of which is Killingholme Haven Pits located 0.02 km south which is a Lincolnshire Wildlife Trust site. This site overlaps with the North Killingholme Haven Pits SSSI. This site has not undergone any changes in area or boundary since the assessment in the ES submitted in 2014.
- 4.2.2. There are no new non-statutory designated sites since the submission of the ES. All non-statutory designated sites (with the exception of East Halton Dismantled Railway Site of Nature Conservation (SNCI) and Eastfield Railway Embankment Local Wildlife Site (LWS) remain the same. The aforementioned sites are no longer identified as non-statutory designated sites.

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<sup>&</sup>lt;sup>7</sup> European marine sites are defined in Habitats Regulations as any part of a European site covered (continuously or intermittently) by tidal waters or any part of the sea in or adjacent to Great Britain up to the seaward limit of territorial waters.



#### 4.3 HABITATS

- 4.3.1. 11 HPIs were recorded within 2 km of the Site; coastal and floodplain grazing marsh, coastal saltmarsh, deciduous woodland (lowland mixed deciduous woodland), lowland meadows (including good quality semi-improved grassland), reedbeds, saline lagoons, no main habitat but additional habitats and mudflats (including intertidal mudflats). A number of these are identified as HPI in accordance with Section 41 of the NERC Act 2006. Under Section 40 of this legislation, every public body (including planning authorities) must, 'in exercising its functions, have regard so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'.
- 4.3.2. There are two sections of potential HPIs located to the west of the Site and two located to the east. Two parcels of reedbed habitat were recorded around the waterbody to the south and are considered HPI in line with the list of species on Section 41 of the NERC Act 2006. Coastal salt marsh and intertidal mudflats are located around the Humber Sea Terminal, in the east of the Site.

#### 4.4 PROTECTED AND NOTABLE SPECIES

4.4.1. The results of the desk study, Phase 1 habitat Survey and protected species assessment highlighted the potential presence of several protected species or species of conservation concern within the Site, or within the immediate surroundings of the Site. These included badger, water vole / otter, bats, reptiles, amphibians and birds. The legal protection afforded to these species is outlined below and where appropriate, the requirement for further survey and/ or mitigation measures is identified.

#### **BADGER**

- 4.4.2. The Protection of Badgers Act 1992 makes it illegal to wilfully kill, injure or take any badger, or attempt to do so. It also makes it an offence to intentionally or recklessly damage, destroy or obstruct access to any part of a badger sett. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.
- 4.4.3. Further detailed badger surveys are recommended to update and reconfirm the level of badger activity within the Site. As set out previously in this report, the results of any badger surveys will be reported in a confidential annex report; it is intended this will be provided to PINS, Natural England, and the LPA Ecologist only, due to the sensitivity associated with the locations of badger setts.

#### WATER VOLE AND OTTER

- 4.4.4. Water voles are protected from killing and injury and their places of rest or shelter are protected from damage, destruction or obstruction under the Wildlife and Countryside Act 1981 (as amended). Additional protection from disturbance is extended to individuals occupying places of rest or shelter. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.
- 4.4.5. The water vole is also listed as a Species of Principal Importance (SPI) in accordance with Section 41 of the NERC Act 2006. Public bodies have an obligation under Section 40 to have regard for these species when carrying out their functions. The water vole is also listed on the Lincolnshire BAP.
- 4.4.6. The ditches within the Site provide suitable habitat for water vole. Previous surveys in 2011 confirmed the presence of this species within the Site. Therefore, it is recommended that further



- assessment be undertaken to update and determine presence/absence of water vole within the Site and obtain an indication of population size and distribution relative to previous findings.
- 4.4.7. The otter is protected in the UK from killing, injury and disturbance and their resting places are protected from damage or destruction under the Habitats Regulations. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) with respect to disturbance of individuals occupying places of rest or shelter and obstruction of access to these.
- 4.4.8. Sub-optimal aquatic and terrestrial habitat such as ponds and standing water ditches was recorded on Site during the Phase 1 habitat survey in 2019 and it is unlikely that otters are using the Site for breeding. However, the desk study identified records within 2 km of the Site. The Ecology and Nature Conservation chapter considered the Site as having negligible conservation value for otter.
- 4.4.9. It is recommended that an updated water vole and otter survey is carried out, to reconfirm the baseline for these species.

#### **BATS**

- 4.4.10. All species of bats recorded within the UK are protected from killing, injury and disturbance<sup>8</sup> and their resting places (roosts) are protected from damage or destruction under the Habitats Regulations. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) with respect to disturbance of individuals occupying places of rest or shelter and obstruction of access to these. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.
- 4.4.11. Certain species of bats, including Bechstein's bat, greater and lesser horseshoe bats, noctule bat, brown long-eared bat and soprano pipistrelle bat are also listed as a Species of Principal Importance (SPI) for the conservation of biodiversity in England in accordance with Section 41 of the NERC 2006. Section 40 obliges public bodies (including local planning authorities) to have regard for the conservation of biodiversity (including SPI) when discharging their duties (including determining planning applications). Furthermore, Natterer's bat, whiskered bat, Brandt's bat, noctule bat, Leisler's bat, common and soprano pipistrelle, barbastelle bat and brown-long eared bat are listed as species on the Lincolnshire BAP.
- 4.4.12. Suitable habitat was recorded for foraging, commuting and roosting within the Site. The Project could result in the disturbance or destruction of bat roosts, should any have become established since the DCO was granted in 2014.
- 4.4.13. During the field survey, seven structures were assessed as having suitability to support roosting bats (see **Figure 5** and **Appendix C**). Further assessment of buildings in the form of internal inspections (where safe to do so) and/or emergence surveys to determine presence, potential presence or likely absence of roosting bats is required.

<sup>&</sup>lt;sup>8</sup> Disturbance is defined within the Habitats Regulations as that which is likely to impair a species ability to survive, breed or reproduce, hibernate or migrate or to significantly affect the local distribution or abundance of the species.



- 4.4.14. Internal inspections are recommended to confirm the suitability of these buildings for roosting bats. Further desk emergence and dawn re-entry surveys may be required on structures that retain suitability once internal inspections have been carried out. These surveys should be undertaken between May and September to conform to good practice guidance (Collins, 2016).
- 4.4.15. The Site also provided suitable habitat for foraging and commuting bats in the form of linear broadleaved tree belts, dense scrub and waterbodies. The Site also has some level of connectivity to the wider landscape. Bat surveys undertaken in 2011 recorded activity of common pipistrelle and noctule bats using habitats in the west of the Site. No bat roosts were recorded during these surveys. To reconfirm bat activity levels within the Site and to understand if it is an important area for foraging and commuting bats, activity surveys are recommended. These would assess the distribution and abundance of bat species and their behaviour, identifying any key areas used by these species and identifying any changes in the level of use since the 2011 surveys.

#### **REPTILES**

- 4.4.16. Native widespread reptile species (common or viviparous lizard, adder, grass snake and slow worm) are partially protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This includes protection from killing and injury.
- 4.4.17. All reptile species are also listed as SPI in accordance with Section 41 of the NERC Act 2006. Public bodies have an obligation under Section 40 to have regard for these species when carrying out their functions.
- 4.4.18. No reptiles were recorded on Site during reptile surveys in 2011.To reconfirm the presence or likely absence of reptiles on the Site, a combined survey comprising visual searches and the use of artificial reptile refugia should be completed.

#### **AMPHIBIANS**

- 4.4.19. Great crested newts are protected from killing, injury and disturbance<sup>9</sup> and their places of rest or shelter (occupied habitat) protected from damage or destruction under the Habitats Regulations. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) with respect to disturbance of individuals occupying places of rest or shelter and obstruction of access to these. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.
- 4.4.20. Great crested newts and common toad *Bufo bufo* are also listed as SPI in accordance with Section 41 of the NERC Act 2006. Public bodies have an obligation under Section 40 to have regard for these species when carrying out their functions. All native British newt species are listed on the Lincolnshire BAP.
- 4.4.21. No great crested newts were recorded during the previous ecological surveys in 2011. However, the 2019 desk study identified great crested newt records within 2 km of the Site. Suitable habitat for

<sup>&</sup>lt;sup>9</sup> Disturbance is defined within the Habitats Regulations as that which is likely to impair a species ability to survive, breed or reproduce, hibernate or migrate or to significantly affect the local distribution or abundance of the species.