# Wood Walk, Hoyland, Barnsley

# Preliminary Ecological Appraisal

## Camstead Homes / Yelcon Ltd

January 2024

# Ecus Ltd

**Report to**: Camstead Homes / Yelcon Ltd
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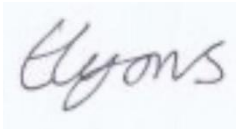

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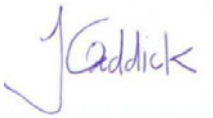

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# Executive Summary

Ecus Limited (Ecus) was commissioned in November 2023 by Camstead Homes / Yelcon Ltd to undertake a Preliminary Ecological Appraisal (PEA) (Chartered Institute of Ecology and Environmental Management (CIEEM), 2017) for an area of land north of Wood Walk, Hoyland, Barnsley, hereafter referred to as 'the Site'. The Site is centred on Ordnance Survey National Grid Reference (OS NGR) SE 37360 01717 and defined by the red line 'Site boundary' annotated on Figure 1.

The Site measures approximately 3.7 hectares (ha) and habitats at the Site include Artificial Unvegetated Unsealed Surface, Modified Grassland, Bramble Scrub, Mixed Scrub, Other Woodland; Broadleaved and Trees. Linear habitats at the Site include Other Native Hedgerow and Fence.

Proposals for the Site are taken from the STEN Architecture 'Planning Layout' (Drawing Reference: 2351.01, dated October 2023) and FDA Landscape '*Residential Development, Wood Walk, Hoyland*' (Drawing Reference: R/1xxx/x, dated December 2023) and involve the construction of 83 dwellings and associated gardens, in addition to Public Open Space (POS) and a Sustainable Urban Drainage System (SuDS) attenuation basin.

A previous PEA undertaken at the Site by Delta Simons ('*Preliminary Ecological Appraisal'*, Report Ref: 16-0406.07, dated August 2021) has been used to inform this report with regard to habitats which had been partially cleared as part of a previous proposed development and ahead of the Ecus PEA. A badger walkover was also undertaken by Ecus in October 2023 as part of the previous proposed development ('*Wood Walk, Hoyland, Barnsley – Badger Walkover Survey*', Report Ref: 22507, dated October 2023).

One statutory designated site for nature conservation is located within 2 km of the Site. This pertains to a Site of Special Scientific Interest (SSSI). A further two non-statutory designated sites (both Local Wildlife Sites (LWS)) are also located within 2 km of the Site.

Loss of habitats on Site is considered to be of importance at the site level, given they are also present within the local area and are of low botanical diversity. The retained habitats at the Site are considered more valuable for supporting protected and notable species. It is recommended that native hedgerow planting is undertaken to the southwest of the Site and along the southern boundary to link existing hedgerows together to improve habitat connectivity. It is also recommended that native wildflower and grassland mix is incorporated into the soft landscaping.

It is also recommended that a badger walkover is undertaken at the Site and within 30 m no more than three months in advance of the works. This is to ensure any badger setts subsequently excavated/discovered are identified and suitable mitigation/licencing is implemented.

The habitats at the Site are considered suitable for nesting bird species. Where vegetation removal is required, such as the hedgerow to the southwest of the Site or within the woodland, this should be undertaken outside of the peak nesting bird season (typically March – August inclusive) in order to minimise the risk of committing an offence in relation to nesting birds. If this is not possible, then a nesting bird check by a suitably qualified ecologist will be required with vegetation removal undertaken within 24 hours of the check (provided no nest identified). Further checks will be required if vegetation has not been removed within this period.

A Construction Ecological Management Plan (CEMP) is also recommended to ensure compliance with legislation and safe working methods are adopted during the construction works. The CEMP details management measures to be adhered to during the work to minimise any potential adverse effects from the construction phase of the development. These will also include the protection of retained habitats at the Site, Best Practice Measures (BPM) for protected and notable species, pollution prevention measures and biosecurity measures.

# 1. Introduction

## 1.1 Background

1.1.1 Ecus Limited (Ecus) was commissioned in November 2023 by Camstead Homes / Yelcon Ltd to undertake a Preliminary Ecological Appraisal (PEA) (Chartered Institute of Ecology and Environmental Management (CIEEM), 2017) for an area of land north of Wood Walk, Hoyland, Barnsley, hereafter referred to as 'the Site'. The Site is centred on Ordnance Survey National Grid Reference (OS NGR) SE 37360 01717 and defined by the red line 'Site boundary' annotated on Figure 1.

1.1.2 The Site measures approximately 3.7 hectares (ha) and habitats at the Site include Artificial Unvegetated Unsealed Surface, Modified Grassland, Bramble Scrub, Mixed Scrub, Other Woodland; Broadleaved and Trees. Linear habitats at the Site include Other Native Hedgerow and Fence.

1.1.3 Proposals for the Site are taken from the STEN Architecture '*Planning Layout*' (Drawing Reference: 2351.01, dated October 2023) and FDA Landscape '*Residential Development, Wood Walk, Hoyland*' (Drawing Reference: R/1xxx/x, dated December 2023) and involve the construction of 83 dwellings and associated gardens, in addition to Public Open Space (POS) and a Sustainable Urban Drainage System (SuDS) attenuation basin.

1.1.4 The purpose of the PEA was to carry out an ecological desk study and a UK Habitat Classification survey to inform an assessment of the ecological value of the Site and its potential to support habitats or be used by species protected under either UK or European nature conservation legislation. This includes those within the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 and the Natural Environment and Rural Communities (NERC) Act (2006). Full details of legislation relating to those habitats and species discussed within this report can be found at: http://www.legislation.gov.uk.

1.1.5 A previous PEA undertaken at the Site by Delta Simons ('*Preliminary Ecological Appraisal*', Report Ref: 16-0406.07, dated August 2021) has been used to inform this report with regard to habitats partially cleared as part of a previous proposed development and ahead of the Ecus PEA. A badger walkover was also undertaken by Ecus in October 2023 as part of the previous proposed development ('*Wood Walk, Hoyland, Barnsley – Badger Walkover Survey*', Report Ref: 22507, dated October 2023), which will be referenced where appropriate within this report.

1.1.6 This report details the findings of a data consultation and ecological walkover survey carried out on 1st December 2023. The methodologies employed and all survey findings are described along with an evaluation and assessment of the ecological value of the Site. Any requirement for further survey work and/or mitigation/enhancement is also detailed as required. Habitats at the Site were

subject to condition assessment and are discussed within the Ecus Biodiversity Net Gain (BNG) report '*Biodiversity Net Gain Assessment – Feasibility Stage*' (Report Reference: 22693, dated December 2023).

# 2. Methodology

## 2.1 Data Consultation

2.1.1 A data consultation was undertaken by Ecus Ltd in November 2023 with the local records centre Barnsley Biological Records Centre (BBRC). The data consultation was undertaken to determine the presence of existing biological records or local non-statutory designated sites of nature conservation interest within 2 kilometres (km) of the Site.

2.1.2 The Multi-Agency Geographic Information for the Countryside (MAGIC) website (http://magic.defra.gov.uk) was reviewed in December 2023 for information on statutory designated sites of nature conservation interest, and the presence of European Protected Species (EPS) mitigation licences for great crested newt *Triturus cristatus* (GCN) and bats within 2 km of the Site. MAGIC was also used to search for information relating to GCN Class Survey Licence Returns and GCN pond survey data (2017- 2019) within 2 km of the Site. Waterbodies and watercourses were also identified using MAGIC colour mapping.

***GCN Risk Zone***

2.1.3 Natural England's GCN Risk Zone dataset was consulted to give an understanding of the potential presence of GCN in the local area and, therefore, the likelihood of the species being found on the Site. This dataset identifies areas where the distribution of GCN has been categorised into district zones relating to GCN occurrence and the level of impact development is likely to have on this species. Zones are split into Red, Amber and Green and are described as follows:

- Red zone – contains key populations of GCN, which are important on a regional, national or international scale and include designated Sites of Special Scientific Interest for GCN;
- Amber zone – contains main population centres for GCN and comprise important connecting habitat that aids natural dispersal; and,
- Green zone – contains sparsely distributed GCN and are less likely to contain important pathways of connecting habitat for this species.

2.1.4 Information obtained from BBRC and MAGIC is included within the report where appropriate. All records have been reviewed however records from within the last 20 years are considered the most relevant.

## 2.2 Ecological Walkover Survey

2.2.1 The Site was surveyed on 1st December 2023 by Assistant Ecologist Tom Lyons BSc (Hons), MRes, with reference to best practice guidelines, the '*UK Habitat Classification User Manual*' (Butcher *et al*. 2020). This survey method aims to define the habitat types present and is not intended to provide a complete list of all plants occurring across the Site.

2.2.2 Habitats and vegetation types present on the Site were recorded on to a field map and notable, rare or scarce plant species, including other features of ecological interest, were highlighted and marked using Target Notes (TN).

2.2.3 The abundance of plant species recorded was classified according to the DAFOR rating. The standardised terms are as follows:

- D – Dominant;
- A – Abundant;
- F – Frequent;
- O – Occasional, and,
- R – Rare.

2.2.4 Habitats present that are listed under Section 41 of the NERC Act (2006) or on the Barnsley Local Biodiversity Action Plan (LBAP) were recorded. Survey findings and TN are detailed in Section 3 below and are annotated on Figure 1. TN descriptions are provided in Appendix 1 and Site photographs are provided in Appendix 2.

2.2.5 The value and sensitivity of ecological features present in the Site was determined based on the guidance given in '*Guidelines on Ecological Impact Assessment'* (CIEEM, 2018). Individual ecological receptors (habitats and species) that could be affected by the proposed development were assigned levels of importance for nature conservation. The highest level is International, then decreasing in order of importance through UK, national, regional, county, local, and lastly site level (within the zone of influence).

2.2.6 Satellite aerial imagery and OS Maps have been utilised where necessary to inform habitat connectivity between the Site and off-Site.

## 2.3 Protected and Key Species

2.3.1 Any evidence of protected species or groups encountered during the survey was recorded. This included observations of field signs and an assessment of the suitability of the habitats present to support protected species. For full details of legislation relating to all habitats and species

discussed within this report visit http://www.legislation.gov.uk.

***Amphibians***

2.3.2 The Site was assessed with regards to its potential to support GCN and common amphibians, including a desk-based search using 1:10,000 OS mapping for waterbodies within 500 metres (m) of the Site, which are not separated by a significant barrier to amphibian dispersal. These are shown in Figure 2.

2.3.3 Where accessible, waterbodies identified within 250 m of the Site were assessed to determine their likely suitability for GCN using the Habitat Suitability Index (HSI) (Oldham *et al.*, 2000).

***Badger***

2.3.4 Signs of badger *Meles meles* activity were searched for within the Site and up to 30 m from the Site boundary, where accessible.

2.3.5 The survey followed standard methodology detailed in '*Surveying Badgers'* (Harris *et al*., 1989) and the approach as described in '*The History, distribution, status and habitat requirements of the badger in Britain*' (Creswell *et al*. 1990).

2.3.6 This included survey for badger setts, latrine/dung pits, foraging marks, feeding signs (e.g. snuffle holes), footprints, badger hairs and worn pathways, specifically along linear features and boundaries in the Site.

2.3.7 The survey focussed on areas with suitable topography and/or vegetation for sett building as well as key habitats favoured for foraging e.g. woodland, hedgerows, ditches and banks, where present.

***Bats***

Daytime bat walkover

2.3.8 During the ecological walkover any structures or trees on Site were assessed using the recommended survey protocol, including the Ground Level Tree Assessment (GLTA) methodology (Collins, 2023).

2.3.9 A structure or tree may have several features of potential interest to roosting bats associated with it and it is not always possible to confirm usage of a feature by bats during the walkover given the often transient nature of bat roosts. Consequently, it is customary when undertaking such surveys to assign a given tree or structure to a defined category of roosting suitability (i.e. confirmed, high, moderate, low, negligible or none), taking into consideration current best practice guidelines (Collins, 2023).

2.3.10 The Site was also assessed for its suitability for use by foraging and commuting bats.

***Birds***

2.3.11 In 2021, a re-assessment of Birds of Conservation Concern 5 (BoCC5) was published by Stanbury *et al*. (2021), which defined rare and threatened bird species on two lists (Red and Amber) describing the level of threat to each species of concern.

2.3.12 "Red" is the highest conservation priority, with species needing urgent action due to either a historical decline in breeding population, severe (>50%) decline in breeding or non-breeding population, or severe decline in breeding range over 50 years or more. "Amber" is the next most critical group, with species qualifying for this status as a result of either recovery from red list criterion, being classed as rare breeders in the UK, moderate (>25%) decline in breeding or non-breeding population or moderate decline in breeding range over 25 years or more. These categories are followed by "Green", indicating that the species are relatively unthreatened.

2.3.13 Desk study data was filtered for Wildlife and Countryside (WCA) Act 1981 (as amended) Schedule 1 bird species and those species protected under Annex 1 of the EU Directive on the Conservation of Wild Birds, also known as the Birds Directive. The data was also filtered to search for records of LBAP priority species, NERC Act (2006) species of principal importance, and birds on the Red, Amber and Green lists within the BoCC5 assessment.

2.3.14 While on the Site during the ecological walkover survey any species of birds encountered were recorded and habitats were assessed for their potential value to breeding, wintering and foraging birds.

***Invertebrates***

2.3.15 Habitats at the Site were assessed for their suitability to support protected and notable invertebrates, with any habitat features such as sheltered sunny areas noted.

***Reptiles***

2.3.16 The habitats present on the Site were assessed for their suitability to support basking, foraging, sheltering and hibernating reptiles, notably with reference to their connectivity with other areas of suitable habitat within the wider landscape.

***Riparian Mammals and White-clawed Crayfish***

2.3.17 A desk-based search for watercourses on, and within 30 m of, the Site which are not separated from the Site by a significant barrier to dispersal was undertaken using OS 1:10,000 mapping.

***Other Key and Notable Species***

2.3.18 Whilst on the Site, habitats were assessed for their potential to support any other nationally, locally scarce or locally notable (e.g. LBAP) species.

## 2.4 Invasive Species

2.4.1 Whilst on the Site during the survey any evidence of invasive non-native species (INNS), as listed on Schedule 9 of the WCA 1981 (as amended), was recorded and mapped where seen.

## 2.5 Assumptions and Limitations

2.5.1 The UK Habitat Classification survey is intended to provide a rapid assessment of habitats present within a site and is not intended to replace detailed vegetation or targeted protected species surveys, where deemed necessary.

2.5.2 The UK Habitat Classification survey guidelines were followed with the exception of the timing of the survey, which was conducted outside of the optimal botanical growth season (May to August). As the ecological walkover was undertaken in December 2023, it is possible that some flowering plants may have been under-recorded or absent and some plants only identified to family or genus level only. However, the habitat classifications are considered to be accurate reflections of the Site given the previously farmed nature of the Site within the local landscape and therefore re-surveys of vegetated habitats in the optimal botanical season are not considered necessary.

2.5.3 No garden ponds/ornamental water features were identified as extant in any of the residential gardens neighbouring the Site. It should be noted that unidentified garden ponds/water features may exist in adjacent gardens. However, in general such water features are usually relatively small in size and are more likely to be used by common amphibians i.e. smooth newt *Lissotriton vulgaris*, and/or palmate newt *Lissotriton helveticus* and/or common frog *Rana temporaria* (albeit GCN and common toad *Bufo bufo* may use them in certain circumstances; for example if there is a larger waterbody close by that supports either of these species).

2.5.4 The embankment the north of the Site and between the Dearne Valley Parkway was inaccessible to survey in order to survey for badger setts and field signs. However, an assessment of the Site habitats for their potential use for foraging and commuting as well as identification of field signs was undertaken to consider likely absence or presence.

# 3. Findings and Evaluation

## 3.1 Site Description

3.1.1 The Site measures approximately 3.7 ha in size. Habitats present at the Site include Urban – Artificial Unvegetated Unsealed Surface (u1c), Grassland – Modified Grassland (g4), Heathland and Shrub – Bramble Scrub (h3d), Heathland and Shrub – Mixed Scrub (h3h), Woodland and Forest – Other Woodland; Broadleaved (w1g) and Trees. Linear habitats at the Site include Heathland and Shrub – Other Native Hedgerow (h2a6) and Urban – Built Linear Features (u1e).

3.1.2 The Site is located to the north of the Wood Walk (B6096) and south of the Dearne Valley Parkway (A6195) in the northern section of Hoyland, Barnsley in South Yorkshire. The wider area is predominantly arable and farmland, with other areas of grassland, woodland and built-up areas.

3.1.3 Artificial Unvegetated Unsealed Surface formed the majority of the Site, which was cleared in 2023 as part of the previous proposed development. This was formerly an arable field, identified within the Delta Simons PEA (2021).

3.1.4 The Modified Grassland forms the boundaries of the former arable field and extends into the eastern section of the Site; the Bramble Scrub is recorded in the southwest of the Site along the Site boundary; the Mixed Scrub is located within the east of the Site and Other Woodland; Broadleaved plantation is located in the east of the Site.

3.1.5 Six Other Native Hedgerows (H1– H6) are located around the Site, including a continuous stretch running along the north adjacent to the former crop field and grassland. Two mature trees (T1 and T2) are also present within the Site, located at approximately SE 37348 01693 and SE 37474 01689 respectively.

## 3.2 Designated Sites

3.2.1 One statutory designated site for nature conservation is located within 2 km of the Site. This pertains to a Site of Special Scientific Interest (SSSI).

3.2.2 A further two non-statutory designated sites (both Local Wildlife Sites (LWS)) are also located within 2 km of the Site.

3.2.3 The designated sites are detailed below in Table 1 and shown in Figure 3. Description citations have been provided by BBRC.

**Table 1. Designated Sites within 2 km of the Site.**

| Designated Site | Description | Approximate Distance / Direction from Site |
|---|---|---|
| ***Statutory*** | | |
| Dearne Valley Wetlands<br><br>SSSI | Dearne Valley Wetlands comprises a series of shallow and deep open waters with an associated range of marginal habitats including ditches, reedbed, marsh, wet grassland, scrub and woodland. This range of habitats provides valuable nesting, resting and feeding conditions which support nationally important numbers and assemblages of birds in the breeding and non-breeding seasons. | 940 m northwest |
| ***Non-Statutory*** | | |
| Wombwell Wood<br><br>LWS | This site pertains to a large block of natural woodland and plantation which is bounded by agricultural land. Ancient woodland indicators are present at the site in addition to the UKBAP herptile species adder *Vipera berus* and common lizard *Zootoca vivipara*. | 550 m north |
| Short Wood and Hay Green<br><br>LWS | The site is a small area of ancient woodland with oak *Quercus robur*, bracken *Pteridium aquilinum* and bluebells *Hyacinthoides non-scripta*. UKBAP breeding bird species found within the wood are dunnock *Prunella modularis*, bullfinch *Pyrrhula pyrrhula* and song thrush *Turdus philomelos*. | 1.25 km west |

3.2.4 Statutory designated sites are of importance to nature conservation at the national level. The non-statutory designated sites are of importance to nature conservation at the regional/county level.

3.2.5 A review of the SSSI Impact Risk Zone (IRZ) on MAGIC identified that the Site is within the Dearne Valley Wetlands SSSI IRZ. The IRZ relates to 'Residential', whereby the type of development proposal which could potentially have adverse impacts on features for which the SSSI is notified include:

- *Residential development of 100 units or more.*

3.2.6 The Site is located within an existing settlement/urban area and therefore is not considered to fall under the 'Rural Residential' category.

## 3.3 Habitats

3.3.1 Habitats recorded on the Site, their distribution and composition are discussed below. Habitat locations and TN depicting features of ecological interest are annotated on Figure 1. Site photographs are displayed in Appendix 2.

***Urban – Artificial Unvegetated Unsealed Surface (u1c) [Secondary Codes: 81 – Ruderal or Ephemeral, 503 – Wet, 510 – Bare Ground]***

3.3.2 The area formally occupied with the arable field (Delta Simons, 2021) has a mixture of cleared, unvegetated ground; pioneer-colonising mounds (Figure 1, TN1, Appendix 2); and rock mounds/piles (Figure 1, TN2, Appendix 2). Species present amongst the vegetated mound to the southeast of the Site are indicative of disturbed ground and include greater willowherb *Epilobium hirsutum* (A), scentless mayweed *Tripleurospermum inodorum* (A), cleavers *Galium aparine* (F), creeping thistle *Cirsium arvense* (F), broadleaved dock *Rumex obtusifolius* (O), common ragwort *Senecio jacobaea* (O), spear thistle *Cirsium vulgare* (O), dandelion *Taraxacum officinale* (R), red deadnettle *Lamium purpureum* (R) and Shepherd's purse *Capsella bursa-pastoris* (R).

3.3.3 A depression as part of excavation works associated with the previous proposed development (Figure 1, TN3, Appendix 2) was inundated with water at the time of the survey, which is believed to be likely to dry up in warmer and dry weather conditions.

3.3.4 Artificial Unvegetated Unsealed Surface is not listed under Section 41 of the NERC Act (2006) and is not included within the LBAP. Built up areas and gardens are listed within the LBAP, however the listings relate to buildings and their grounds, allotments, verges and urban open spaces; and it is not considered to relate to the Artificial Unvegetated Unsealed Surface habitat at the Site. This habitat is considered to be of importance to nature conservation at no higher than at the site level.

***Grassland – Modified Grassland (g4) [Secondary Codes: 10 – Scattered Scrub, 14 – Scattered Rushes, 16 – Tall Forbs, 50 – Ditch, 500 – Dry, 510 – Bare Ground]***

3.3.5 The margins of the cropland field consist mostly of thin strips of modified grassland, with a larger parcel of modified grassland present in the eastern section of the Site. Species present around the field margins include annual meadow-grass (F), cock's-foot *Dactylis glomerata* (F), creeping buttercup *Ranunculus repens* (F), greater willowherb (F), Yorkshire fog (F), bramble *Rubus fruticosus* (O), cleavers (O), common couch *Elymus repens* (O), common nettle *Urtica dioica* (O), common ragwort (O), cow parsley *Anthriscus sylvestris* (O), creeping thistle (O), red fescue (O), rosebay willowherb *Chamaenerion angustifolium* (O), scentless mayweed (O), beech sp. saplings *Fagus sp*. (R), blackthorn *Prunus spinosa* (R), common knapweed *Centaurea nigra* (R), hazel saplings *Corylus avellana* (R), hogweed *Heracleum sphondylium* (R), oak sp. saplings *Quercus sp*. (R), soft rush *Juncus effusus* (R), sycamore saplings *Acer pseudoplatanus* (R), white clover (R) and yarrow *Achillea millefolium* (R).

3.3.6 The grassland within the eastern parcel of the Site comprises of cock's-foot (F), common ragwort (F), tufted hairgrass *Deschampsia cespitosa* (F), bramble (O), creeping thistle (O), rosebay willowherb (O), teasel *Dipsacus fullonum* (O), crested dog's-tail *Cynosurus cristatus* (R) and spear thistle (R). A small area of bare ground is present which is being slowly colonised by common nettle and willowherb.

3.3.7 Two small dry ditches, considered extremely unlikely to hold water, were located along the northern and western boundaries of the Site within the grassland margins, one of which is associated with the hedgerow (H1) (Figure 1, TN4, Appendix 2).

3.3.8 Modified Grassland is not listed under Section 41 of the NERC Act (2006) and is not listed in the LBAP, although other grasslands such as neutral grasslands, amenity grasslands, acid grasslands and lowland meadows. Arable field margins are included within the LBAP as a priority habitat however this relates to managed margins to benefit farmland bird species such as skylark *Alauda arvens*is. The grassland verges at the Site do not appear to have clear management and therefore, these habitats are not considered to qualify as arable field margins within the local plan. However, this habitat is present within the local area and therefore is considered to be of importance to nature conservation at no higher than at the site level.

***Woodland and Forest – Other Woodland; Broadleaved (w1g) [Secondary Codes: 29 – Plantation, 61 – Re-Created Habitat, 210 – Coppice, 521 – Unmanaged]***

3.3.9 A plantation woodland is present to the east of the Site which comprises mostly of sycamore (A), with elder *Sambucus nigra* (O), hazel (O), silver birch *Betula pendula* (O) and rowan *Sorbus acuparia* (R). Understory species were scarce and consisted of blackthorn (R), elder (R), hawthorn (R) and hazel (R). Historic evidence of coppicing is present with multiple trunks growing from one stem. However, no recent management is evident as tree growth is very dense packed in most areas particularly, in the habitat margins. Small branches from the trees are also present on the ground.

3.3.10 A defunct dry stone wall is present near the eastern extent of the woodland which is fully collapsed with moss vegetation growing upon it (Figure 1, TN5, Appendix 2).

3.3.11 Other Woodland; Broadleaved is not listed under Section 41 of the NERC Act (2006) and is not listed in the LBAP. This woodland parcel is isolated from other woodlands through nearby roads and as woodland are present within the local area, including the Wombwell Woods LWS to the northeast of the Site, this habitat is considered to be if importance to nature conservation at the site level only.

***Heathland and Shrub – Mixed Scrub (h3h) [Secondary Codes: 12 – Scattered Bracken, 114 – Dry Stone Wall, 524 – Invasive Non-Native Species]***

3.3.12 Two separate sections of mixed scrub are present within the eastern section of the Site. A large stand of bracken *Pteridium aquilinum* (LA) is present towards the eastern boundary of the Site; this habitat is approximately 0.01 ha and under UK Habitat Classification a habitat of bracken is required to be a minimum of 0.04 ha to be considered a distinct habitat. This criterion is not met and therefore is identified within the Mixed Scrub habitat. Other species present in this habitat include willow sp. *Salix sp*. (F), blackthorn (O), bramble (O), creeping thistle (O), field rose *Rosa arvensis* (O), rosebay willowherb (O), buddleia *Buddleia* (R), hazel (R), spear thistle (R) and yorkshire-fog (R).

3.3.13 A defunct dry stone wall is present under the bracken patch and is colonised with mosses (Figure 1, TN6, Appendix 2).

3.3.14 One stand of non-native buddleia is present within this habitat (Figure 1, TN7, Appendix 2) and no evidence of widespread colonisation was considered present during the survey. Buddleia is not listed under Schedule 9 of the WCA (1981) as amended but does display invasive tendencies.

3.3.15 Mixed Scrub is not listed under Section 41 of the NERC Act (2006) but is included within the LBAP under 'Scrub'. The mixed scrub at the Site is did not appear to show diverse botanical species and as this habitat is considered likely to be present within the wider area. It is therefore considered to be of importance to nature conservation at no higher than at the site level.

***Heathland and Shrub – Bramble Scrub (h3d)***

3.3.16 A dense parcel of bramble scrub was identified to the southwest of the Site. Species present include bramble (D), common nettle (F), rosebay willowherb (F) and well as some undetermined grass species.

3.3.17 Bramble Scrub is not listed under Section 41 of the NERC Act (2006) but is included within the LBAP under 'Scrub'. The section of Bramble Scrub at the Site is small in area and is likely to be present within the wider area, therefore this habitat is considered to be of importance to nature conservation at no higher than at the site level.

***Heathland and Shrub – Other Native Hedgerow (h2a6) [Secondary Codes: 518 – Neglected, 521 – Unmanaged]***

3.3.18 Six hedgerows (H1– H6) were recorded at the Site which consisted of native species (Figure 1). None of the hedgerows supported a minimum of six woody species and, therefore they are not considered to qualify as a native species-rich hedgerow.

3.3.19 H1 was recorded along the north of the Site with a small dry ditch running underneath and consisted of blackthorn (LA), field maple *Acer campestre* (F), hawthorn (F) hazel and willow sp.(F). H2 comprised of hawthorn (D) with two willow species identified only to Genus level (O) and blackthorn. A dense stand of coralberry *Symphoricarpos orbiculatus* was also present within the

hedgerow. H3 and H4 comprised of hawthorn (A), blackthorn (O), elder (R) with some of the hawthorn stands wrapped with ivy *Hedera ilex*. H5 comprised of hawthorn (A), willow sp. (O), as well as bramble (A), and also supported a small ditch which was dry at the time of the survey. H6 comprised of sycamore (A), with hawthorn (O) and rowan (O).

3.3.20 Hedgerows are listed under Section 41 of the NERC Act (2006) as a priority habitat provided 80% of the species are native woody species, and hedgerow are also included in the LBAP. Given the species diversity within the hedgerows on the Site, and the habitat connectivity with off-Site habitats, it is considered that the on-Site hedgerows are of importance to nature conservation at the local level, although hedgerows are likely to be present within the wider area.

***Urban – Built Linear Features (u1e) [Secondary Code: 621 – Fence]***

3.3.21 A number of fences are located around the Site forming the Site boundary, including within the woodland and scrub to the east, within the hedgerows to the north and southeast of the Site and also within the modified grassland strip to the west.

3.3.22 Fences are not listed under Section 41 of the NERC Act (2006) and are not included within the LBAP. Given the negligible habitat value and low value to species (e.g. use for nests to attach to for species such as thrushes *Turdus sp.*), this habitat is considered to be of no higher importance to nature conservation than at the site level and is not considered further in this report.

## 3.4 Protected and Key Species

***Amphibians***

3.4.1 BBRC returned a total of 62 records of amphibians for locations within 2 km of the Site including common frog, common toad, GCN and smooth newt. The closest record pertains to a common frog, located approximately 450 m southeast of the Site from 2015. The one GCN record returned was located approximately 970 m southwest of the Site from 2015.

3.4.2 No GCN EPS licence returns were identified within 2 km of the Site using MAGIC and no records pertaining to Great Crested Newt Class Survey Licence Returns (England) or Great Crested Newt Pond Surveys 2017– 2019 were identified within 2 km of Site following a review of MAGIC.

3.4.3 The Site is located within a Green Zone for Natural England (NE) District Level Licensing (DLL). A Green Zone contains sparsely distributed GCN and are less likely to contain important pathways of connecting habitat for this species. The Site however, is located nearby to Amber Zones, approximately 30 m east and approximately 120 m west of the Site but do not have direct habitat linkages with the Site. Amber zones contain main population centres for GCN and comprise important connecting habitat that aids natural dispersal.

3.4.4 Using OS mapping, no waterbodies were identified within 250 m of the Site. Three waterbodies

were identified within 500 m of the Site, at roughly SE 37782 01917 (approximately 280 m northeast), SE 36774 01770 (approximately 430 m west) and SE 37580 01199 (approximately 500 m south) (Figure 2, WB1, WB2 & WB3 respectively). The closest two waterbodies (WB1 and WB2) are separated from the Site by a major dual-carriageway road (Dearne Valley Parkway), which is considered to represent a major barrier to dispersal; WB3 is separated from the Site by gardens and fields, and Wood Walk/Wombwell Road to the south of the Site. However, suitable terrestrial habitat in the form of woodland and grassland is present between these ponds and the Site, with small dispersal barriers in the form of roads.

3.4.5 Three watercourses/ditches are present within 500 m of the Site (Figure 2), with D1, D2 and D3 located approximately 40 m south, 290 m northeast and 310 m west from the Site respectively. D1 is considered likely to be a small flowing watercourse based on the presence of a culvert as shown on MAGIC imagery; and therefore are highly unlikely to provide GCN and common amphibian breeding habitat. D2 and D3 are located greater than 250 m from the Site and given barriers to dispersal from these to the Site in the form of roads, are discounted as a receptor for GCN to the Site.

3.4.6 No waterbodies were recorded on the Site and ditches within the grassland margins on the western and northern boundaries on the Site were dry at the time of the survey and are considered extremely unlikely to hold water within the spring and summer months. It is unlikely that GCN breeding habitat is present on the Site and given the former arable field has been cleared as part of the previous proposed development, the majority of the Site area is considered sub-optimal for foraging and commuting GCN and common amphibians. It is noted however that several puddles were present at the Site, including a large one to the north of the Site where excavations had created a depression on impermeable surfaces (Figure 1, TN3, Appendix 2). Given the absence of vegetation in these areas, it is considered that these puddles are very temporary, will dry up in warmer weather and are unsuitable for supporting GCN.

3.4.7 The grassland margins and hedgerows provide suitability for foraging and commuting GCN and common amphibians, whilst the woodland and mixed scrub, particularly within the defunct dry stone walls within the woodland and mixed scrub, as well as the large brash and brick pile (Figure 1, TN8, Appendix 2), would support hibernation and shelter, as well as for foraging and commuting. The rock pile/mound (TN2) provides suitable sheltering and hibernation potential for amphibians which was created as part of the clearance works.

3.4.8 It is considered that WB1, WB2 and WB3 have poor habitat connectivity to the Site, given the presence of roads between these waterbodies and the Site, and there is a low risk that GCN would disperse onto the Site if present within these waterbodies. The major and minor roads intervening

between these waterbodies and the Site are considered to be minor barriers to dispersal and based on aerial imagery more suitable habitat will be present adjacent to these waterbodies. Given the lack of nearby waterbodies and similar habitat within the wider area, it is considered unlikely that GCN would be reliant on the Site habitats and therefore the Site is considered to be of importance to GCN at no higher than at the site level.

3.4.9 Common amphibians, namely common toad have a much wider dispersal range than GCN (up to 5 km from breeding ponds), and therefore their presence should not be ruled out at the Site, considering the potential for garden ponds nearby. However, it is not considered likely that common amphibians would be reliant on the Site habitats and therefore the Site is considered to be of importance to common amphibians at no higher than at the site level.

***Badger***

3.4.10 Badgers are not listed as species of principal importance under Section 41 of the NERC Act (2006).

3.4.11 BBRC returned seven records of badger for locations within 2 km of the Site, three of which pertained to setts. The closest record is located approximately 1.35 km from the Site from 2020.

3.4.12 [redacted]

3.4.13 No further signs of badger setts or field signs were recorded during the survey. A likely rabbit warren was recorded within the woodland to the west of the disused badger sett (Figure 1, TN9, Appendix 2) adjacent to the telegraph pole. This was assessed on the size of the entrance holes and presence of droppings near to dig holes, which were both considered too small to have originated from badger.

3.4.14 With exception of the woodland, the majority of the habitats on Site are considered to be sub-optimal for badger sett construction. The grassland margins are relatively narrow and although many have a hedgerow as cover, however may still support sett construction. The off-Site habitats to the north, i.e. on the embankment between the Site and the Dearne Valley parkway, are considered suitable for badger sett construction, however this could not be surveyed during the PEA due to it being inaccessible.

3.4.15 The Site where cleared as part of the previous proposed development is unsuitable for badger setts due to the disturbance of the ground. Given the small amount of present suitable habitat at the Site for badgers, and more suitable habitat is present within the wider area, the Site is considered to be of importance to badgers at no higher than at the site level.

***Bats***

3.4.16 Barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, brown long-eared bat *Plecotus auritus*, greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe *Rhinolophus hipposideros*, noctule *Nyctalus noctula* and soprano pipistrelle *Pipistrellus pygmaeus* bats are included as species of principal importance under Section 41 of the NERC Act (2006). All bat species are included within the LBAP.

3.4.17 BBRC returned a total of 74 bat records for locations within 2 km of the Site, five of which were roost records. Roost records pertained to common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle. The closest record related to both species, located approximately 260 m north of the Site from 2021.

3.4.18 The remaining 69 records pertained to foraging, commuting and grounded bats including the following species: brown long-eared bat *Plecotus auratus*, common pipistrelle, Daubenton's bat *Myotis daubentonii*, Leisler's bat *Nyctalus leisleri*, myotis species *Myotis sp*., noctule, nyctalus species *Nyctalus sp*., pipistrelle species *Pipistrelles sp*. and soprano pipistrelle. The closest record pertains to a pipistrelle species, located approximately 620 m northeast of the Site from 2017.

3.4.19 One EPS licence relating to bats was identified within 2 km of the site using MAGIC. The licence was recorded approximately 1.80 km south of the Site and pertained to the destruction to a resting place for soprano pipistrelle (2017-32557-EPS-BDX) from 2018.

Roosting Bats

*Structures*

3.4.20 No buildings are present on the Site.

3.4.21 Four telegraph poles (TG1, TG2, TG3, TG4, Figure 1) were identified on the Site, one within the woodland to the east, two within the former arable field and the fourth within the bramble scrub to the southwest respectively.

3.4.22 TG1, TG3 and TG4 possess some small holes in which potentially singular bats could fit in but are likely to be exposed and unlikely to be used for roosting. These three telegraph poles were considered to display Negligible suitability for roosting bats.

3.4.23 TG2 possessed a fissure near the top in which it was considered could offer a Potential Roosting Feature (PRF) for singular bats given that one of the fissures runs through a small hole and could

support some shelter. TG2 was considered to display Low suitability for roosting bats. The telegraph poles are all understood to be retained as part of the proposed development.

*Trees and Woodland*

3.4.24 Two mature trees (T1 and T2, Figure 1) are present in the south and southeast of the Site respectively. T1 comprises an ash *Fraxinus excelsior* and T2 a sycamore.

3.4.25 T1 was observed to support PRFs: in a hole within an area of a snapped branch; within a split branch; and, within two rotten knot holes. T1 was assessed as having the potential to support singular or very low numbers of bats and is therefore designated as PRF-I (where a PRF is considered to be suitable for individual bats or low numbers due to the lack of size or lack of suitable surrounding habitat (Collins, 2023)) and is considered to display Low Roost Suitability in line with current guidance (Collins, 2023).

3.4.26 T2 possessed a PRF in a split within the trunk approximately 6 m high which has potential to lead deeper into a cavity. This tree therefore has been designated as PRF-I and is considered to display Low Roost Suitability in line with current guidance (Collins, 2023).

3.4.27 The woodland to the east of the Site comprises relatively juvenile trees with small diameter trunks. No PRFs were identified on trees in the woodland with exception of a single sycamore tree which supported a split within the trunk, near its crown. The split was upwards facing and exposed to rainfall, therefore was not considered to be suitable for roosting bats.

3.4.28 Given the small number of PRFs at the Site, which are considered likely to be of low value for only very low numbers of roosting bats, whilst roosting bats cannot be ruled out at the Site it is not considered that any more than a low number of individuals will be supported. Higher value habitats, with more mature trees and dwellings, with equivalent or greater suitability for roosting are present within the local area. The Site is considered to be of importance to roosting bats at no higher than the site level.

Foraging and Commuting Bats

3.4.29 Hedgerows, mixed scrub and woodland habitats at the Site are considered to possess suitability for foraging and commuting bats. The northern hedgerow (H1) links with further habitat between the Site and the Dearne Valley Parkway and a field to the west, whilst the southern and eastern hedgerows/scrub/woodland are in close proximity to fields and hedgerows to the south of the Site. The centre of the Site is considered unsuitable for foraging and commuting bats due to its unvegetated present state.

3.4.30 In line with current guidance (Collins, 2023), the Site is considered to display Low suitability for foraging and commuting bats, given the presence of linear habitats and connectivity to suitable off-

Site foraging and commuting habitat, as well as the proximity to the major roads near the Site such as the Dearne Valley Parkway.

3.4.31 Habitats of similar size and value to those on the Site are present within the wider area and it is considered unlikely that bats would be reliant on the Site habitats for foraging and commuting. The Site is considered to be of no higher importance to foraging and commuting bats than at the site level.

***Birds***

3.4.32 BBRC returned a total of 2,475 records comprising 95 bird species within 2 km of the Site. Species returned included nine Schedule 1 bird species, as listed within the WCA 1981 (as amended), 20 Red, 30 Amber and 42 Green listed BoCC species (Stanbury *et al*., 2021). One Schedule 9 bird species, Canada goose *Branta canadensis*, was also returned in the records. Bird species recorded within 2 km of the Site are summarised in Appendix 3.

3.4.33 The Site supports suitability for nesting birds within the woodland, scrub, trees and hedgerows. Grassland margins may previously have supported ground-nesting bird species, however due to earlier vegetation clearance works only a relatively small area of this habitat is still remaining and it is considered unlikely that ground-nesting birds are present at the Site.

3.4.34 Two disused birds' nests were identified within H6, which were likely to have originated from woodpigeons *Columba palambus*. Hedgerows around the Site include berry-producing shrubs including blackthorn and hawthorn, as well as dense bramble to the southwest of the Site. These provide foraging sources for over-wintering birds.

3.4.35 Several bird species were recorded during the survey, including a small flock (approximately 10 individuals) of starling *Sturnus vulgaris* which were perched on the power lines to the south of the Site. Other species recorded included blackbird *Turdus merula*, blue tit *Cyanistes caeruleus*, grey partridge *Perdix perdix*, long-tailed tit *Aegithalos caudatus* and woodpigeon.

3.4.36 Due to the limited potential for ground nesting species, as well as the small size of the Site and presence of similar habitat in the wider area for non-ground nesting species, the Site is considered to be importance to birds at no higher than at the site level.

***Invertebrates***

3.4.37 A large number of invertebrate species are included as species of principal importance under Section 41 of the NERC Act (2006).

3.4.38 BBRC returned a total of 1,497 records of invertebrate species for locations within 2 km of the Site. The closest record pertains to a seven-spotted ladybird, located within the Site from 2014.

3.4.39 The Site is considered to have limited potential for supporting invertebrate species due to the likely low numbers of flowering plants with rich nectar sources. The artificial unvegetated unsealed surface may provide some basking opportunities, with the scrub, woodland and trees providing sheltering and hibernation potential. The hedgerows at the Site also provide some foraging and sheltering potential.

3.4.40 Given the likely presence of more suitable habitat in the wider area in comparison to the Site for invertebrates, particularly where a more diverse range of botanical interest exists, the Site is considered to be of importance to invertebrates at no higher than at the site level.

***Reptiles***

3.4.41 BBRC returned a total of 27 records for reptiles for locations within 2 km of the Site. Species noted include adder *Vipera berus*, common lizard *Zootoca vivipara* and grass snake *Natrix helvetica*. The closest record pertains to a grass snake, located approximately 270 m north from 2019. This record is located north of the Dearne Valley Parkway which is north of the Site, therefore this road presents a major barrier to dispersal and therefore reptiles are considered unlikely to commute to the Site across this road.

3.4.42 The majority of the Site has been heavily disturbed as a result of earlier vegetation clearance though grassland margins and hedgerows, scrub and woodland boundaries on the Site provide some suitability for foraging and commuting reptiles. A brash and brick pile (TN8) provides hibernation potential for reptiles including egg-laying opportunities for grass snake. The Site is partially isolated due to surrounding road network which presents a barrier to reptile dispersal but (where present in the wider area) reptiles may access the Site from the north where woodland is present directly adjacent to the Site.

3.4.43 Dry stone walls within the woodland and mixed scrub patches are collapsed with potential gaps underneath which may also provide sheltering and hibernation potential for reptiles. The rock pile/mound (TN2) present on the Site also provides shelter and hibernation potential for reptiles.

3.4.44 Whilst it is highly unlikely that reptiles would be present in the centre of the Site they may utilise the boundary habitats for foraging and shelter in small numbers. As suitable habitat is also present within the wider area, the Site is therefore considered to be of importance to reptiles at no more

than the site level.

***Riparian Mammals and White-Clawed Crayfish***

3.4.45 Eurasian otter *Lutra lutra*, European water vole *Arvicola amphibius* and white-clawed crayfish *Austropotamobius pallipes* are all listed as species of principal importance under Section 41 of the NERC Act (2006). All three species are also included within the LBAP as priority species.

3.4.46 BBRC returned no records of otter, water vole or white-clawed crayfish for locations within 2 km of the Site.

3.4.47 No waterbodies or watercourses are located on the Site although D1 is located approximately 40 m south of the Site, which is considered likely to be a small flowing watercourse and is separated from the Site by a road. D2 and D3 are not connected to the Site and have ecological separation to the Site by the roads.

3.4.48 No major watercourses are located within 30 m of the Site with limited suitable terrestrial habitat connectivity between these watercourses and the Site; therefore, it is considered highly unlikely that otter or water vole would disperse on to the Site.

3.4.49 Terrestrial habitat at the Site is considered sub-optimal for otter and water vole and unsuitable for white-clawed crayfish due to the lack of standing water, limited foraging and refuge potential. The ditches present under the hedgerows were dry at the time of the survey and were considered unlikely to hold water for significant lengths of time, making them unsuitable for water vole.

3.4.50 Given the distance of the Site and the lack of direct terrestrial connectivity, as well as major barriers to dispersal in the form of roads between these watercourses and the Site, it is considered highly unlikely that otter, water vole or white-clawed crayfish would be present at the Site and therefore, the Site is considered to be of importance to these species at no higher than the site level. Otter, water vole and white-clawed crayfish are not discussed further in this report.

***Other Notable and Key Species***

Hedgehog

3.4.51 BBRC returned 10 records of hedgehog for locations within 2 km of the Site, with the closest record located approximately 500 m west of the Site from 2019.

3.4.52 No evidence of hedgehog was recorded on the Site during the survey. The grassland margins and hedgerows provide suitable foraging and commuting habitat for hedgehog, whilst the scrub and woodland provide sheltering potential amongst dense growth and fallen branches. Both the rock pile/mound (TN2) and the brash and brick pile (TN8) provides sheltering and hibernation potential for hedgehog.

3.4.53 Whilst the Site provides some suitability for hedgehog, these are considered likely to be present within the wider area. There is limited connectivity between the Site and habitats in the wider area and therefore it is considered unlikely that hedgehog would colonise the Site habitats. Therefore, the Site is considered to be of importance to hedgehog at no higher than at the site level.

Brown Hare

3.4.54 BBRC returned 11 records for brown hare *Lepus europaeus* for locations within 2 km of the Site, with the closest located approximately 1.27 km southeast of the Site from 2014.

3.4.55 Brown hare may have utilised the Site habitats prior to earlier vegetation clearance due to its arable nature with grassland field margins but opportunity for this species is now much reduced.

3.4.56 The Site is bordered by a field to the west however (from aerial imagery) this appears to be a managed grassland for sport. Using aerial imagery, arable fields appear to be present to the south and southeast of the Site which may provide more optimal habitat for brown hare.

3.4.57 Due to the unsuitability of the Site for brown hare and the presence of more suitable habitat in the wider area, it is unlikely for brown hare to be found on the Site. The Site is therefore considered to be of importance to brown hare at no higher than at the site level and are not discussed further in this report.

Harvest Mouse

3.4.58 BBRC returned one record for harvest mouse *Micromys minutus* for locations within 2 km of the Site, located approximately 1.34 km northwest from 2015.

3.4.59 The Site habitats have limited potential for harvest mouse outside of the hedgerows which surround the Site and the woodland which provide some level foraging and commuting habitat. Grassland margins offer some, albeit suboptimal, opportunity for best building. More suitable habitat present in the wider area may support harvest mouse in larger numbers, such as larger woodlands to the north, grassland and field margins and amongst hedgerows adjacent to arable fields. The Site is considered to be of importance to harvest mouse at the site level.

## 3.5 Invasive Species

3.5.1 BBRC returned 99 records of invasive plant species for locations within 2 km of the Site. Species included Canadian waterweed *Elodea canadensis*, Himalayan balsam *Impatiens glandulifera*, Japanese knotweed *Fallopia japonica*, Japanese rose *Rosa rugosa*, montbretia *Crocosmia x crocosmiiflora*, New Zealand pigmyweed *Crassula helmsii*, Nuttall's waterweed *Elodea nuttallii*, rhododendron *Rhododendron ponticum*, wall cotoneaster *Cotoneaster horizontalis* and variegated yellow archangel *Lamiastrum galeobdolon subsp. montanum*. The closest record pertains to Japanese knotweed, located approximately 710 m south of the Site from 2010.

3.5.2 BBRC returned four records for American mink *Neovison vison* within 2 km of the Site, with the closest record located approximately 650 m northeast of the Site from 2012.

3.5.3 BBRC returned four records for grey squirrel *Sciurus carolinensis* for locations within 2 km of the Site, with the closest record located approximately 460 m east of the Site from 2018.

3.5.4 BBRC returned one record for Canada goose Branta canadensis for locations within 2 km of the Site, with the precise location not known as the record was provided as a four-figure grid reference and no location was provided.

3.5.5 No invasive or non-native plant or animal species were recorded during the survey. However, since the PEA was conducted outside of the optimal botanical survey period, the flowers of invasive plants are likely to have been absent, but some common invasive species may still have stems visible during the winter. In addition, no invasive species (apart from the buddleia) were observed during the badger walkover survey in October 2023.

# 4. Impact Assessment, Mitigation and Enhancements

## 4.1 Proposals

4.1.1 Proposals for the Site are taken from the STEN Architecture '*Planning Layout*' (Drawing Reference: 2351.01, dated October 2023) and FDA Landscape '*Residential Development, Wood Walk, Hoyland*' (Drawing Reference: R/1xxx/x, dated December 2023) and involve the construction of 83 dwellings and associated gardens, in addition to Public Open Space (POS) and a Sustainable Urban Drainage System (SuDS) attenuation basin.

4.1.2 The Site was undergoing clearance works in October 2023 and therefore the arable field has been lost as a habitat. A small section of bramble scrub and other native hedgerow (H5) will be lost in the future to facilitate an access road to the proposed development.

4.1.3 The loss of a small section of bramble scrub and other native hedgerow will be necessary to facilitate a new access road to the Site, to connect to dwellings and driveways. Other woodland, broadleaved and mixed scrub habitats will be retained, along with the modified grassland margins, the scattered trees and remaining other native hedgerow (H1- H4, H6).

## 4.2 Designated Sites

4.2.1 Dearne Valley Wetland SSSI statutory designated site for nature conservation is located within 2 km of the Site and the Site falls within two SSSI IRZs, in which the risk relating to 'Residential' developments apply if there will be 100 units or more.

4.2.2 The Site is located within an existing settlement/urban area and therefore is not considered to fall under the 'Rural Residential' category. Given the proposed works are for 83 dwellings, below the 100 units threshold identified above, no further consultation with Natural England is deemed necessary.

4.2.3 The SSSI and non-statutory LWS designated sites do not have direct ecological connectivity with the Site, therefore it is considered unlikely that direct or indirect impacts will occur to these sites given the nature of the proposals. No further action is considered necessary with regards to consultation with the local authority and/or Natural England.

## 4.3 Habitats

4.3.1 The Artificial Unvegetated Unsealed Surface is currently present at the Site in place of the former arable field. This will be replaced as part of the proposed development with housing, gardens, roads and associated soft landscaping. Further small-scale impacts to the Bramble Scrub and Other Native Hedgerow are anticipated to facilitate the construction of a new access road to the new properties.

4.3.2 Production of a Construction Ecological Management Plan (CEMP) is recommended in order to detail measures to be adhered to during the works which will minimise/avoid potential harm to those habitats to be retained at the Site following the construction phase of the development. These will include detailed protection measures for retained habitats, pollution control measures and biosecurity measures.

***Urban – Artificial Unvegetated Unsealed Surface (u1c)***

4.3.3 Artificial Unvegetated Unsealed Surface is currently present at the Site in place of the former arable field and will be replaced as part of the proposed development.

4.3.4 Artificial Unvegetated Unsealed Surface is not listed under Section 41 of the NERC Act (2006) and is not included within the LBAP. Built up areas and gardens are listed within the LBAP; however the listings relate to buildings and their grounds, allotments, verges and urban open spaces; and it is not considered to relate to the Artificial Unvegetated Unsealed Surface habitat at the Site. Loss of this habitat is considered to be of no higher importance to nature conservation than at the site level.

***Grassland – Modified Grassland (g4)***

4.3.5 The Modified Grassland at the Site will mostly be retained, with very minor losses towards the south of the Site and adjacent to the woodland to the east. This grassland habitat is likely present within the local area and therefore any loss of this habitat is of importance to nature conservation at the site level only.

4.3.6 New grassland habitats will be created at the Site as part of a number of POS within the new development. New grassland is recommended to include a wildflower and grassland mix sown to provide a more diverse, higher quality habitat post-development.

***Woodland and Forest – Other Woodland; Broadleaved (w1g)***

4.3.7 The Other Woodland; Broadleaved habitat will be retained as part of the works, therefore no impacts to the value of this habitat to nature conservation beyond the site level is likely to occur. This woodland should be protected through fencing installation to British Standard (BS) and no encroachment onto this habitat should occur during the operational phase.

4.3.8 The understory is lacking vegetative diversity and consists mostly of bare earth. It is recommended that new woodland mix is sown within the woodland to provide greater structural diversity, which will in turn benefit a range of species including invertebrates.

***Heathland and Shrub – Mixed Scrub (h3h)***

4.3.9 No Mixed Scrub habitat will be lost to facilitate the development and therefore no impact to nature conservation is anticipated.

4.3.10 A mature stand of buddleia was present within the scrub. Whilst this is not a WCA (1981) Schedule 9 listed species, it is non-native and displays invasive tendencies. Should this be removed, it should be dug out and chipped on Site; this will prevent excessive colonisation of the grassland and scrub in its immediate surroundings, particularly if disturbed post-development.

***Heathland and Shrub – Bramble Scrub (h3d)***

4.3.11 A small section (approximately 0.01 ha) of Bramble Scrub will be lost to facilitate a new access road into the development. The remainder will be retained and due to this being a common habitat and likely to be present within the wider area, impacts to this habitat are unlikely to occur beyond the site level.

4.3.12 It is recommended that at least 0.01 ha of native scrub species creation is undertaken at the Site post-development to compensate for the loss of the bramble scrub.

***Heathland and Shrub – Other Native Hedgerow (h2a6)***

4.3.13 Most of the Other Native Hedgerows will be retained and protected as part of the development, except for a small section (approximately 0.01 km) of H5 to the southwest of the Site to facilitate a new access road to the development. This is not considered to significantly impact the functionality of the hedgerow as an ecological corridor and therefore any impacts to nature conservation are considered to be no higher than at the site level.

4.3.14 It is recommended that new native hedgerow planting is undertaken around the southwest of the Site and along the southern boundary where gaps between existing hedgerows are present to improve the ecological linkage between the hedgerow currently present and off-Site habitats which will benefit a range of species.

***Trees***

4.3.15 T1 and T2 are due to be retained as part of the proposed development and have been subjected to an arboricultural assessment (see Ecus '*Wood Walk, Hoyland – BS 5837:2012 Arboricultural Report and Method Statement*' V1.0. Report Ref: 22693, dated November 2023) and therefore no further survey is considered necessary at this time.

## 4.4 Species

4.4.1 A CEMP is recommended for implementation during the construction stage of works in order to minimise the risks of harm to protected and notable species. This will include Best Practice Measures (BPM) listed below where appropriate.

***Amphibians***

4.4.2 GCN are protected under the WCA 1981 (as amended) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 and are a European Protected Species ("EPS").

4.4.3 Common amphibians are protected under the WCA 1981 (as amended) against sale, barter or exchange of captive animals.

4.4.4 GCN and common toad are listed as species of principal importance under Section 41 of the NERC Act (2006). GCN and common toad, as well common frog, palmate newt and smooth newt are also included on the LBAP.

4.4.5 No breeding habitat is anticipated to be lost as part of the proposed works due to the absence of waterbodies on Site. A relatively large puddle was present to the northern section of the Site within a depression on impermeable ground following site clearance works, however this was unvegetated at the time of the Survey and subjected to heavy disturbance; it is highly unlikely that GCN could utilise this for breeding. Several smaller puddles were present at the Site where small depressions in ground level were present. The habitat loss is therefore considered to be of importance to GCN and common amphibians at no higher than at the site level.

4.4.6 No waterbodies were identified within 250 m of the Site, whilst intermediate terrestrial habitat to the Site is considered likely to be more of value than the areas of the Site where development is to take place. Barriers to dispersal are also present, including the major roads around the Site. The watercourse/ditch (D1) approximately 40 m south of the Site across Wood Walk is considered likely to be a small flowing watercourse, therefore it is considered unlikely that breeding GCN would be present in D1.

4.4.7 The scale of impacts resulting from the loss of on-Site habitats are considered to be of Low scale (see Table 1 below). The identified waterbodies (WB1, WB2 and WB3) are located outside of 250 m and therefore listed within the Distant range.

**Table 1. GCN Impact Assessment**

| Habitat Feature | Development Effect | Scale of Impact | | |
|---|---|---|---|---|
| | | Low | Medium | High |
| Confirmed GCN breeding pond/water body | Destruction | | | ✓ |
| | Isolation caused by fragmentation | | | ✓ |

| | | | | |
|---|---|---|---|---|
| | Partial destruction; modification | | ✓ | |
| | Temporary disturbance | ✓ | | |
| | Post-development interference | | | ✓ |
| Other pond or water body | Destruction | | ✓ | |
| | Isolation caused by fragmentation | | ✓ | |
| | Partial destruction; modification | ✓ | | |
| | Temporary disturbance | ✓ | | |
| | Post-development interference | ✓ | | |
| **Immediate Terrestrial Habitat** (less than 50 m from a GCN/breeding pond or other water body potentially used by the species) | Destruction | | | ✓ |
| | Isolation caused by fragmentation | | | ✓ |
| | Partial destruction | | ✓ | |
| | Modified management, resurfacing etc. | | ✓ | |
| | Temporary disturbance | ✓ | | |
| | Post-development interference | | ✓ | |
| | Temporary destruction & reinstatement | ✓ | | |
| **Intermediate Terrestrial Habitat** (at a distance of 50 m up to 250m from a GCN/breeding pond or other water body potentially used by the species) | Destruction | | ✓ | |
| | Isolation caused by fragmentation | | ✓ | |
| | Partial destruction | ✓ | | |
| | Modified management, resurfacing, etc. | ✓ | | |
| | Temporary disturbance | ✓ | | |
| | Post-development interference | ✓ | | |
| | Temporary destruction & reinstatement | ✓ | | |
| **Distant Terrestrial Habitat** (more than 250 m from a GCN/breeding pond or other water body potentially used by the species) | Destruction | ✓ | | |
| | Isolation caused by fragmentation | ✓ | | |
| | Partial destruction | ✓ | | |
| | Modified management, resurfacing etc. | ✓ | | |
| | Temporary disturbance | ✓ | | |
| | Post-development interference | ✓ | | |
| | Temporary destruction & reinstatement | ✓ | | |

(Page 34, English Nature (2001) Great Crested Newt Mitigation Guidelines)

4.4.8 The presence of GCN at the Site is considered unlikely due to the Site's location but not ruled out due to its presence within a Natural England GCN Risk 'Green Zone' and unrecorded potential presence within garden ponds. A Natural England (NE) District Level Licencing (DLL) Enquiry may

be submitted for the Site (under the no survey data available option); however it is considered appropriate that BPM are implemented at the Site during the works with regards to GCN and common amphibians. This includes maintain vigilance for common amphibians at all times during the works, ensuring equipment and storage is raised so amphibians cannot shelter underneath. Should common amphibians be encountered at the Site, it should be first allowed to move away on its own accord. If in immediate danger, it should be picked up and moved to an area of safety away from the works. The rock pile/mound (TN2) within the main area of the Site will likely be demolished to facilitate the works; it is strongly recommended that this is undertaken outside of the hibernation period (November to February inclusive) to prevent amphibians being woken during a state of torpor which will increase the mortality risk.

4.4.9 In the unlikely event that a GCN is encountered during the works, works must cease (where safe and practical to do so) and a suitably qualified ecologist is to be contacted for advice. GCN should be allowed to move away on its own accord, however if the GCN is considered to be in immediate danger, it should be carefully picked up by gloved hand and moved to an area of safety outside of the works footprint (i.e. within woodland and scrub around the Site boundaries).

***Badger***

4.4.10 Badgers and their setts are protected under the Protection of Badgers Act 1992. It is an offence under the act to kill, injure or take a badger. It is also an offence to destroy, damage or obstruct a currently active badger sett, or to disturb animals within the sett.

4.4.11 [redacted]

4.4.12 Badgers are a highly mobile species with a wide dispersal range and therefore there is potential that they may utilise habitats within the Site (i.e. grassland, hedgerows, scrub and woodland), when foraging and commuting.

4.4.13 Given the presence of more suitable habitat for sett construction and foraging within the wider area, the proposed work impacts are considered to be of no higher importance to badgers than at the site level.

4.4.14 It is recommended that BPM for badgers should be implemented throughout the works to safeguard badgers. This includes covering any open excavations deeper than 1 m, which otherwise should be covered overnight. If excavations are shallower than 1 m than a scaffold board or equivalent should be placed in overnight to allow any badgers (or other animals) to exit the hole. Directional lighting should also be implemented to avoid light spillover the boundary, scrub and woodland

habitats at the Site as well as adjacent, off-Site habitats in order to prevent deterrence of badgers utilising these for foraging and commuting.

4.4.15 [redacted]

***Bats***

4.4.16 All species of bat occurring within the UK are included in Schedule 2 of the Conservation of Habitats and Species Regulations, 2019. Under regulation 41 bats are protected from deliberate capture, injury or killing, from deliberate disturbance and from deliberate damage or destruction of a breeding site or resting place (roost).

4.4.17 All UK bats are also included on Schedule 5 of the WCA 1981 (as amended). However, their protection is limited to certain offences. Under the 1981 Act (as amended) it is an offence to intentionally or recklessly disturb bats while they are occupying a structure or place used for shelter or protection, or to obstruct access to any such place.

Roosting Bats

4.4.18 No buildings are present on the Site, however two trees (T1 and T2) as well as a telegraph pole (TG2) were considered to display Low suitability for roosting bats, likely to only support individuals or very small numbers. No further survey is considered necessary at this time as under the current proposals these features will be retained.

4.4.19 Machinery should avoid encroaching within three metres of T1, T2 and TG2 where possible and keep the level of activity in these areas to a minimum, in case roosting bats are present within the PRFs identified. Machinery is also recommended to avoid idling within 10m of T1, T2 and TG2, which can create excessive fumes and nose/vibration disturbance which may disturb roosting bats.

4.4.20 Directional lighting should be implemented and directed away from T1, T2 and TG2.

Foraging and Commuting Bats

4.4.21 The majority of the Site has been cleared and therefore provides only suboptimal habitat for bats. More valuable habitats for foraging and commuting bats are being retained as part of the proposed development (i.e. hedgerows and woodland) and impacts to foraging and commuting bats are, therefore considered to be at no higher level than at the site level.

4.4.22 It is recommended that night working is avoided where possible and temporary lighting should be directed away from vegetated habitats (i.e. hedgerows, trees, scrub, grassland and woodland) where foraging and commuting bats may be present. Any post-development lighting used should also be directional and pointed away from vegetated habitats to avoid deterring light-sensitive species from utilising more valuable habitat at the Site.

4.4.23 It is recommended that hedgerow planting is undertaken around the southwest of the Site and along the southern boundary between the existing hedgerows to improve the ecological linkages between the hedgerows and form a more continuous foraging and commuting corridor. New shrub planting within the soft landscaping will also improve invertebrate diversity and provide additional food sources for bats. Sensitive and directional lighting should also be implemented in which the hedgerows, scrub and woodland habitats and trees are not lit.

4.4.24 No further survey regarding bat activity is considered to be necessary given the majority of the hedgerows will be retained post-development. It is recommended that hedgerow creation is undertaken at the Site to improve the habitats for foraging and commuting bats. A sensitive lighting plan is also recommended to be implemented at the Site which will also be included within the CEMP.

4.4.25 The lighting scheme associated with the construction and operational phases should be directly informed by the latest guidance available from the Bat Conservation Trust (BCT) and other relevant bodies including the Institution of Lighting Professionals (ILP) (Bat Conservation Trust, 2023).

4.4.26 During the construction and operational phases, any unnecessary light spill should be controlled through a combination of directional lighting, low lighting columns (reduced wattage lamps and louvres), hooded/shielded luminaires and/or strategic screening planting. All luminaires should lack UV elements and metal halide, fluorescent sources should not be used. LED luminaires should be used where possible with a warm white spectrum adopted (<2700Kelvin) as specified within the ILP guidance.

***Birds***

4.4.27 All species of wild bird, their nests and eggs are protected under the WCA, 1981 (as amended) and it is an offence (with certain exceptions) to take, damage or destroy the nest of any wild bird while it is in use or is being built. WCA 1981 (as amended). Species listed under Schedule 1 of the Act receive additional protection against disturbance whilst occupying a nest site.

4.4.28 A total of 49 bird species are listed as species of principal importance under Section 41 of the NERC Act (2006). 48 bird species are also included within the LBAP.

Ground Nesting Birds

4.4.29 The majority of the Site, formerly a crop field, is currently unsuitable for ground nesting birds due to the presence of unvegetated surfaces and its disturbed nature. The grassland margins are also considered to be sub-optimal for nesting birds due to their limited width and proximity to hedgerows and tall vegetation which could hide predators. Heras fencing present within the grassland also reduces the space available for nesting.

4.4.30 It is possible that some ground-nesting bird species, such as pheasant *Phasianus colchicus*, may still utilise the scrub in the eastern section of the Site, subject to disturbance, however this habitat availability considered to be limited. Suitable habitat for ground-nesting birds is likely present within the wider area and therefore impacts to ground-nesting birds are considered to be at the site level.

Other Nesting Birds

4.4.31 The retained habitats at the Site are suitable for hedge and tree nesting bird species, in particular the hedgerows, trees and woodland. The woodland shown in the FDA Landscape (2023) '*Residential Development, Wood Walk, Hoyland*' includes the creation of a footpath through it, which may require tree removal/pruning to facilitate this.

4.4.32 It is recommended that no materials are to be stored within three metres of the hedgerows, grassland margins, woodland, scrub or trees, in order to minimise disturbance to foraging and nesting birds which may be present in these areas. Machinery is also recommended to avoid idling within three metres of the hedgerows, which can create excessive fumes and nose/vibration disturbance. These measures are to be included within the CEMP.

4.4.33 The small section of bramble and hedgerow to be removed in the southwest of the Site possesses suitability for nesting birds, as does the woodland; to minimise the risk of committing an offence in relation to nesting birds, clearance of this scrub and hedgerow should be undertaken outside of the peak nesting bird season (typically March – August inclusive). If this is not possible, then a nesting bird check by a suitably qualified ecologist will be required with vegetation removal undertaken within 24 hours of the check (provided no nest identified). Further checks will be required if vegetation has not been removed within this period.

4.4.34 If an active nest is found during a nesting bird check, an exclusion zone (in consultation with the ecologist) should be implemented and will be maintained until any chicks have fledged or the nest is no longer active. The exclusion zone will be determined by the ecologist as this will be dependent on the species identified.

Wintering Birds

4.4.35 The hedgerow habitats have suitability to support wintering birds due to the presence of berry-producing vegetation (including hawthorn and rowan). Hedgerows, with the exception of

approximately 0.01 km of H5, will be retained as part of the proposed development.

4.4.36 No further survey is considered necessary at the Site with regards to breeding or wintering birds. Impacts to hedge and tree nesting birds from the proposed development is considered to be no higher than at the site level. It is recommended that soft landscaping at the Site post-development incorporates foraging shrubs and trees, such as holly *Ilex aquifolium* and rowan, with new hedgerow creation including species such as blackthorn, dogwood *Cornus sanguinea*, elder and hawthorn.

***Invertebrates***

4.4.37 A small number of invertebrate species are listed under Schedule 5 of the WCA 1981 (as amended) and are protected against sale.

4.4.38 Habitats suitable for invertebrates at the Site are confined to the retained habitats as the former crop field is now an unvegetated impermeable surface. Impacts to invertebrates are considered to be no higher than at the site level. It is recommended that materials are not stored within 5 m of the hedgerows, grassland margins, woodland and scrub in order to avoid potential flowering plants being impacted which serve as foraging sources for invertebrates.

4.4.39 It is recommended that soft landscaping at the Site post-development include wildflower mix with nectar-rich flowering plants to provide enhanced foraging resources for invertebrates post-development. Bee bricks and insect towers are also recommended to be installed at the Site within the properties post-development; a minimum of five each are recommended to enhance invertebrate diversity at the Site.

***Reptiles***

4.4.40 Common reptile species including grass snake, common lizard and slow worm *Anguis fragilis* are protected under Schedule 5 of the WCA 1981 (as amended) against intentional killing or injuring. All UK reptile species are listed as species of principal importance under Section 41 of the NERC Act (2006). Reptiles are also included in the LBAP.

4.4.41 Reptiles may utilise the hedgerow, grassland, scrub and woodland at the Site as part of a foraging and commuting corridor, however most of the Site has been subject to some level of disturbance. Impacts to reptiles are considered to be no higher than at the site level.

4.4.42 It is recommended that BPM are implemented during the works at all times. This includes maintaining vigilance for reptiles at all times, ensuring no materials are left on the ground and should be raised to prevent reptiles from sheltering underneath. It is also recommended that no materials are to be stored within 5 m of the hedgerows, grassland margins, woodland and scrub, in order to minimise disturbance to foraging and commuting reptiles which may be present in these

areas.

4.4.43 If a reptile is encountered during the works, works should cease (where safe and practical to do so) and the reptile should be allowed to move away from the works are on its own accord. A suitably qualified ecologist should then be contacted for advice on how to proceed with respect to legal protection for reptiles. The rock pile/mound should also be demolished outside of the reptile hibernation period under supervision (October to March inclusive) in order to avoid disturbing potential reptiles in a state of torpor which would increase their mortality risk. To align with the amphibian and hedgehog hibernation periods, it is recommended that this should be undertaken between April to October (weather dependent), or May to September.

4.4.44 The defunct dry stone walls (TN5 and TN6) brash and brick pile (TN8) and are recommended to be retained and left undisturbed which will provide continuous sheltering and hibernation habitat for reptiles.

4.4.45 As a further enhancement measure, it is recommended that brash piles are placed around the Site post-works to provide further sheltering and hibernation opportunities for reptiles.

***Other Notable and Key Species***

Hedgehog

4.4.46 Hedgehog is included as a species of principal importance under Section 41 of the NERC Act (2006). Hedgehog are also included within the LBAP. Whilst not afforded a high level of protection, hedgehogs have experienced significant declines in the UK population. Taking a best practice approach, avoiding harm to hedgehogs should be taken into consideration during works.

4.4.47 Hedgehogs are highly mobile and inquisitive animals that have potential to move onto Site. It is considered that habitat loss associated with the development is of importance to hedgehogs at the site level due to the abundance of suitable habitat in the surrounding area. It is therefore recommended that BPM are implemented throughout the works as specified for badgers. The rock pile/mound should be demolished outside of the hedgehog hibernation period (November to March inclusive, in October and April weather-dependent) to prevent awakening a hibernating hedgehog in a state or torpor which would increase its mortality risk.

4.4.48 It is recommended that no materials are to be stored within three metres of the hedgerows, grassland margins, woodland and scrub, in order to minimise disturbance to sheltering hedgehog and to avoid disrupting foraging and commuting routes. Directional lighting should also be implemented away from these vegetated habitats during the construction and operational phase.

4.4.49 The scrub and hedgerow proposed for removal to the southwest of the Site should be undertaken in a directional, sensitive and staged manner, in which small sections are removed at a time with

intervening visual checks to ensure no hedgehogs are present during the clearance. The clearance should be direct towards other areas of suitable habitat (i.e. hedgerow and scrub) and not directed towards the centre of the Site or the road. If a hedgehog is encountered within its active season (April – October inclusive, weather dependent in April and October), it should be allowed to move away on its own accord. If in immediate danger, it should be picked up by gloved hand and moved to an area of safety away from the works. If vegetation clearance is undertaken during the hibernation period (November – March inclusive) and a hedgehog is encountered, or juvenile hedgehogs are encountered during the breeding season, these should be picked up by gloved hand, carefully placed in a secure box and taken to the nearest hedgehog rescue centre.

4.4.50 As an enhancement measure, it is recommended that three hedgehog houses are placed around the Site perimeters, away from public view to provide suitable sheltering habitat post-development.

Harvest Mouse

4.4.51 Harvest mouse are included as a species of principal importance under Section 41 of the NERC Act (2006). Harvest mouse are also included within the LBAP. Taking a best practice approach, avoiding harm to harvest mouse should be taken into consideration during works.

4.4.52 The surrounding area is likely to consist of suitable habitat, including hedgerows, grassland and field margins and woodland, therefore impacts to harvest mouse are considered to be at the site level only.

4.4.53 It is recommended that no materials are to be stored within three metres of the hedgerows, grassland margins, woodland and scrub, in order to minimise disturbance to harvest mice which may be present in these areas. Machinery is also recommended to avoid idling, which can create excessive fumes and nose/vibration disturbance.

4.4.54 The hedgerow and scrub removal to the southwest of the Site should be undertaken in a directional manner in which any harvest mouse present will move towards the remaining hedgerow or scrub (and not towards the centre of the Site or road). This should also be undertaken outside of the breeding season, which encompasses late May to October.

## 4.5 Invasive Species

4.5.1 No Schedule 9-listed invasive plant species were recorded during the survey and are considered unlikely to be present at the Site. It is recommended that the works proceed under biosecurity measures as a precaution.

4.5.2 Should any invasive species be suspected/identified on the Site (except for the buddleia already identified to the east of the Site (TN7)), a suitably qualified ecologist should be contacted for advice.

4.5.3 Any proposed soft landscaping at the Site should avoid the use of species listed on Schedule 9 of the WCA 1981 (as amended) and ideally no non-native species where possible.

## 4.6 Biosecurity Measures

4.6.1 Works should follow standard measures to include biosecurity measures to be implemented during construction and post development to reduce the possibility of spread of invasive species and diseases. Biosecurity measures should also be included within the CEMP.

4.6.2 Amphibians in the UK are susceptible to infectious diseases such as Chytridiomycosis, caused by the chytrid fungi *Batrachochytrium dendrobatidis* and *Batrachochytrium salamandrivorans*. Given that amphibians may be present on the Site, biosecurity measures should be implemented at all times during the works.

4.6.3 Standard practices such as cleaning and disinfecting equipment and boots as well as machines, in particular, when moving between sites should apply to reduce the risk of introducing diseases or invasive species to the Site.

4.6.4 On-going monitoring at the Site during and post works should be implemented to ensure that the presence of invasive species and/or diseases is picked up. Should invasive species or diseases be identified at any point then these would need be managed through a management plan to be implemented by appointing a suitably experienced contractor/specialist.

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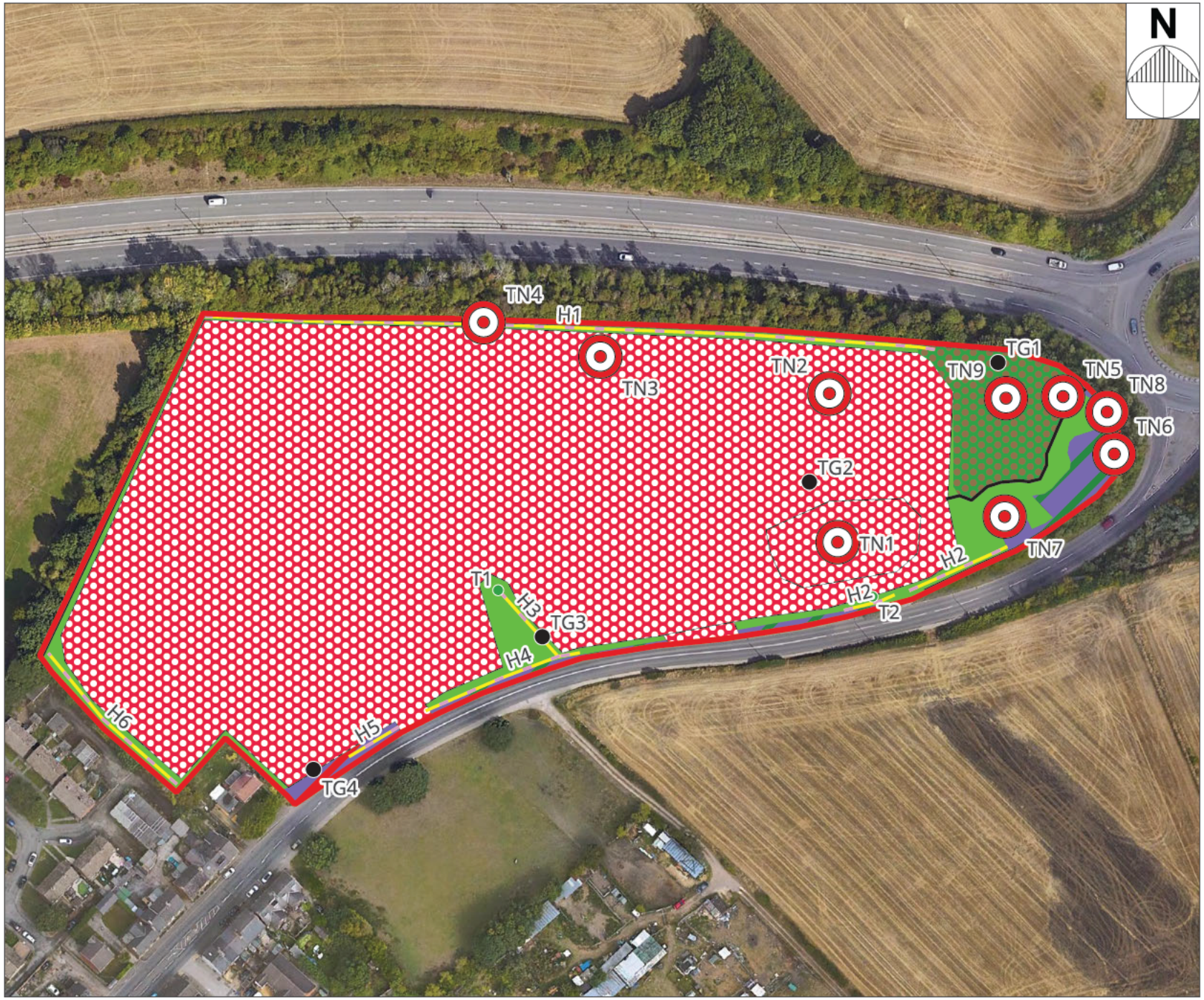
# Figure 1. UK Habitat Classification Map

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## Key

- Site Boundary
- Target Notes
- h2a6 - Other Native Hedgerow
- u1e - Built Linear Feature
- Scattered Trees
- g4 - Modified Grassland
- w1g - Other Woodland; Broadleaved
- h3d - Bramble Scrub
- h3h - Mixed Scrub
- u1c - Artificial Unvegetated Unsealed Surface
- Telegraph Poles

0 20 40 60 80 100 m

Camstead Homes / Yelcon Ltd

Wood Walk, Hoyland, Barnsley - Preliminary Ecological Appraisal

Figure 1
UK Habitat Classification Map

| | | | | |
|---|---|---|---|---|
| | | | | |
| A | 12/12/2023 | TL | PFP | - |
| Rev | Date | Drawn by | Checked by | Revision Comments |

| | |
|---|---|
| Site centred on: | SE 37360 01717 |

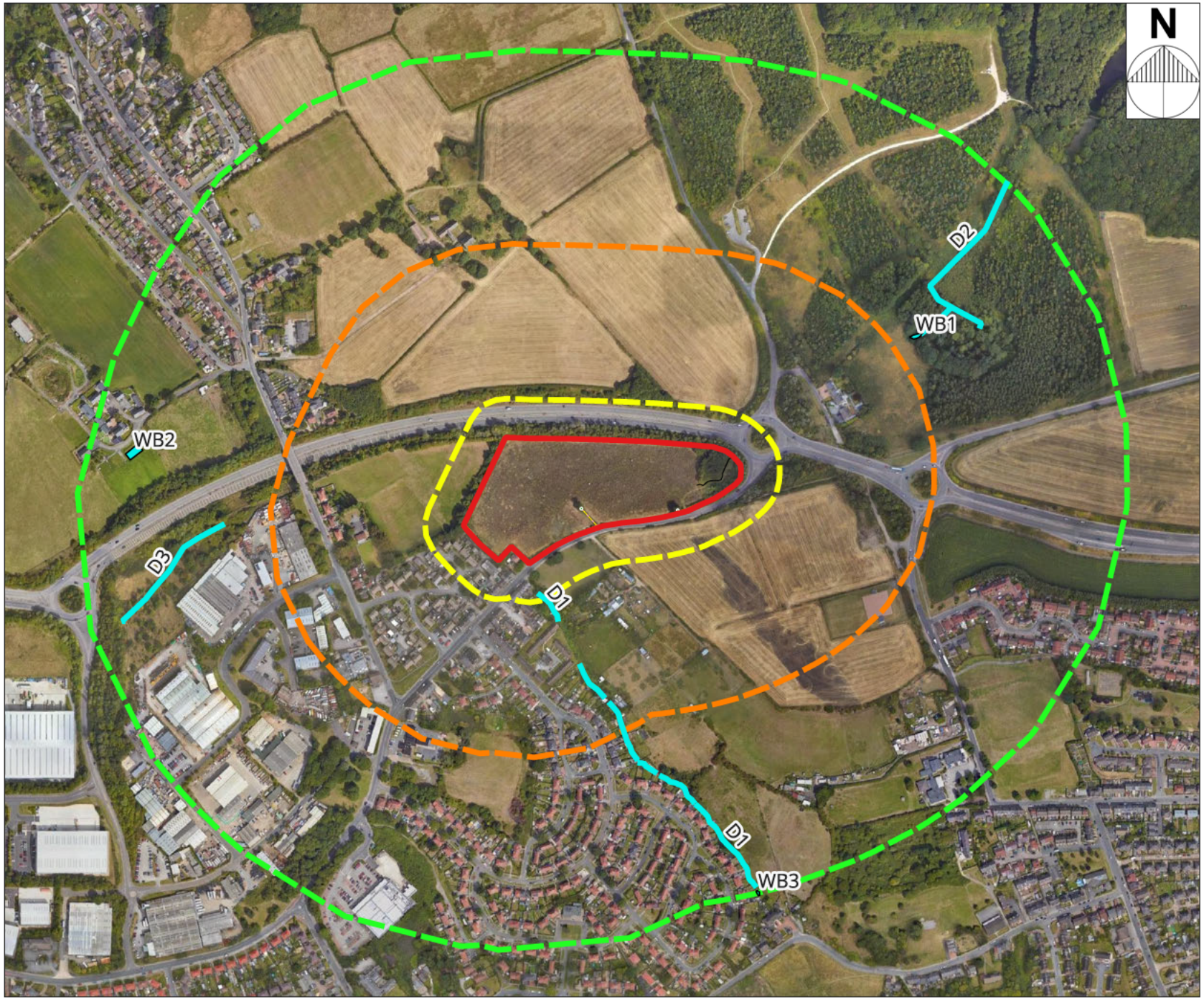
Imagery ©2023 Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies, The GeoInformation Group, Map data ©2023

January 2024

Scale: 1:1,800 @A4

Drg.Ref: 22693 - ECO - 1 - A

# Figure 2. Waterbody Location Map

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**Key**

- Site Boundary
- Waterbodies
- Watercourses
- 50m Buffer
- 250m Buffer
- 500m Buffer

0 100 200 m

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Wood Walk, Hoyland, Barnsley, Preliminary Ecological Appraisal

Figure 2
Waterbody Location Map

| | | | | |
|---|---|---|---|---|
| | | | | |
| A | 07.12.23 | TL | PFP | - |
| Rev | Date | Drawn by | Checked by | Revision Comments |

| | |
|---|---|
| Site centred on: | SE 37360 01717 |

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January 2024 | Scale: 1:7,000 @A4 | Drg.Ref: 22693 - ECO - 2 - A

# Figure 3. Designated Sites Map

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**Key**

- Site Boundary
- 2km Buffer
- Site of Special Scientific Interest (SSSI)
- Local Wildlife Site (LWS)

0 500 1,000 m

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Wood Walk, Hoyland, Barnsley, Preliminary Ecological Appraisal

Figure 3
Designated Sites Map

| | | | | |
|---|---|---|---|---|
| | | | | |
| A | 07.12.23 | TL | PFP | - |
| Rev | Date | Drawn by | Checked by | Revision Comments |

| | |
|---|---|
| Site centred on: | SE 37360 01717 |

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January 2024

Scale: 1:25,000 @A4

Drg.Ref: 22693 - ECO - 3 - A

# Appendix 1. Target Notes

TN1 – Earth mound

TN2 – Rock piles

TN3 – Large depression in ground with water

TN4 – Ditch along northern boundary

TN5 – Defunct dry stone wall

TN6 – Defunct dry stone wall

TN7 – Buddleia growth

TN8 – Brash and brick pile

TN9 – Rabbit warren

# Appendix 2. Site Photographs

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|---|---|
| Plate 1 | TN1 – Earth mound within former crop field. |
| Plate 2 | TN2 – Rock piles debris within former crop field. |
| Plate 3 | TN3 – Large depression in ground with water within former crop field. |
| Plate 4 | TN4 – Ditch along northern boundary under hedgerow. |
| Plate 5 | TN5 – Defunct dry stone wall in woodland. |
| Plate 6 | TN6 – Defunct dry stone wall in mixed scrub. |

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| Plate 7 | TN7 – Buddleia. |
| Plate 8 | TN8 – Brash and rock pile with shelter and hibernation potential |
| Plate 9 | TN9 – Rabbit warren within woodland. |
| Plate 10 | Artificial Unvegetated Unsealed Surface |
| Plate 11 | Other Woodland; Broadleaved |
| Plate 12 | Modified Grassland |

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| Plate 13 | Modified Grassland |
| Plate 14 | Mixed Scrub |
| Plate 15 | Bramble Scrub |
| Plate 16 | T1 |
| Plate 17 | T2 |
| Plate 18 | H1 |




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| Plate 19 | H2 |
| Plate 20 | H3 |
| Plate 21 | H4 |
| Plate 22 | H5 |
| Plate 23 | H6 |
| Plate 24 | Dry ditch in Modified Grassland along western boundary. |

# Appendix 3: Bird Species Recorded within 2 km of the Site

| Common name | Scientific name | Conservation Status |
|---|---|---|
| Fieldfare | *Turdus pilaris* | Schedule 1, Red |
| Garganey | *Anas querquedula* | Schedule 1, Amber |
| Green Sandpiper | *Tringa ochropus* | Schedule 1, Amber |
| Kingfisher | *Alcedo atthis* | Schedule 1, Amber |
| Redwing | *Turdus iliacus* | Schedule 1, Amber |
| Barn Owl | *Tyto alba* | Schedule 1, Green |
| Goshawk | *Accipter gentilis* | Schedule 1, Green |
| Peregrine Falcon | *Falco perigrinus* | Schedule 1, Green |
| Red Kite | *Milvus milvus* | Schedule 1, Green |
| Cuckoo | *Cuculus canorus* | Red, NERC S41 |
| Grasshopper Warbler | *Locustella naevia* | Red, NERC S41 |
| Grey Partridge | *Perdix perdix* | Red, NERC S41 |
| House Sparrow | *Passer domesticus* | Red, NERC S41 |
| Lapwing | *Vanellus vanellus* | Red, NERC S41 |
| Lesser Redpoll | *Acanthis cabaret* | Red, NERC S41 |
| Linnet | *Carduelis cannabina* | Red, NERC S41 |
| Skylark | *Alauda arvensis* | Red, NERC S41 |
| Spotted Flycatcher | *Muscicapa striata* | Red, NERC S41 |
| Starling | *Sturnus vulgaris* | Red, NERC S41 |
| Tree Sparrow | *Passer montanus* | Red, NERC S41 |
| Willow Tit | *Poecile montanus* | Red, NERC S41 |
| Yellowhammer | *Emberiza citrinella* | Red, NERC S41 |
| Bullfinch | *Pyrrhula pyrrhula* | Amber, NERC S41 |
| Dunnock | *Prunella modularis* | Amber, NERC S41 |
| Reed Bunting | *Emberiza schoeniclus* | Amber, NERC S41 |
| Song Thrush | *Turdus philomelos* | Amber, NERC S41 |
| Greenfinch | *Carduelis chloris* | Red |
| House Martin | *Delichon urbica* | Red |
| Mistle Thrush | *Turdus viscivorus* | Red |
| Ringed Plover | *Charadrius hiaticula* | Red |
| Swift | *Apus apus* | Red |
| Woodcock | *Scolopax rusticola* | Red |

| | | |
|---|---|---|
| Black-Headed Gull | *Chroicocephalus ridibundus* | Amber |
| Dipper | *Cinclus cinclus* | Amber |
| Grey Wagtail | *Motacilla cinerea* | Amber |
| Kestrel | *Falco tinnunculus* | Amber |
| Mallard | *Anas platyrhynchos* | Amber |
| Meadow Pipit | *Anthus pratensis* | Amber |
| Moorhen | *Gallinula chloropus* | Amber |
| Oystercatcher | *Haematopus ostralegus* | Amber |
| Pink-footed Goose | *Anser brachyrhynchus* | Amber |
| Rook | *Corvus frugilegus* | Amber |
| Sedge Warbler | *Acrocephalus schoenobaenus* | Amber |
| Short-Eared Owl | *Asio flammeus* | Amber |
| Snipe | *Gallinago gallinago* | Amber |
| Sparrowhawk | *Accipiter nisus* | Amber |
| Stock Dove | *Columba oenas* | Amber |
| Tawny Owl | *Strix aluco* | Amber |
| Teal | *Anas crecca* | Amber |
| Wheatear | *Oenanthe oenanthe* | Amber |
| Common Whitethroat | *Sylvia communis* | Amber |
| Willow Warbler | *Phylloscopus trochilus* | Amber |
| Woodpigeon | *Columba palumbus* | Amber |
| Wren | *Troglodytes troglodytes* | Amber |
| Blackbird | *Turdus merula* | Green |
| Blackcap | *Sylvia atricapilla* | Green |
| Blue Tit | *Cyanistes caeruleus* | Green |
| Buzzard | *Buteo buteo* | Green |
| Carrion Crow | *Corvus corone* | Green |
| Chaffinch | *Fringilla coelebs* | Green |
| Chiffchaff | *Phylloscopus collybita* | Green |
| Coal Tit | *Periparus ater* | Green |
| Collared Dove | *Streptopelia decaocto* | Green |
| Coot | *Fulica atra* | Green |
| Cormorant | *Phalacrocorax carbo* | Green |
| Garden Warbler | *Sylvia borin* | Green |
| Goldcrest | *Regulus regulus* | Green |

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|---|---|---|
| Goldfinch | *Carduelis carduelis* | Green |
| Goosander | *Mergus merganser* | Green |
| Great Spotted Woodpecker | *Dendrocopos major* | Green |
| Great Tit | *Parus major* | Green |
| Green Woodpecker | *Picus viridis* | Green |
| Grey Heron | *Ardea cinerea* | Green |
| Jackdaw | *Corvus monedula* | Green |
| Jay | *Garrulus glandarius* | Green |
| Lesser Whitethroat | *Sylvia curruca* | Green |
| Little Grebe | *Tachybaptus ruficollis* | Green |
| Long-Tailed Tit | *Aegithalos caudatus* | Green |
| Magpie | *Pica pica* | Green |
| Nuthatch | *Sitta europaea* | Green |
| Pheasant | *Phasianus colchicus* | Green |
| Pied Wagtail | *Motacilla alba* | Green |
| Raven | *Corvus corax* | Green |
| Reed Warbler | *Acrocephalus scirpaceus* | Green |
| Robin | *Erithacus rubecula* | Green |
| Rock Dove | *Columba livia* | Green |
| Siskin | *Carduelis spinus* | Green |
| Swallow | *Hirundo rustica* | Green |
| Treecreeper | *Certhia familiaris* | Green |
| Tufted Duck | *Aythya fuligula* | Green |
| Water Rail | *Rallus aquaticus* | Green |
| Waxwing | *Bombycilla garrulus* | Green |
| Little Owl | *Athene noctua* | No Status |
| Red Legged Partridge | *Alectoris rufa* | No Status |

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