

# WREN KITCHENS, FALKLANDS WAY

Ecological Impact Assessment (Low Impact EclA)



Client:

Wren Kitchens Ltd

Report Reference:

RSE\_5526\_R1\_V2\_EclA






Issue Date:

November 2021

**PROJECT**

Client:	Wren Kitchens Ltd
Project:	Wren Kitchens, Falkland Way
Reference	RSE_5526_R1_V2_EclA
Report Title	Ecological Impact Appraisal (Low Impact)

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# 1 EXECUTIVE SUMMARY

## 1.1 Background

i RammSanderson Ecology Ltd was instructed by Wren Kitchens Ltd to carry out a Preliminary Ecological Appraisal of land at Falkland Way, Barton upon Humber to inform the proposals for a proposed HGV and car parking facility at the site. The site was in the process of being cleared at the time of survey so a full assessment of the habitats could not be conducted, however satellite imagery indicates that the site was likely predominantly rough grassland, with areas of scrub/scattered trees and tall ruderal vegetation throughout.

**Table 1: Summary of Ecological Features**

Ecological Feature	Comment	Avoidance	Mitigation	Compensation/Enhancement	Residual Impact
Designated Sites	The site falls within the Impact Risk Zone of the Humber Estuary RAMSAR SAC SPA SSSI, however a previous Habitat Regulations Assessment (JBA 2020) has scoped out this allocated employment site for further assessment. Therefore, no impacts are considered likely to the Humber Estuary from the proposals.	N/A	Follow Environment Agency Pollution prevention guidance 2013 and ensure adequate provisions are on site in the form of spill kits and wash down areas. Dust suppression techniques	N/A	Negligible
Habitats and Biodiversity Net Gain	Site had been cleared prior to survey taking place, however the existing hedgerows are a Habitat of Principal Importance under the NERC Act 2006. Majority of habitats on site cleared to facilitate development and therefore offsetting off site recommended. Biodiversity Impact Assessment indicates 10.4% gain in biodiversity	Retain hedgerows where possible.	Retain hedgerows where possible. Maintain root protection areas of hedgerows.	Enhancement of grassland and woodland offsite	Positive

Ecological Feature	Comment	Avoidance	Mitigation	Compensation/Enhancement	Residual Impact
Great Crested Newt	Four ponds (P1-4) were located c.20m from the site boundary, with a further 23 waterbodies located within 500m of the site.	N/A	Retain hedgerows where possible District Level Licensing (DLL) Scheme application	District Level Licensing (DLL) Scheme	Negligible
Bats	No trees on site offer potential bat rooting potential. Hedgerows offer commuting and foraging potential but any loss of these will not impact foraging availability locally.	Retain hedgerows where possible.	Implementation of a sensitive lighting strategy	Hedgerow and wildflower meadow creation	Negligible
Badger	No setts or signs recorded. Limited suitable habitat on site due to recent clearance but low risk of badgers traversing the site remains.	N/A	Precautionary methods of works with regard to mammals detailed within a CEMP/PMW document	N/A	Negligible
Birds	The scattered trees and hedgerows have some limited scope for bird nesting provision.	Retain hedgerows and trees where possible.	Vegetation clearance should be completed during the period Sept-end Feb to avoid nesting birds. Where this is not possible, a nesting bird check in the presence of an ecologist will be required	Hedgerow and wildflower meadow creation	Negligible
Reptiles	Hedgerows and scrub provide suitable habitat for reptiles. Site offered more suitable habitat prior to clearance. Connectivity to suitable habitats reduced due to construction site north of site.	Retain hedgerows where possible.	Vegetation clearance following methods set out in PMW of CEMP.	Hedgerow and wildflower meadow creation	Negligible
Riparian Mammals and Freshwater Invertebrates	Nearest watercourse was located c.100m from the site and as such water voles are not anticipated to be impacted. Otter may traverse the site while foraging and commuting. The area limits suitability for white-clawed crayfish.	N/A	Precautionary method of works with regard to mammals passing through the site detailed within a CEMP/PMW document. Follow Environment Agency Pollution prevention guidance 2013 and ensure	N/A	Negligible

Ecological Feature	Comment	Avoidance	Mitigation	Compensation/Enhancement	Residual Impact
			adequate provisions are on site in the form of spill kits and wash down areas. Dust suppression techniques		
Terrestrial Invertebrates	The site had been cleared and as such provides limited suitability for terrestrial invertebrates/	N/A	N/A	Hedgerow and wildflower meadow creation	N/A
Eels/Fish	The river Humber is located too far afield for impacts upon fish to be anticipated as a result of the works. Care should be taken to minimise pollution in order to further reduce risks.	N/A	Follow Environment Agency Pollution prevention guidance 2013 and ensure adequate provisions are on site in the form of spill kits and wash down areas. Dust suppression techniques	N/A	Negligible
Principal Species	Species such as hedgehog and toad are potentially present locally but no habitat impacts are proposed.	Retain hedgerows where possible	Precautionary methods of works with regard to mammals detailed within a CEMP/PMW document	Hedgerow and wildflower meadow creation	Negligible
Invasive Species	No invasive species present on site.	N/A	N/A	N/A	N/A

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## 2 INTRODUCTION AND BACKGROUND

### 2.1 Purpose and Scope of this Report

- i RammSanderson Ecology Ltd was commissioned by Wren Kitchens to assess the potential for protected species and habitats to be present on the site of a proposed industrial development at Falkland Way, Barton upon Humber. The survey area included two fields separated by a central hedgerow that was previously covered in scrub or grassland, however, the site was being cleared at the time of survey with the topsoil being removed by heavy plant machinery. The proposals for the site include the creation of hardstanding car and HGV parking /storage areas.
- ii To complete an EclA of the proposals, a desk-based assessment, Extended Phase 1 Habitat Survey and protected species assessments were carried out based upon the findings of the Preliminary Ecological Appraisal (PEA). This report is a stand-alone EclA which has been prepared following current guidance (CIEEM, 2018) and can be used to lawfully determine a planning application in line with current planning policy. This report does not form part of a wider discipline Environmental Impact Assessment (EIA) of Environmental Statement (ES), nor does it confer the need for any such documentation.
- iii The study area was defined depending on the proposals, desk study and applicable legislation (Appendix 1) as shown in the enclosed Site Location Plan (Figure 1) and Phase 1 Habitat plan (Figure 2) plus a buffer zone extended to include the Zone of Influence (see section below) of the proposals (hereafter referred to as the "Site").
- iv This ecological impact assessment is based on a review of the development proposals provided by the Client in Drawing: Derby RP – P1B (Appendix 3), desk study data (third party information) and surveys of the Site. The aims of this report are to:
  - Classify the habitat types at the site based on standard Phase 1 Habitat survey methodology;
  - Evaluate any potential for protected species to be present;
  - Identify any ecological constraints that may affect the scheme design;
  - Provide recommendations for any further actions that might be required (for example, to monitor badger setts periodically through construction);
  - Identify likely significant effects on ecological receptors;
  - Assess if the proposals are compliant with legislation and policy relating to biodiversity; and
  - Identify opportunities for ecological enhancement to provide net biodiversity gain in line with the National Planning Policy Framework (NPPF, 2021).
- v This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of RammSanderson Ecology Ltd.
- vi The surveys and desk-based assessments undertaken as part of this review and subsequent report including the Ecological Constraints and Opportunities Plan are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013) and follow current guidance (CIEEM, 2018).

### 2.2 Zone of Influence

- i The Zone of Influence (Zol) is used to describe the geographic extent of potential impacts of a proposed development. The Zone is determined by the development proposals in relation to individual species ecological requirements indicated in best practice guidelines.
- ii In relation to great crested newts (GCN), the zone of influence is considered to be up to 500m from the site boundaries, as this is the distance that Natural England would require to be considered in relation to GCN licensing.

- iii For badgers, the zone of influence is typically 30-50m from the Site boundary as this is the distance within which a sett can be damaged or disturbed by heavy machinery.
- iv As bats are highly mobile species, the ZoI for these can be 5km from a site wherein high-quality habitat will be impacted by proposals.
- v For designated sites, the Zone of Influence can be >10km from the site and this is termed the Impact Risk Zone (IRZ). Where sites occur within an IRZ the requirement for a Habitat's Regulations Assessment or Environmental Impact Assessment may be triggered.

### 2.3 Site Context and Location

- i The site was located north of Falkland Way, Barton Upon Humber (central grid reference: TA 03986 22658). The site was located within the north-eastern aspect of Barton-Upon-Humber, adjacent to the southern bank of the River Humber. The site at the time of survey was being cleared and as such was dominated by bare ground, however using satellite imagery the site appears to have been previously dominated by scrub and grassland with hedgerows. The surrounding land use was predominantly agricultural, with residential and industrial developments within Barton-upon-Humber.



Client: Wren Kitchens Ltd.

Project: Wren Kitchens, Falklands Way  
Date: 07/10/2021

Drawing: Site Location and Context GC  
Drawn By:

Drawing No. RSE\_5526\_Figure 1

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0 100 m

0 1 km

0 2 km

## 3 METHODOLOGY

### 3.1 Ecological impact Assessment

i The ecological impact assessment is based on the standard best practice methodology provided by the Guidelines for Ecological impact Assessment (CIEEM, 2018). The assessment identifies important sites, habitats, species and other ecological features that are of conservation value based on factors such as legal protection, statutory or local site designations such as Sites of Special Scientific Interest (SSSI) or Local Wildlife Sites (LWS) or inclusion on Red Data Book Lists or Local Biodiversity Action Plans.

ii The importance of an ecological feature is considered within a defined geographical context. The following frame of reference is used, or adapted to suit local circumstances:

- International and European
  - National
  - Regional
  - Metropolitan, County, vice-county or other local authority-wide area
  - River Basin District
  - Estuarine system/Coastal cell
  - Local
  - Below Local level e.g. on site only
- Importance

High Importance



Negligible

iii Consideration of impacts at all scales is important, and essential if objectives for no net loss of biodiversity and maintenance of healthy ecosystems are to be achieved. In identifying impacts, the review considers the Client's Site proposals and any subsequent recommendations made are proportionate / appropriate to the site and have considered the Mitigation Hierarchy as identified below:

- **Avoid:** Provide advice on how the development may proceed by avoiding impacts to any species or sites by either consideration of site design or identification of an alternative option.
- **Mitigate:** Where avoidance cannot be implemented mitigation proposals are put forward to minimise impacts to species or sites as a result of the proposals. Mitigation put forward is proportionate to the site.
- **Compensate:** Where avoidance cannot be achieved any mitigation strategy will consider the requirements for site compensatory measures.
- **Enhance:** The assessment refers to planning policy guidance (e.g. NPPF) to relate the ecological value of the site and identify appropriate and proportionate ecological enhancement in line with both national and local policy.

iv For the purpose of this EclA, a 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' (explained in 3.1.i.) or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects are considered significant at the range of scales from international to local. A significant effect is an effect that is sufficiently important to require assessment and reporting so that the ecological consequences of the project are understood. In broad terms, significant effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).

v Note: The following definitions are used for the terms 'impact' and 'effect' throughout this report:

- **Impact** – Actions resulting in changes to an ecological feature. For example, the construction activities of a development removing a hedgerow.

- **Effect** – Outcome to an ecological feature from an impact. For example, the effects on a dormouse population from loss of a hedgerow.

### 3.2 Desk Based Assessment

- Data regarding statutory and non-statutory designated sites, plus any records of protected or Priority species and habitats was requested from the local ecological records centre and online resources, details of which are provided in Table 2 below.

**Table 2: Consulted resources**

Consultee/Resource	Data Sought	Search Radius from Boundary
Lincolnshire Environmental Records Centre (Greater Lincolnshire Nature Partnership)	Non-Statutory Site Designations	2km
	Protected/Principal Species Records	2km
<a href="http://www.magic.gov.uk">www.magic.gov.uk</a> <sup>1 2</sup>	Statutory Site Designations (Impact Risk Zones)	20km
	Habitats of Principal Importance (NERC Act, 2006)	1km
	European Protected Species Licences	5km

*NB: Desk study data is third party controlled data, purchased or consulted for the purposes of this report only. RammSanderson Ecology Ltd cannot vouch for its accuracy and cannot be held liable for any error(s) in these data.*

### 3.3 Phase 1 Habitat Survey

- An extended Phase 1 Habitat Survey of the site was completed to identify habitats present. All habitats within the site boundary were described and mapped following standard Phase 1 Habitat Survey methodology (JNCC, 2010), which categorises habitat type through the identification of individual plant species.
- Nomenclature follows Stace (Stace, 2010) for vascular plant species and the DAFOR scale for relative abundance was used in the field to determine dominant plants within habitats and communities (D = dominant, A = abundant, F = frequent, O = occasional and R = rare).

### 3.4 Protected / Priority Species Scoping Assessment

- The habitats on site were assessed for their suitability for supporting any legally protected or Priority species that would be affected by the proposed development. This includes invasive non-native plant species such as Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*).

### 3.5 Biodiversity Impact Assessment

#### 3.5.1 Outline Procedure

- Biodiversity Impact Assessment of proposals was carried out in accordance with guidelines published by DEFRA and via the DEFRA Metric Calculation Tool 3.0. The existing value of individual habitats on site is initially calculated by accurately mapping the proposed development site from information collected during

<sup>1</sup> Multi Agency Geographic Information for the Countryside Interactive GIS Map.

<sup>2</sup> MAGIC resource was reviewed on the 07/10/2021

a Biodiversity Scoping Assessment/Phase 1 Habitat Survey and by dividing the land into individual habitat parcels. This part of the study is informed by JNCC Phase 1 habitat and UK habitats classification systems. The distinctiveness, condition, connectivity and strategic significance of these parcels is then assessed and together with the area of each habitat, a value is assigned. A summary of how habitat distinctiveness, condition assessment, connectivity and strategic significance is determined is detailed within DEFRA best practice literature

### **3.5.2 Calculation**

- ii Once the habitat types have been input into the Biodiversity Impact Assessment calculator, along with their area, distinctiveness, condition, connectivity and strategic significance an overall score in biodiversity units is calculated.

### **3.5.3 Compensation**

- iii Once the biodiversity value of existing on-site habitats has been quantified, the value of indicatively proposed habitats to achieve a net gain as part of development must be calculated. This is calculated using the methodology applied above, taking into account the area/length of indicatively proposed habitats, their distinctiveness, condition, connectivity and strategic significance once this is established. A further two parameters are also taken into consideration at this stage. These are the time it will take to reach this target condition and the difficulty of creating/restoring each habitat type proposed. By using these parameters, the calculation takes into account that the time it takes for a habitat to establish may result in a loss of biodiversity for a period of time and also the risk of failure associated with any habitat creation/restoration

## **3.6 Limitations**

- i It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.
- ii The site was being cleared on the date of survey, meaning that the survey does not reflect the true condition of the site prior to works commencing, and field signs or suitable ecological features may have been lost. The report takes this into account and the Biodiversity Impact Assessment is being prepared using the satellite imagery to create a 'before' scenario.

## **3.7 Accurate lifespan of ecological data**

- i The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for approximately 18 months from the date of survey, notwithstanding any considerable changes to the site conditions, the presence of mobile species such as bats, otters and badgers or where species/county specific guidance dictates otherwise (CIEEM, 2019).

## 4 BASELINE CONDITIONS

### 4.1 Surveyors Competency and Survey Conditions

- i The survey was carried out by Gabrielle Cruttenden MSc BSc (Hons). Gabrielle is a member of CIEEM and has been a professional ecologist for three years and is appropriately experienced and qualified to undertake this survey. She holds a class 1 license for great crested newts (2021-53823-CLS-CLS). The survey was completed during suitable conditions as detailed in the table below.

**Table 3: Summary of conditions during survey**

Abiotic Factor	Survey 1
Survey type	PEA
Date completed	28/10/2021
Temperature (°C)	13
Wind speed (Beaufort Scale)	1
Cloud cover (Oktas Scale)	2
Precipitation	0

### 4.2 Designated Sites

#### 4.2.1 Statutory Designated Sites and Non-Statutory Designated Sites<sup>3</sup>

- i The nearest statutorily designated site is the Humber Estuary RAMSAR SPA SAC SSSI. The site lies c.0.1km south of this internationally designated site. The site falls within the Impact Risk Zone of the Humber Estuary for multiple categories (see Appendix 2 for full details), including all planning applications outside existing settlements, as well as air pollution and non-residential developments with a footprint greater than 0.2ha.
- ii The closest non-statutorily designated site is Water's Edge LWS, located c.0.3km west of the site boundary.

### 4.3 Biodiversity



- i The Biodiversity Impact Assessment was undertaken utilising satellite imagery to determine the habitat types on site prior to the site clearance. In consideration of this, when assessed against the DEFRA Metric 3.0 for biodiversity, the site contains 10.70 baseline biodiversity units for habitats areas, and 2.73 for linear features (e.g., hedgerows). The most distinctive habitat that was likely present within the site was the scrub habitat, with grassland accounting for the majority of biodiversity units due to the likely area of the site covered by this habitat



<sup>3</sup> Full desk study results are provided in Appendix 2.



#### 4.4 Field Survey Results


- i The survey area was dominated by bare ground due to having been recently cleared. Prior to clearance the area of grassland and scrub is likely to have been higher, and a third hedgerow was potentially present. Full habitat descriptions and photos are provided below. For a Phase 1 Habitat Survey Plan refer to Figure.
- ii Habitat types detailed below are listed in order of the JNCC (2010) Handbook. The species list provided in this report reflect only those taxa observed during the survey.

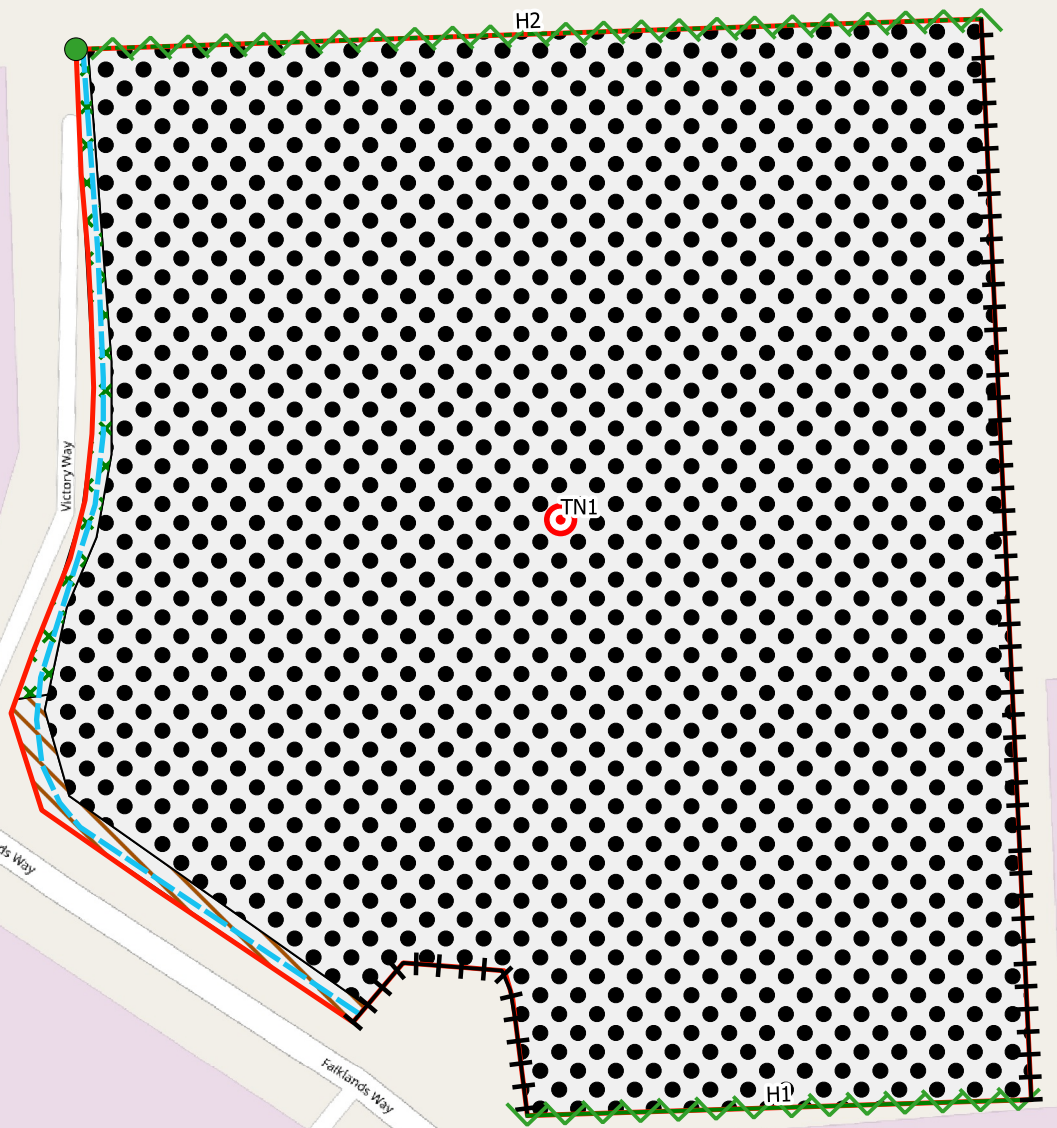
**Table 4: Results of Phase 1 Site Survey**

Habitat	Description	Area (m <sup>2</sup> )	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
A2.2 Scattered Scrub	Small areas of scattered scrub were located throughout the site, likely to have been more extensive prior to site clearance. The habitat was dominated by bramble ( <i>Rubus fruticosus</i> ). The understory comprised frequent mugwort ( <i>Artemisia sp.</i> ) and nettle, occasional rosebay willowherb, cock's foot and hedge bindweed ( <i>Castylegia sepium</i> ), and rarely occurring scentless chamomile ( <i>Triplospermum inodorum</i> ) and smooth sow thistle ( <i>Sonchus oleraceus</i> ).	344	1	Removed to facilitate works. Ecological value for fauna.	
A3.1 Parkland scattered trees	Immature ash tree ( <i>Fraxinus excelsior</i> ) in north-western corner of the site.	N/A	N/A	Retention recommended.	











Habitat	Description	Area (m <sup>2</sup> )	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
C3.1 Tall Ruderal	An area of tall ruderal was present along the southern boundary. This was dominated by rosebay willowherb, with occasional bramble and rose ( <i>Rosa</i> sp.)	330	1	Limited ecological value. To be lost.	
J2.1.1 Intact species-rich hedgerow	The hedgerow (H1) located along the southern boundary of the site was dominated by hawthorn ( <i>Crataegus monogyna</i> ), with abundant ivy ( <i>Hedera helix</i> ), frequent cherry ( <i>Prunus</i> sp.), occasional field maple ( <i>Acer campestre</i> ), bramble and blackthorn ( <i>Prunus spinosa</i> ), and rarely occurring elder ( <i>Sambucus nigra</i> ). The hedge measured 4m high and 0.5m wide, with heavily mown grassland on the southern side and cleared bare ground on northern side.	83m (length)	N/A	Ecologically valuable in comparison to the rest of the site. Retention recommended.	

Habitat	Description	Area (m <sup>2</sup> )	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
J2.2.1 Defunct species rich hedgerow	A hedgerow (H2) was located along the northern boundary of the site. This was dominated by hawthorn with occasional rose, bramble and cherry, and rarely occurring ash. The hedgerow measured 3m x 0.5m with a wet ditch running behind it. It appeared to have been damaged during the construction works. The ground flora comprised abundant common nettle and rosebay willowherb, and occasional mugwort.	150m (length)	N/A	Ecologically valuable in comparison to the rest of the site. Retention recommended.	
J2.6 Dry ditch	A dry ditch was present beneath the scrub on the western boundary of the site. This was unvegetated due to the recent site clearance.	188m (length)	N/A	Limited ecological value due to being unvegetated.	

Habitat	Description	Area (m <sup>2</sup> )	Proportion of site (%)	Ecological Importance & Outcome of Proposal	Photograph
J4 Bare Ground	The majority of the site was dominated by bare ground, having been recently cleared.	25,068	98	Negligible ecological value, however aerial mapping indicates previous rough grassland and scrub which would have been of higher ecological value.	



**Key**

-  Boundary
-  A2.2 - Scrub - scattered
-  C3.1 - Other tall herb and fern - ruderal
-  J4 - Bare ground
-  J2.1.1 - Intact hedge - native species-rich
-  J2.2.1 - Defunct hedge - native species-rich
-  J2.4 - Fence
-  J2.6 - Dry ditch
-  Deciduous Tree
-  Target Note:  
TN1: The site topsoil was cleared prior to the Preliminary Ecological Appraisal and therefore, was bare ground at the time of survey



Client: Wren Kitchens Ltd.		
Project: Wren Kitchens, Falklands Way		
Drawing Title: Phase 1 Habitat Plan		
Drawing No. RSE_5526_Figure	Scale: 1:1,250	Rev: V1
Drawn By: GC	Date: 07/10/2021	



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## 5 IMPACTS AND MITIGATION (CUMULATIVE AND/OR IN ISOLATION)

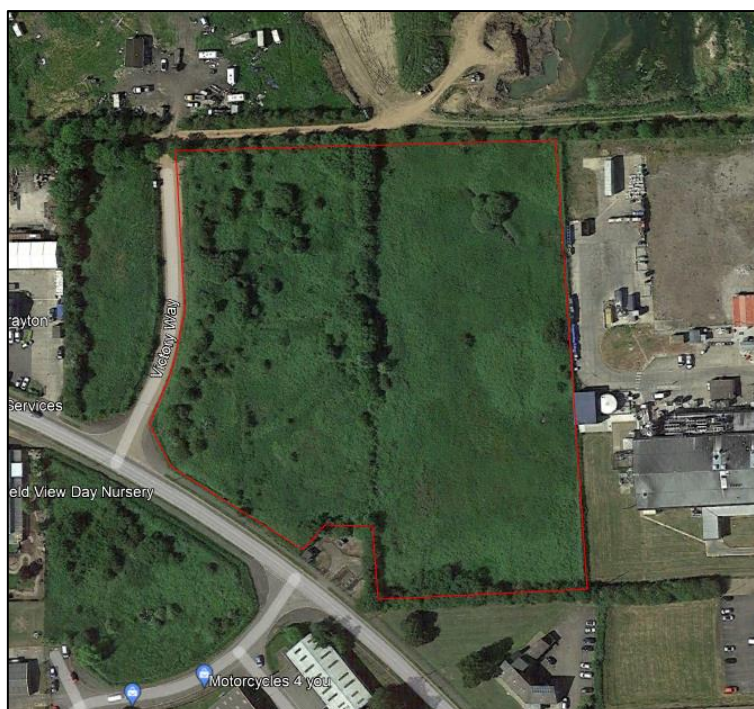
### 5.1 Planning Application Search

- i A planning application search was not conducted for this site as affects upon all ecological receptors were nugatory and so would not act in synergy with other proposals. Therefore, an evaluation of cumulative effects was deemed disproportionate as an assessment of impacts can be made in in the absence of this data.

### 5.2 Habitats

- i The majority of habitats on site were generally of limited botanical interest and poor species diversity. The site was in the process of being cleared at the time of survey so a full assessment of the habitats could not be conducted, however satellite imagery indicates that the site was likely predominantly rough grassland, with areas of scrub/scattered trees and tall ruderal vegetation throughout. A central hedgerow was potentially also present running north-south through the site. Desk study data indicates that the site previously formed coastal floodplain and grazing marsh, a Habitat of Principal Importance under the NERC Act (2006). As previously stated, however, the topsoil was in the process of being removed at the time of survey and therefore, the site was predominantly bare ground during the survey. As such, it was not possible to determine whether the site formed coastal floodplain and grazing marsh from the site survey.

Figure 3: Aerial imagery of the Site from June 2021



© Google Earth

- ii Two hedgerows (H1 and H2) were present on site. All hedgerows formed of >80% native woody species are a Habitat of Principal Importance under the NERC Act (2006) and, as such, they are a material consideration during planning.
- iii No protected or Priority plant species were observed, and all plant species encountered were common, widespread and characteristic of the common habitat types they represent

### 5.2.2 Invasive / Non-native Species

- iv No invasive species were identified during the survey. As previously stated, however, as the site was cleared at the time of survey, it is possible that invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 as *amended* may have previously been located on site.

### 5.2.3 Biodiversity

- v Following input of habitat data into the DEFRA Metric 3.0, it was originally considered that there will be a quantified net loss in biodiversity of 8.31 habitat units (-78.29%) across the site. This loss was considered to be from the extensiveness of the proposed areas of hardstanding (HGV & car parking and related infrastructure).
- vi In consideration of this loss, offsetting off-site has been proposed within nearby land, within the curtilage of Wren Kitchens headquarters, known as 'The Nest'. These areas comprise areas of heavily managed poor semi-improved grassland and broadleaved woodland. For further details of these offsetting areas, please refer to Appendix 5 and 6.
- vii Following the incorporation of these offsetting areas into the DEFRA Metric 3.0, it has been considered that there will be a quantified net gain in biodiversity of 1.10 habitat units (10.40%) within the scope of the proposals. This gain is considered to come largely from the enhancement of the offsite grassland areas, achieved through additional wildflower seed mixes and a relaxed mowing regime, in addition to the enhancement of the pockets of woodland on site. Considering the curtilage of The Nest is not publicly accessible, enhancing these habitats to 'good' condition is considered achievable due to reduced anticipated anthropogenic pressures (such as trampling and dog fouling). For further enhancement details of these areas, please refer to the Biodiversity Impact Assessment (RSE\_5526\_BIA V3).
- viii Provided the existing hedgerows on site can be enhanced, with new hedgerow planting around the site peripheries, there could also be a potential net gain of 1.69 hedgerow units (61.82%) across the site.
- ix The above calculation is based upon the current proposals (Appendix 3), and habitat conditions assessments of the habitats both on and offsite (Appendix 5 and 6).

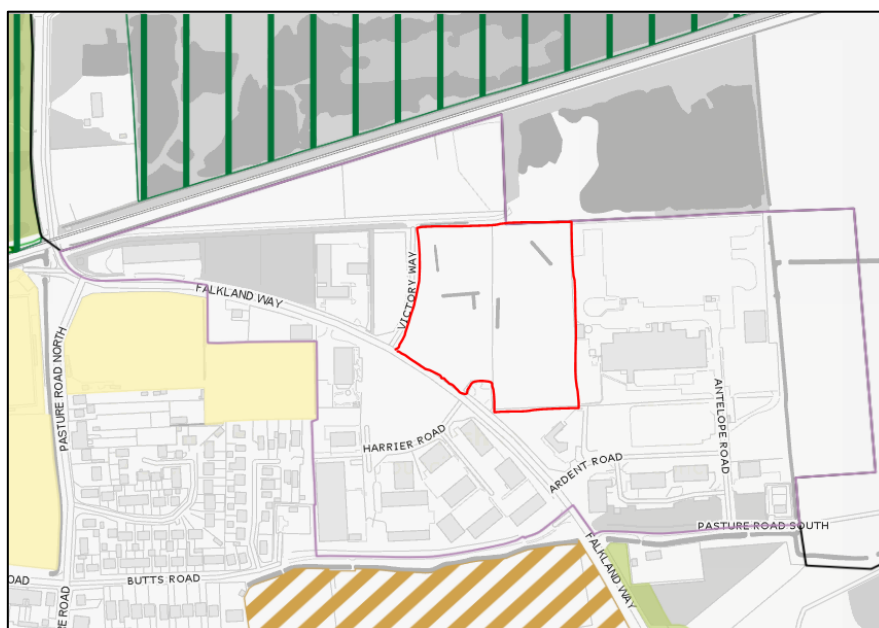
## 5.3 Designated Sites

### 5.3.1 Statutorily Designated Sites

- i The Site lies within Impact Risk Zones (IRZ) for the Humber Estuary RAMSAR SAC SPA SSSI for multiple categories (see Appendix 2 for full details), including all planning applications outside existing settlements, as well as air pollution and non-residential developments with a footprint greater than 0.2ha.
- ii The proposals include a new car and HGV parking area, comprising an area c.2.55ha. The North Lincolnshire Local Plan Policies Map (<https://localplan.northlincs.gov.uk/stages/3/policy-map>) outlines that the site has been allocated as an existing employment site (Figure 4) as part of the Humber Bridge Industrial Estate (North Lincolnshire Council 2021). In addition, a Habitat Regulations Assessment (HRA) (JBA 2020) of the allocations and preferred options within the Core Strategy have been undertaken and, as such, impacts to the Humber Estuary RAMSAR SAC SPA SSSI from these allocations have been assessed. During this HRA, the existing employment areas were screened out at Stage 1 (Likely Significant Effect) of the HRA as the "policy or proposal not likely to have a significant effect either alone or in combination" (JBA 2020) upon the Humber Estuary RAMSAR SAC SPA SSSI. As such, it is not considered necessary to undertake an additional HRA for the proposals, and no impacts are considered likely from the development. Given the proximity of the proposals to the Humber Estuary, however, it is recommended that mitigation measures, including dust

suppression techniques and a robust pollution prevention strategy are implemented throughout the development.

**Figure 4: Existing Employment Areas (Purple Line) including the application site**



© North Lincolnshire Council

- iii Far Ings NNR LNR and Water's Edge LNR are also located c.0.3km west of the site boundary. Whilst these nationally designated sites are not to be directly impacted from the proposals, there is the potential for indirect impacts to occur, such as pollution. As such, it is recommended that mitigation measures, including dust suppression techniques and a robust pollution prevention strategy are implemented throughout the development.

### 5.3.2 Non-statutorily Designated Sites

- iv The closest non-statutorily designated sites were Waters' Edge LWS and Barton Broads LWS, both located approximately 0.3km west of the site boundary and designated for their wetland habitats. Whilst these locally designated sites are not to be directly impacted from the proposals, there is the potential for indirect impacts to occur, such as pollution. As such, it is recommended that mitigation measures, including dust suppression techniques and a robust pollution prevention strategy are implemented throughout the development.
- v The remaining non-statutorily designated site, A15/A1077 Road Verges LWS, was considered to be too far afield to be impacted by the proposals

## 5.4 Fauna

### 5.4.1 Great Crested Newts

- i No ponds were located on site, however there was a group of ponds (P1-4; Figure 5) to the north-east of the site, located within what appeared to be part of an active construction site with surrounding wetland habitat. These ponds were inaccessible at the time of survey, and therefore their suitability to support breeding GCN could not be fully assessed. As such, there is a risk that GCN are breeding within these ponds, located c.20m from the site boundary. GCN may also traverse from these waterbodies on to site.

- ii There are a further 23 waterbodies within 500m of the site, with 4 of these being within 250m. As such, GCN are considered a constraint upon the development. The habitats on site are now limited in their suitability to support GCN due to having been recently cleared and dominated by bare ground, however, there remain sections of suitable habitat in the form of scrub, tall ruderal and hedgerows. It is likely that the site, prior to clearance, offered suitable habitat for commuting, foraging and refuge seeking GCN.
- iii North Lincolnshire is part of the Natural England District Level Licencing (DLL) Scheme and, therefore, it is recommended that an application under this scheme is conducted with associated mitigation in order to legitimise the works.

**Figure 5: Ponds located north-east of the Site**



#### **5.4.2 Bats**

##### **Bat Tree Roosts**

- iv All of the trees on site were subject to a ground level tree assessment. All trees were assessed as having negligible bat roost potential. Therefore, bat tree roosts are likely absent from site. As vegetation and a hedgerow have been removed, it cannot be ruled out that previously standing trees offered bat potential.

##### **Bat Foraging Habitat**

- v The hedgerows on site act as linear features which offer suitability for commuting and foraging bats. The site is limited in extent and is adjacent to a large wetland area with suitable foraging habitat. As such, the works on site are not likely to impact availability of foraging habitat locally, and the site is assessed as offering negligible foraging value.
- vi When assessed against criteria in best practice guidelines (Collins J., eds, 2016) the site was considered to offer low quality foraging and commuting habitat for bats. Furthermore, the local wetland habitats are not considered to be directly affected by the proposals. As such further survey of the site for bat foraging is considered entirely unnecessary and disproportionate. However, efforts should be made within the proposals to minimise effects of lighting on the adjacent wetlands. The new car park area should consider the use of lighting and where possible avoid altogether. If avoidance is not possible, light spill onto the railway corridor should be minimised and should follow the guidance set out in Bats and Lighting in the UK (BCT and ILP, 2018). Therefore, associated site lighting proposals must consider the following:

- Avoid lighting where possible;
- Install lamps and the lowest permissible density;
- Lamps should be positioned to direct light to avoid upward spill onto any green corridors that could be used by commuting bats or features with bat roost potential;
- LED lighting – with no/low UV component is recommended;
- Lights with a warm colour temperature – 3000K or 2700K have significantly less impact on bats;
- Light sources that peak higher than 550nm also reduce impacts to bats; and
- The use of timers and dimmers to avoid lighting areas of the site all night is recommended.

#### **5.4.3 Bat Building Roost**

vii There were no buildings on site.

#### **5.4.4 Birds**

viii The hedgerows and trees located on site are suitable habitat for bird nesting sites and local records of birds of conservation concern (BoCC) were returned. Furthermore, the site is in close proximity to Humber Estuary SPA, which supports a number of protected birds and is known for its waterbird assemblage. As a hedgerow and areas of scrub have potentially been removed prior to surveys taking place, the full potential for bird species to be present cannot be accurately assessed.

ix Any tree management works, or vegetation clearance should take place outside the bird nesting season (which runs March to September inclusive) to ensure compliance with the general protection afforded to wild birds under the Wildlife and Countryside Act 1981 (as amended). If this is unavoidable, the trees and hedgerows should be carefully checked, by a suitably qualified ecologist, prior to removal. Where active nests are found, working restrictions would be put in place until follow up survey can demonstrate that all chicks have fledged.

#### **5.4.5 Reptiles**

x No records of reptiles were returned during the desk study. The terrestrial habitats on site including hedgerows, scrub, grassland and tall ruderal vegetation provided opportunities for foraging, refuge and commuting for reptiles. The site is now comprised of bare ground, however there is a risk that reptiles may have been present on site prior to clearance.

#### **5.4.6 Water Vole, Otter and White-Clawed Crayfish**

xi The site is located adjacent to a wetland and in close proximity to the Humber Estuary. As such, otter utilising the wetland and the nearby drains may traverse the site while foraging. A drain is located 100m north of the site that may present suitability for otter holts, however this is separated from the site by a construction site and as such is not considered a constraint upon the site.

xii The drains and wetland offer suitability for water vole, however as water vole dig burrows within 10m of the bank, they are not considered a constraint upon the site. The geographical location of the site limits its suitability for white-clawed crayfish.

#### **5.4.7 Badgers and Principal Species**

xiii No badger setts or field signs were recorded on site. However, the site had been recently cleared and as such field signs may have been missed. The site comprises of bare ground and the land to the north is an active construction site, with a busy road to the south. As such, the risk of badgers being impacted by the works remains low.

xiv On this basis it is not considered necessary to conduct further assessment for badger in the area. However during construction it is recommended that best practice is followed in respects to badger and any other mammals (i.e. Fox and hedgehog) which may be present locally. This should include

- Mammal ladders (such as a plank) or earth ramps to be placed in any open excavations at the end of each day;
- Cap off any open pipes at the end of each day;
- Cover any open holes, or install mammal ladders or earth ramps in any open excavations at the end of each day to prevent animals from becoming trapped;
- Keep all fuel and other harmful substances in a locked area;
- Ensure any spillages are treated with spill kits;
- If any fresh sett digging is observed notify an ecologist immediately and leave a 20m buffer around the area until an assessment can be made.

## 6 DISCUSSION AND RECOMMENDATIONS

### 6.1 Protected / Priority Species and Habitats Impact Appraisal

- i The potential for protected species or habitats to be present on site and impacted by the proposals is provided in Appendix 3. No further surveys were conducted to facilitate an assessment of ecological impacts post development. Recommended mitigation and residual impacts is provided in the table below.

**Table 5: Summary of Residual Impacts**

Ecological Feature	Importance (Geographic Frame of Reference)	Potential Effect	Mitigation Proposed	Proposed Mechanism to Secure	Residual Impact
<b>Statutory Designated Sites</b>	County or above	Potential pollution impacts	Dust suppression and pollution prevention techniques to be utilised throughout construction phase	Planning Condition – CEMP/PMW	Not significant
<b>Non-statutory designated sites</b>	County	Potential pollution impacts	Dust suppression and pollution prevention techniques to be utilised throughout construction phase	Planning Condition – CEMP/PMW	Not significant
<b>Habitats and Biodiversity</b>	Local	Ground works on site have removed the central hedgerow. Possibility to retain boundary hedgerows.  Biodiversity Impact Assessment indicates 10.4 % gain in biodiversity as a result of the works.	All retained trees and hedgerows should be protected in accordance with BS 5837:2012.  Dust suppression and pollution prevention techniques to be utilised throughout construction phase  Enhancements outlined in Section 7.	Planning Condition - LEMP	Positive
<b>Reptiles</b>	Local	Could be injured during initial site set up, clearance and ground works	Vegetation clearance under a Precautionary Method of Works	Planning Condition – CEMP/PMW	Not significant
<b>Bats – Roosting</b>	Local	None	N/A	N/A	N/A
<b>Bats – Foraging/Commuting</b>	Local	Limited impacts due to the context of the site	Sensitive bat lighting strategy	Planning Condition – CEMP & LEMP	Not significant

Ecological Feature	Importance (Geographic Frame of Reference)	Potential Effect	Mitigation Proposed	Proposed Mechanism to Secure	Residual Impact
<b>Great crested newts</b>	N/A	27 ponds within 500m zone of influence, including waterbodies 20m from the north-eastern aspect of the site.	District Level Licencing (DLL) application	Planning Condition – DLL Application	Not significant
<b>Freshwater Invertebrates</b>	Negligible	Potential pollution impacts	Dust suppression and pollution prevention techniques to be utilised throughout construction phase	Planning Condition – CEMP/PMW	Not significant
<b>Riparian Mammals</b>	Negligible	Risk of holts being impacted is negligible due to construction site being located between the site and the nearest watercourse, however commuting and foraging otter may traverse the site during the works period.	Precautionary measures for mammals passing through the site Dust suppression and pollution prevention techniques to be utilised throughout construction phase	Planning Condition – CEMP/PMW	Not significant
<b>Eels/Fish</b>	Negligible	Potential pollution impacts	Dust suppression and pollution prevention techniques to be utilised throughout construction phase	Planning Condition – CEMP/PMW	Not significant
<b>Badgers</b>	Local	Potential for killing/injury/disturbance of individuals passing through the site.	Best practice site working procedures in regards to mammals.	Planning Condition – CEMP/PMW	Not significant
<b>Priority Species</b>	Negligible	Resting places for these species unlikely to be affected	Retain hedgerows where possible. Best practice site working procedures regarding mammals.	Planning Condition – CEMP/PMW	Not significant
<b>Breeding birds</b>	Negligible	Damage or destruction of nests	Precaution in relation to legislative protection of animals. Tree felling should be undertaken outside the bird nesting season. Provision of nest boxes	Planning Condition – CEMP/PMW and LEMP	Not significant
<b>Invasive Species</b>	N/A	N/A	N/A	N/A	N/A

## 7 COMPENSATION AND ENHANCEMENT RECOMMENDATIONS

- i It is a requirement of the NPPF (2021) that developments provide a measurable net gain for biodiversity post development. Proposals include the creation of industrial development and as such, opportunities for enhancement are limited. Given that the site was cleared prior to the preliminary survey, the full extent of its value could not be appraised and as such significant enhancements will be required. It is recommended that the hedgerows are retained and enhanced, and that tree planting and areas of wildflower grassland are incorporated throughout the development where possible. Bird boxes should also be incorporated due to the proximity to a SPA designated for protected birds

### 7.1.2 Hedgerows

- ii Existing hedgerows should be enhanced through plug planting to close gaps. A minimum of 6 species should be planted, which may include blackthorn (*Prunus spinosa*), field maple (*Acer campestre*), alder (*Alnus glutinosa*), common dogwood (*Cornus sanguinea*), hazel (*Corylus avellana*) and guelder rose (*Viburnum opulus*). Standard trees such as English oak (*Quercus robur*) and wild cherry (*Prunus avium*) can also be planted at 50m intervals. A wildflower mix could be incorporated along the base of the hedgerow to enhance the ground flora.
- iii Planting should be undertaken during early winter, providing the ground is not frozen. Planting up gaps can be done in conjunction with coppicing existing plants, to give new plants minimum competition. To further reduce competition and aid establishment of the planted-up sections, the bases of the plants would be kept weed free through spot treatment of herbicide for the first three years.

### 7.1.3 Tree Planting

- iv Scattered trees should be incorporated throughout the site, using local stocks of native tree species. Suggested species include field maple, silver birch (*Betula pendula*), rowan (*Sorbus aucuparia*), cherry and elder (*Sambucus nigra*). Trees should be planted in winter, with tree guards used for the first five years. Bases of the trees should also be kept free from weeds through spot treatment of herbicide for the first three years. Any failed stock should be replaced each winter.

### 7.1.4 Wildflower meadows

- v Incorporating areas of grassland throughout the development is recommended in order to add aesthetic and biodiversity value. These should be sown as wildflower meadows.
- vi The ground could be prepared for supplementary planting with minimal effort, using a chain harrow. Any existing vegetation should be removed, and the soil should be raked to break it up, producing a fine, firm later of soil. It is recommended that Long Season Meadow Mix (available from Naturescape) is used to allow for a long growing season, producing an aesthetically pleasing meadow of flowers, thus negating the requirement for an extensive mowing regime. Seeds should be sowed during autumn or spring, and if there is a dry period, the soil being sowed should be watered.
- vii Once established, the grassland will only require mowing in September (with the arisings being left for 48hrs prior to removal to allow the seeds to disperse for the following year). Any cutting should be removed from the ground, so that a low level of fertility is maintained, and any unwanted weeds such as nettles or thistles should be removed during the first year of management.

### 7.1.5 Nest Boxes

- viii A range of bird boxes is recommended for the site, due to its proximity to the Humber Estuary RAMSAR SAC SPA SSSI, of which a qualifying feature includes a range of protected bird species. Boxes include but are not limited to the Apex Bird box, the Vivara Pro Open Nest Box, and the FSC Woodstone Swift Box, available from [nhbs.com](http://nhbs.com)

## 8 MONITORING

- i None proposed or considered necessary.

## 9 REFERENCES

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- xvii Office of the Deputy Prime Minister, 06/2005. 'Government Circular: Biodiversity and Geological Conservation - Statutory Obligations and their impact within the planning system'. London: ODPM.
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## APPENDIX 1: LEGISLATION AND PLANNING POLICY

### 9.2 General & Regionally Specific Policies

- i. Articles of British legislation, policy guidance and both Local Biodiversity Action Plans (BAPs) and the NERC Act 2006 are referred to throughout this report. Their context and application is explained in the relevant sections of this report. The relevant articles of legislation are:
  - The National Planning Policy Framework (2021);
  - ODPM Circular 06/2005 (retained as Technical Guidance on NPPF 2021);
  - The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019;
  - The Wildlife and Countryside Act 1981 (as amended);
  - EC Council Directive on the Conservation of Wild Birds 79/409/EEC;
  - The Protection of Badgers Act 1992;
  - The Countryside and Rights of Way Act 2000;
  - The Hedgerow Regulations 1997;
  - The Natural Environment and Rural Communities (NERC) Act 2006; and
  - Local Biodiversity Action Plan for North Lincolnshire.

## APPENDIX 2: DESK STUDY DATA

### 9.3 Desk Study Results

- i A total of six statutory designated sites were recorded within the search area, the details of which are summarised in the table below. The site lies within the Impact Risk Zone of the Humber Estuary RAMSAR SAC SPA SSSI.

**Table 6: Statutorily Designated Sites within 5km of Site Boundary**

Site Name	Designation	Location	Brief Description
Humber Estuary	RAMSAR <sup>4</sup> SAC <sup>5</sup> SPA <sup>6</sup> SSSI <sup>7</sup>	0.1km N	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 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.
Far Ings	NNR <sup>8</sup> LNR <sup>9</sup>	0.3km W	The pits and reedbeds at Far Ings and along the Humber bank are now one of the UK strongholds for bittern.
Waters' Edge	LNR	0.3km W	Over 110 acres of wetland habitat along the banks of the Humber
Humber Bridge	LNR	3.2km NW	Varied habitats which are a unique resource in heavily populated areas of Haltemprice and Hull. It is a former chalk quarry with mixed species woodland, spring fed pond and herb rich grassland.
South Ferriby Chalk Pit	SSSI	3.8km SW	South Ferriby Chalk Pit is of considerable importance in providing good sections of Upper Jurassic and Lower Cretaceous rocks
Melton Bottom Chalk Pit	SSSI	7.9km NW	Melton Bottom Chalk Pit displays an extensive exposure of Chalk, overlying the Lias with marked unconformity, and is the type locality for the Welton Chalk Formation. There is also an excellent section of the Ferriby Chalk

<sup>4</sup> RAMSAR – The Convention on Wetlands of International Importance especially as Waterfowl Habitat 1975

<sup>5</sup> SAC – Special Area of Conservation

<sup>6</sup> SPA – Special Protection Area

<sup>7</sup> SSSI – Site of Special Scientific Interest

<sup>8</sup> NNR – National Nature Reserve

<sup>9</sup> LNR – Local Nature Reserve

Site Name	Designation	Location	Brief Description
			Formation and the best exposure of the Black Band in England

i The site falls within less than 1km of the Humber Estuary RAMSAR SAC SPA SSSI, and is located within the Impact Risk Zone of this internationally designated site for the following categories:

- **All Planning Applications:** All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures
- **Infrastructure:** Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals
- **Wind & Solar Energy:** Solar schemes with footprint > 0.5ha, all wind turbines.
- **Minerals, Oil & Gas:** Planning applications for quarries, including new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction
- **Rural Non-Residential:** Large non-residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m<sup>2</sup> or footprint exceeds 0.2ha
- **Residential:** Residential development of 10 units or more
- **Rural Residential:** Any residential developments outside of existing settlements/urban areas with a total net gain in residential units
- **Air Pollution:** Any development that could cause AIR POLLUTION or DUST either in its construction or operation
- **Combustion:** All general combustion processes
- **Waste:** Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management
- **Composting:** Any composting proposal
- **Discharges:** Any discharge of water or liquid waste that is discharged to ground (i.e., to seep away) or to surface water, such as a beck or stream
- **Water Supply:** Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m<sup>2</sup> or any development needing its own water supply.

ii Three non-statutorily designated sites were also identified within the search radius, details of which are provided in the table below.

**Table 7: Non-statutorily Designated Sites**

Site Name	Designation	Location	Brief Description
Waters' Edge	LWS <sup>10</sup>	0.3km W	Waters' Edge Local Wildlife Site is an extremely biodiverse complex of wetland, woodland and grassland habitats that have developed in recent years following industrial use and subsequent management with wildlife in mind.
Barton Broads	LWS	0.5km W	This site is part of a retirement homes complex and is located immediately south-west of Water's Edge Local Nature Reserve. It is dominated by a single water body that is almost bisected by a long and narrow peninsula

<sup>10</sup> LWS – Local Wildlife Site

Site Name	Designation	Location	Brief Description
			with a very complicated outline. Wetland on the lake margins is the most significant feature
A15/A1077 Road Verges	LWS	1.8km W	Unimproved and semi-improved calcareous grassland, unimproved neutral grassland, scattered scrub

- iii There are 135 Habitats of Principal Importance under Section 41 of the NERC Act, 2006 located within a 1km radius of the site. These are shown in a table below, with the distance and direction of the closest habitats in regard to the site referenced.

**Table 8: Habitats of Principal Importance within 1km of the Site**

Habitat	Quantity	Closest Habitat - Distance to Site	Closest Habitat - Direction to Site
Coastal floodplain and grazing marsh	32	On Site	On Site
Lowland fens	20	95m	North
Reedbeds	38	215m	North
Deciduous woodland	24	215m	Northwest
Saline lagoons	2	300m	Northeast
Coastal saltmarsh	15	685m	North
Good quality semi-improved grassland	2	700m	Northwest
Mudflats	1	780m	North
Open Mosaic Habitat on Previously Developed Land	1	785m	West

- iv Records of previous European Protected Species Licences (EPSL) were discovered within a 5km search area around the site. This included:
- One record of bat licence which was for common pipistrelle (*Pipistrellus pipistrellus*) bats and was located c.1.1km south-west of the site boundary
  - Four records of great crested newt (*Triturus cristatus*) licences, the closest of which was located c.4.1km north-west of the site boundary
- ii Protected species records were received from Lincolnshire Ecological Records Centre. A summary of the records considered most relevant to the site and/or proposed development are provided in Table 7. Full species records are available to view upon request

**Table 9: Summary of protected and Priority species records**

Common Name	Scientific Name	Records	Conservation Status
<b>Amphibians</b>			
Common frog	<i>Rana temporaria</i>	5 records; closest	Partial protection under WCA

Common Name	Scientific Name	Records	Conservation Status
Common toad	<i>Bufo bufo</i>	4 records; closest	NERC <sup>11</sup> , Partial Protection under WCA
Smooth newt	<i>Lissotriton vulgaris</i>	1 record; 0.8km SW	Partial protection under WCA <sup>12</sup>
<b>Mammal</b>			
Brown hare	<i>Lepus europaeus</i>	1 record; 0.6km NW	NERC
Brown long-eared bat	<i>Plecotus auritus</i>	6 records; closest 0.1km NW	EPS <sup>13</sup> , WCA <sup>14</sup> , NERC
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	18 records; closest 0.2km NW	EPS, WCA
Daubenton's	<i>Myotis daubentonii</i>	6 records; closest 0.1km NW	EPS, WCA
Eurasian badger	<i>Meles meles</i>	7 records within 2km of the site.	PBA <sup>15</sup>
European hedgehog	<i>Erinaceus europaeus</i>	6 records; closest 0.3km NE	NERC
European otter	<i>Lutra lutra</i>	8 records; closest 0.3km NE	EPS, WCA, NERC
Grey seal	<i>Halichoerus grypus</i>	1 record;	CSA <sup>16</sup>
Harvest mouse	<i>Micromys minutus</i>	2 records; closest 1.8km SW	NERC
Myotis bat sp.	<i>Myotis sp.</i>	3 records; closest	EPS, WCA, NERC
Nathusius' pipistrelle	<i>Pipistrellus nathusii</i>	1 record; 1.1km NW	EPS, WCA, NERC
Noctule bat	<i>Nyctalus noctula</i>	17 records; closest 0.1km NW	EPS, WCA, NERC
Noctule bat roost		7 records; closest 1km SW	
Pipistrelle bat sp.	<i>Pipistrellus sp.</i>	14 records; closest 1km SW	EPS, WCA, NERC
Pipistrelle bat roost		15 records; closest 1km SW	
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	12 records; closest 0.7km NE	EPS, WCA, NERC
Soprano pipistrelle roost		7 records; closest 1km SW	
Unidentified bat	Chiroptera sp.	50 records; closest 0.2km NE	EPS, WCA, NERC

<sup>11</sup> NERC – Species of Principal Importance under Section 41 of the Natural Environment Rural Communities Act (2006) Species of Principal Conservation Importance; UKBAP & LBAP

<sup>12</sup> WCA – Wildlife & Countryside Act (1981) Section 5 protecting against trade or sale of species.

<sup>13</sup> EPS – European Protected Species - protected by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

<sup>14</sup> WCA (5) – Schedule 5 protected species - Wildlife & Countryside Act (1981)

<sup>15</sup> PBA – Protection of Badgers Act 1992

<sup>16</sup> CSA – Conservation of Seals Act 1970

Common Name	Scientific Name	Records	Conservation Status
Unidentified bat roost		13 records; closest 0.5km S	
Water vole	<i>Arvicola amphibius</i>	21 records; closest 0.2km SE	WCA, NERC
<b>Birds</b>			
Avocet	<i>Recurvirostra avosetta</i>	1 record 1km ENE. *23,040 other records were identified.	BoCCAmber, WCA (1) <sup>17</sup>
Arctic skua	<i>Stercorarius parasiticus</i>	2 records, closest record 1km WNW *25 other records identified.	BoCCRed
Barn owl	<i>Tyto alba</i>	5 records, closest record 0.6km NE. *129 other records were identified.	BoCCGreen, WCA (1)
Barnacle goose	<i>Branta leucopsis</i>	*41 records identified.	BoCCAmber
Bearded tit	<i>Panurus biarmicus</i>	27 records, closest record 0.7km NW. *577 other records were identified.	WCA (1)
Bewick's swan	<i>Cygnus columbianus bewickii</i>	*9 records identified	BoCCAmber, WCA (1), NERC
Bittern	<i>Botaurus stellaris</i>	27 records, closest record 260m N. *851 other records identified.	BoCCAmber, NERC
Black tern	<i>Chlidonias niger</i>	4 records, closest record 1km WNW. *46 other records identified.	BoCCGreen, WCA (1)
Black-necked grebe	<i>Chroicocephalus ridibundus</i>	*18 records identified.	BoCCAmber
Black-tailed godwit	<i>Limosa limosa</i>	3 records, closest record 1km ENE. *217 other records identified.	BoCCRed
Brambling	<i>Fringilla montifringilla</i>	*43 records identified	BoCCGreen, WCA (1)
Brent goose	<i>Branta bernicla</i>	*7 records identified	BoCCAmber
Bullfinch	<i>Pyrrhula pyrrhula</i>	20 records, closest record 0.7km WNW. *579 other records identified.	BoCCAmber, NERC

<sup>17</sup> WCA (1) - Schedule 1 Wildlife and Countryside Act 1981 (as amended)

Common Name	Scientific Name	Records	Conservation Status
Cetti's warbler	<i>Cettia cetti</i>	50 records, closest record 160m NNW. *571 other records identified.	WCA (1)
Common firecrest	<i>Regulus ignicapilla</i>	*19 records identified.	WCA (1)
Common scoter	<i>Melanitta nigra</i>	6 records, closest record 1km WNW. *98 other records identified.	BoCCRed, WCA (1), NERC
Corn bunting	<i>Emberiza calandra</i>	*33 records identified.	BoCCRed, NERC
Cuckoo	<i>Cuculus canorus</i>	8 records, closest record 285m NNW. *95 other records identified.	BoCCRed, NERC
Curlew	<i>Numenius arquata</i>	12 records, closest record 0.9km NE. *962 other records identified.	BoCCRed, NERC
Dark-bellied Brent goose	<i>Branta bernicla subsp. bernicla</i>	*23 records identified.	NERC
Dotterel	<i>Charadrius morinellus</i>	*2 records identified.	BoCCRed, WCA (1)
Eurasian hoopoe	<i>Upupa epops</i>	*6 records identified.	WCA (1)
Eurasian whimbrel	<i>Numenius phaeopus</i>	*97 records identified.	BoCCRed, WCA (1)
European Greater White-fronted Goose	<i>Anser albifrons subsp. albifrons</i>	*13 records identified	BoCCRed, NERC
European honey buzzard	<i>Pernis apivorus</i>	*4 records identified.	BoCCAmber, WCA (1)
Fieldfare	<i>Turdus pilaris</i>	7 records, closest record 1km ENE. *207 other records identified	BoCCRed, WCA (1)
Gadwall	<i>Anas strepera</i>	58 records, closest record 75m NE. *194 other records identified.	BoCCAmber
Garganey	<i>Anas querquedula</i>	*4 records identified.	BoCCAmber, WCA (1)
Golden oriole	<i>Oriolus oriolus</i>	*1 record identified.	BoCCRed, WCA (1)
Golden eye	<i>Bucephala clangula</i>	26 records, closest record 0.6km NE. *753 other records identified.	BoCCAmber
Goshawk	<i>Accipiter gentilis</i>	*1 record identified.	WCA (1)
Grasshopper warbler	<i>Locustella naevia</i>	3 records, closest record 1km ENE.	BoCCRed, NERC

Common Name	Scientific Name	Records	Conservation Status
		*125 other records identified.	
Great northern diver	<i>Gavia immer</i>	1 record, 1km ENE. *11 other records identified.	BoCCAmber
Green sandpiper	<i>Tringa ochropus</i>	1 record, 1 km ENE. *45 other records identified.	BoCCAmber, WCA (1)
Greenshank	<i>Tringa nebularia</i>	1 record, 1km ENE. *66 other records identified.	BoCCAmber, WCA (1)
Grey partridge	<i>Perdix perdix</i>	2 records, closest record 0.9km NE. *23 other records identified.	BoCCRed, NERC
Grey-headed wagtail	<i>Motacilla flava subsp. thunbergi</i>	*1 record identified.	Local priority
Greylag goose	<i>Anser anser</i>	39 records, closest record 0.7km NW. *1097 other records identified.	BoCCAmber
Hawfinch	<i>Coccothraustes coccothraustes</i>	*6 records identified.	BoCCRed, NERC
Hen harrier	<i>Circus cyaneus</i>	2 records, closest record 1km WNW. *24 other records identified.	BoCCRed, WCA (1)
Hobby	<i>Falco subbuteo</i>	2 records, closest record 0.6km ENE *119 other records identified.	BoCCGreen, WCA (1)
House sparrow	<i>Passer domesticus</i>	63 records, closest record, 320m WSW. *925 other records identified.	BoCCRed, NERC
Kingfisher	<i>Alcedo atthis</i>	41 records, closest record 0.6km NE. *535 other records identified.	BoCCAmber, WCA (1)
Lapland bunting	<i>Calcarius lapponicus</i>	*3 records identified.	BoCCAmber, WCA (1)
Lapwing	<i>Vanellus vanellus</i>	9 records, closest record, 0.9km NE. *745 other records identified.	BoCCRed, NERC
Leach's storm petrel	<i>Oceanodroma leucorhoa</i>	*2 records identified.	BoCCAmber, WCA (1)
Lesser redpoll	<i>Acanthis cabaret</i>	2 records, closest record 1.1km NW. *103 other records identified.	BoCCRed, NERC

Common Name	Scientific Name	Records	Conservation Status
Linnet	<i>Linaria cannabina</i>	13 records, closest record 0.6km ENE. *337 other records identified.	BoCCRed, NERC
Little gull	<i>Hydrocoloeus minutus</i>	3 records, closest record 1km ENE. *100 other records identified.	BoCCAmber, WCA (1)
Long-tailed duck	<i>Clangula hyemalis</i>	4 records, closest record 0.6km NE. *121 other records identified.	BoCCRed, WCA (1)
Marsh harrier	<i>Circus aeruginosus</i>	43 records, closest record 260m N. *1018 other records identified.	BoCCAmber, WCA (1)
Mediterranean gull	<i>Larus melanocephalus</i>	*6 records identified.	BoCCAmber, WCA (1)
Merlin	<i>Falco columbarius</i>	*7 records identified.	BoCCRed, WCA (1)
Mute swan	<i>Cygnus olor</i>	87 records, closest record 75m NE. *1241 other records identified.	BoCCAmber
Osprey	<i>Pandion haliaetus</i>	1 record, 1km ENE. *43 other records identified.	BoCCAmber, WCA (1)
Peregrine	<i>Falco peregrinus</i>	6 records, closest record 1km WNW. *224 other records identified.	WCA (1)
Pink-footed goose	<i>Anser brachyrhynchus</i>	1 record, 1.9km WNW. *180 other records identified.	BoCCAmber
Pintail	<i>Anas acuta</i>	3 records, closest record 1km WNW. *64 other records identified.	BoCCAmber
Pochard	<i>Aythya ferina</i>	61 records, closest record 75m NE. *1201 other records identified.	BoCCRed
Purple heron	<i>Ardea purpurea</i>	*1 record identified.	WCA (1)
Purple sandpiper	<i>Calidris maritima</i>	*2 records identified.	BoCCAmber, WCA (1)
Quail	<i>Coturnix coturnix</i>	*5 records identified.	BoCCAmber, WCA (1)
Red kite	<i>Milvus milvus</i>	*18 records identified.	WCA1
Red-necked phalarope	<i>Phalaropus lobatus</i>	*9 records identified.	BoCCRed, WCA (1)

Common Name	Scientific Name	Records	Conservation Status
Redshank	<i>Tringa totanus</i>	12 records, closest record 0.8km WNW. *661 other records identified.	BoCCAmber
Red-throated loon	<i>Gavia stellata</i>	1 record, 1km WNW. *38 other records identified.	WCA (1)
Redwing	<i>Turdus iliacus</i>	10 records identified, closest record 0.9km WNW. *286 other records identified.	BoCCRed, WCA (1)
Reed bunting	<i>Emberiza schoeniclus</i>	47 records, closest record 75m NE. *829 other records identified.	BoCCAmber, NERC
Ring ouzel	<i>Turdus torquatus</i>	*23 records identified.	BoCCRed, NERC
Ruff	<i>Philomachus pugnax</i>	2 records, closest record 1.1km NE. *69 other records identified.	BoCCRed, WCA (1)
Savi's warbler	<i>Locustella luscinioides</i>	*1 record identified.	BoCCRed, NERC
Scaup	<i>Aythya marila</i>	1 record, 1.9km WNW. *161 other records identified.	BoCCRed, WCA (1)
Skylark	<i>Alauda arvensis</i>	4 records, closest record 340m E. *197 other records identified.	BoCCRed, NERC
Slavonian grebe	<i>Podiceps auritus</i>	2 records, closest record 0.6km NE. *69 other records identified.	BoCCRed, WCA (1)
Snipe	<i>Gallinago gallinago</i>	5 record, closest record 0.6km ENE. *344 other records identified.	BoCCAmber
Snow bunting	<i>Plectrophenax nivalis</i>	1 record, 1km WNW. *33 other records identified.	BoCCAmber, WCA (1)
Song thrush	<i>Turdus philomelos</i>	19 records, closest record 0.6km SSW. *427 other records identified.	BoCCRed, NERC
Spoonbill	<i>Platalea leucorodia</i>	*18 records identified.	BoCCAmber, WCA (1)
Spotted flycatcher	<i>Muscicapa striata</i>	1 record, 1km ENE. *27 other records identified.	BoCCRed, NERC
Starling	<i>Sturnus vulgaris</i>	68 records, closest record 320m WSW.	BoCCRed, NERC

Common Name	Scientific Name	Records	Conservation Status
		*703 other records identified.	
Swift	<i>Apus apus</i>	53 records, closest record 410m WSW. *523 other records identified.	BoCCAmber
Temminck's stint	<i>Calidris temminckii</i>	*2 records identified.	WCA (1)
Tree pipit	<i>Anthus trivialis</i>	*10 records identified.	BoCCRed, NERC
Tree sparrow	<i>Passer montanus</i>	7 records, closest record 1km ENE. *278 other records identified.	BoCCRed, NERC
Turtle dove	<i>Streptopelia turtur</i>	6 records, 95m NE. *164 other records identified.	BoCCRed, NERC
White-fronted goose	<i>Anser albifrons</i>	*3 records identified.	BoCCRed, NERC
White-tailed eagle	<i>Haliaeetus albicilla</i>	*1 record identified.	BoCCRed, WCA (1)
Whooper swan	<i>Cygnus cygnus</i>	4 records, closest record 1km WNW. *62 other records identified.	BoCCAmber, WCA (1)
Wigeon	<i>Mareca penelope</i>	17 records, closest 0.7km NW. *85 other records identified.	BoCCAmber
Wood sandpiper	<i>Tringa glareola</i>	*5 records identified.	BoCCAmber, WCA (1)
Wood warbler	<i>Phylloscopus sibilatrix</i>	*4 records identified.	BoCCRed, NERC
Woodlark	<i>Lullula arborea</i>	*1 record identified.	NERC, WCA (1)
Wryneck	<i>Jynx torquilla</i>	*2 records identified.	NERC, WCA (1)
Yellow wagtail	<i>Motacilla flava</i>	2 records, closest record 1km ENE. *132 other records identified.	BoCCRed, NERC
Yellowhammer	<i>Emberiza citrinella</i>	3 records, closest record 0.6km E. *125 other records identified.	BoCCRed, NERC
<b>Invertebrates</b>			
Beaded chestnut	<i>Agrochola lychnidis</i>	10 records; closest 1.9km SW	NERC
Blood-vein	<i>Timandra comae</i>	46 records; closest 1.9km W	NERC
Brindled beauty	<i>Lycia hirtaria</i>	1 record; 1.9km SW	NERC
Buff ermine	<i>Spilosoma lutea</i>	87 records; closest 1.5km SW	NERC

Common Name	Scientific Name	Records	Conservation Status
Cinnabar	<i>Tyria jacobaeae</i>	22 records; closest 0.9km NE	NERC
Dark-barred twin-spot carpet	<i>Xanthorhoe ferrugata</i>	82 records; closest 1.9km W	NERC
Dot moth	<i>Melanchra persicariae</i>	3 records; closest 0.9km NE	NERC
Double dart	<i>Graphiphora augur</i>	15 records; closest 0.9km NE	NERC
Dusky thorn	<i>Ennomos fuscantaria</i>	1 record; 1.1km NW	NERC
Ghost moth	<i>Hepialus humuli humuli</i>	12 records; closest 1.9km SW	NERC
Grayling	<i>Hipparchia semele</i>	1 record; 1km SW	NERC
Green-brindled crescent	<i>Allophyes oxyacanthae</i>	60 records; closest 1.9km SW	NERC
Grey dagger	<i>Acronicta psi</i>	21 records; closest 1.9km SW	NERC
Large wainscot	<i>Rhizedra lutosa</i>	132 records; closest 1.9km W	NERC
Latticed heath	<i>Chiasmia clathrata</i>	1 record; 1.9km W	NERC
Mouse moth	<i>Amphipyra tragopoginis</i>	42 records; closest 1km SW	NERC
Rosy minor	<i>Litoligia literosa</i>	56 records; closest 1.9km SW	NERC
Rustic	<i>Hoplodrina blanda</i>	143 records; closest 0.9km NE	NERC
Shaded broad-bar	<i>Scotopteryx chenopodiata</i>	15 records; closest 0.7km NW	NERC
Small heath	<i>Coenonympha pamphilus</i>	5 records; closest 0.9km NE	NERC
Small square-spot	<i>Diarsia rubi</i>	157 records; closest 0.9km NE	NERC
Wall	<i>Lasiommata megera</i>	16 records; closest 0.2km N	NERC
White-letter hairstreak	<i>Satyrrium w-album</i>	2 records; closest 0.6km NW	NERC
<b>Invasive Species</b>			
American mink	<i>Neovison neovison</i>	3 records; closest 0.6km NW	WCA (9) <sup>18</sup>

<sup>18</sup> WCA (9) - Schedule 9 Wildlife and Countryside Act 1981 (as amended)

Common Name	Scientific Name	Records	Conservation Status
Canadian waterweed	<i>Elodea canadensis</i>	1 record; closest 0.1km NW	WCA (9)
Himalayan balsam	<i>Impatiens glandulifera</i>	2 records; closest 0.7km W	WCA (9)
Japanese knotweed	<i>Reynoutria japonica</i>	5 records; closest 0.4km SW	WCA (9)
Japanese rose	<i>Rosa rugosa</i>	1 record; 0.2km N	WCA (9)
Mandarin duck	<i>Aix galericulata</i>	1 record, 1km SW. *5 other records identified.	WCA (9)
Nuttall's waterweed	<i>Elodea nuttalli</i>	10 records; closest 0.1km N	WCA (9)

NB: The desk study data is third party controlled data, purchased for the purposes of this report only. RammSanderson Ecology Ltd cannot vouch for its accuracy and cannot be held liable for any error(s) in these data.

#### 9.4 Habitat Connectivity Analysis and Closest Relevant Records

- i In assessing the site, a review of online resources and desk study data was undertaken to assesses the site with respect to its connectivity to the wider environment, particularly along linear features (rivers, railways, canals etc.) and any designated or protected sites. This assessment enables the evaluation of a particular proposal in context of the wider environment with regard to the site itself and any species which may utilise the site.
- ii The connectivity to the wider landscape is limited to the south of the site, due to the presence of the existing Humber Bridge Industrial Estate and the residential and road network of Barton upon Humber. The site does, however, exhibit extensive connectivity to the wider environment to the north of the site through local wetlands and subsequently agricultural land. This connectivity eventually reaches the Humber Estuary and therefore offers extensive connectivity for a variety of faunal species, including bats, birds, terrestrial and riparian mammals, as well as herpetofauna (amphibians and reptiles)

## APPENDIX 3: CLIENT PROPOSALS

**NOTES:**

1. If this drawing has been received electronically it is the recipients responsibility to print the document to the correct scale.
2. All dimensions are in millimetres unless stated otherwise. It is recommended that information is not scaled off this drawing.
3. This drawing should be read in conjunction with all other relevant drawings and specifications.
4. Drawing is not reflective of the latest design layout



Note  
 Lorry Parking Space size is 3.2m x 18.75m



P02	RB	SJP	SJP	14/10/2021
Layout Updated				
P01	RB	SJP	SJP	08/10/2021
First Issue				

Rev	Drawn By:	Checked By:	Approved By:	Date:
Amendments				

Project:  
**Falklands Way Logistics Park**

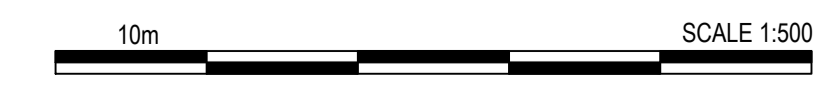
Title:  
**Proposed Site Plan**

Identification / Location:		Sheet Number:			
Project Code:	Originator Code:	Vol / Zone:	Level:	Type:	Role: Number:
WREN2	BED	ST	ZZ	SK	A 0101

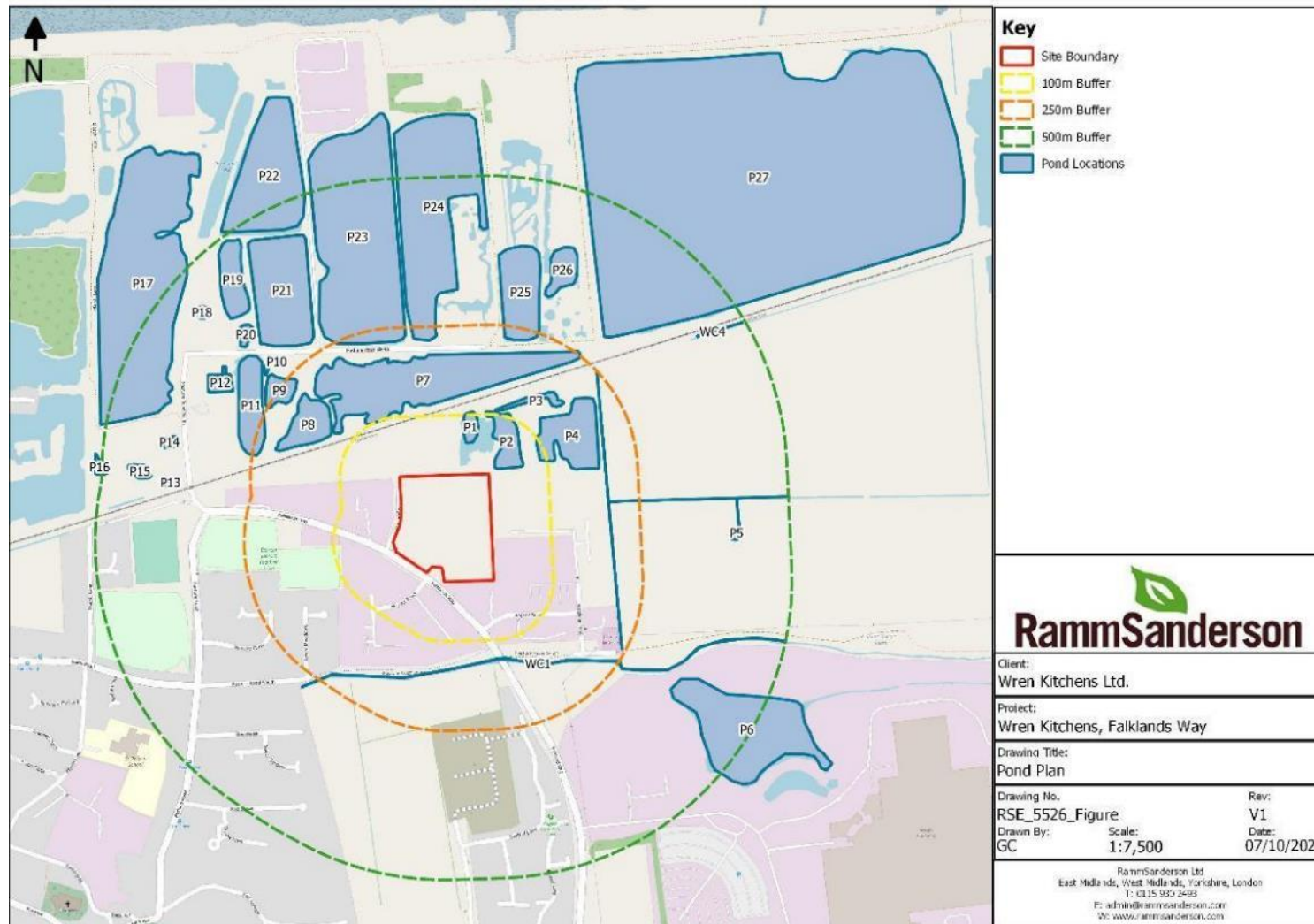
Rev Description:	Status Code:	Model Ref:	Rev No:
Preliminary	S0	ACAD	P01
Scale:	Sheet:	Discipline:	BED Project Number:
1:500	A1	Architectural	NWK 210085



**Proposed Site Plan**  
 (Scale 1:500)



**APPENDIX 4: POND PLAN**



## APPENDIX 5: BIODIVERSITY IMPACT ASSESSMENT CONDITIONS ASSESSMENT

Table 10: Biodiversity Impact Assessment Conditions Assessment

Criteria	Pass/Fail	Further Comments
<b>ON SITE</b>		
<b>Grassland – Modified Grassland</b>		
There must be 6-8 species per m <sup>2</sup>	N/A	
Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed	N/A	
Some scattered scrub may be present, but scrub accounts for less than 20% of total grassland area	N/A	
Physical damage is less than 5% of total grassland area		<i>Assumed habitat based on satellite imagery, therefore conditions assessment not possible and moderate condition assumed</i>
Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens	N/A	
Cover of bracken less than 20%	N/A	
There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). and undesirable species make up less than 5% of total area.	N/A	
<i>Condition Score: Moderate</i>		
<b>Heathland and Shrub – Mixed Scrub</b>		
Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover	N/A	<i>Assumed habitat based on satellite imagery, therefore conditions assessment not possible and moderate condition assumed</i>

Criteria	Pass/Fail	Further Comments
There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs	N/A	
There is an absence of invasive non-native species (as listed on Schedule 9 of the WCA, 1981) and undesirable species make up less than 5% of ground cover	N/A	
The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitats	N/A	
There are clearings, glades or rides present within the scrub, providing sheltered edges	N/A	

*Condition Score: Moderate*

**Heathland and Shrub – Bramble Scrub**

Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover	Fail	
There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs	Fail	
There is an absence of invasive non-native species (as listed on Schedule 9 of the WCA, 1981) and undesirable species make up less than 5% of ground cover	Pass	
The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitats	Fail	
There are clearings, glades or rides present within the scrub, providing sheltered edges	Fail	

*Condition Score: Poor*

**Sparsely Vegetated Land – Ruderal/Ephemeral**

Criteria	Pass/Fail	Further Comments
Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone should not account for more than 80% of the total habitat area	Fail	<i>Small portion of habitat still visible along south-western boundary. Additional areas assumed based on satellite imagery, therefore conditions assessment not possible and poor condition assumed based on remnant habitat on site</i>
There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native or non-native but beneficial to wildlife	Fail	
Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area	Pass	

*Condition Score: Poor*

<b>Hedgerow 1 (H1)</b>		
Height: >1.5m average along length	Pass	
Width: >1.5m average along length	Fail	
Gap between ground and base of canopy <0.5m for >90% of length	Fail	
Gaps make up <10% of total canopy length and no canopy gaps >5m	Pass	
>1m width of undisturbed ground with perennial herbaceous vegetation for <90% of length	Fail	
Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	Fail	
>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	
>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Fail	

*Condition Score: Poor*

Criteria	Pass/Fail	Further Comments
<b>Hedgerow 2 (H2)</b>		
Height: >1.5m average along length	Pass	
Width: >1.5m average along length	Fail	
Gap between ground and base of canopy <0.5m for >90% of length	Fail	
Gaps make up <10% of total canopy length and no canopy gaps >5m	Fail	
>1m width of undisturbed ground with perennial herbaceous vegetation for <90% of length	Fail	
Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	Fail	
>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	
>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Fail	
<i>Condition Score: Poor</i>		
<b>Hedgerow 3 (H3)</b>		
Height: >1.5m average along length	N/A	
Width: >1.5m average along length	N/A	
Gap between ground and base of canopy <0.5m for >90% of length	N/A	<i>Assumed habitat based on satellite imagery, therefore conditions assessment not possible and moderate condition assumed</i>
Gaps make up <10% of total canopy length and no canopy gaps >5m	N/A	
>1m width of undisturbed ground with perennial herbaceous vegetation for <90% of length	N/A	

Criteria	Pass/Fail	Further Comments
Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	N/A	
>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	N/A	
>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	N/A	
<i>Condition Score: Moderate</i>		
<b>OFF SITE</b>		
<b>Grassland – Modified Grassland</b>		
There must be 6-8 species per m <sup>2</sup>	Fail	Very species poor – less than 6 species per m <sup>2</sup> . It should be noted that the conditions assessment was undertaken in November 2021 (outside of the peak botanical season) and therefore species may have been missed
Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed	Fail	Sward height uniform throughout – less than 10cm
Some scattered scrub may be present, but scrub accounts for less than 20% of total grassland area	Pass	
Physical damage is less than 5% of total grassland area	Pass	
Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens	Fail	No bare ground
Cover of bracken less than 20%	Pass	
There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). and undesirable species make up less than 5% of total area.	Fail	White clover and creeping buttercup abundant throughout

Criteria	Pass/Fail	Further Comments
<i>Condition Score: Poor</i>		
<b>Grassland – Modified Grassland (Track through Woodland)</b>		
There must be 6-8 species per m <sup>2</sup>	Fail	Very species poor - less than 6 species per m <sup>2</sup> . It should be noted that the conditions assessment was undertaken in November 2021 (outside of the peak botanical season) and therefore species may have been missed
Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed	Pass	Varying sward height throughout
Some scattered scrub may be present, but scrub accounts for less than 20% of total grassland area	Pass	
Physical damage is less than 5% of total grassland area	Pass	
Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens	Fail	
Cover of bracken less than 20%	Pass	
There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). and undesirable species make up less than 5% of total area.	Fail	Creeping buttercup abundant throughout
<i>Condition Score: Moderate</i>		
<b>Woodland and Forest – Other woodland; broadleaved</b>	Points	
Age distribution of trees	2	
Wild, domestic and feral herbivore damage	3	
Invasive plant species	3	
Number of native tree species	3	

Criteria	Pass/Fail	Further Comments
Cover of native tree and shrub species	3	
Open space within woodland	3	
Woodland regeneration	2	
Tree health	2	
Vegetation and ground flora	1	
Woodland vertical structure	1	
Veteran trees	1	
Amount of deadwood	1	
Woodland disturbance	2	
<i>Condition Score: Moderate</i>	27/39	<i>It should be noted that the conditions assessment was undertaken in November 2021 (outside of the peak botanical season) and therefore species may have been missed</i>

**APPENDIX 6: BIODIVERSITY IMPACT ASSESSMENT – OFFSETTING AREAS**

