
EXTENDED PHASE 1 HABITAT SURVEY

Dunford Road, Hade Edge

Jones Homes (Yorkshire) Ltd



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Field Investigations and Data

Where field investigations have been carried out these have been restricted to a level of detail required to achieving the stated objectives of the work. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by AES - Ltd for inaccuracies in the data supplied by any other party.

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1.0 INTRODUCTION

- 1.1 The following report has been prepared by Applied Ecological Services Ltd on behalf of Jones Homes (Yorkshire) Ltd. It provides the results of an Extended Phase 1 Habitat Survey on land along Dunford Road, Hade Edge. The purpose of the survey was to map and identify habitats and species that are present within the site boundary , to record any evidence indicating the presence of protected species and to identify where habitats were potentially suitable for such species. This information was then used to assess the value of the site in terms of the habitats and species which it supports or may support.
- 1.2 The land within the site boundary equates to approximately 2.4 hectares. The site is located along Dunford Road, approximately 11km south of Huddersfield at grid reference SE 14684 05355 (approximate central point).
- 1.3 The site consists of improved grassland fields that have been cut for hay with rough grass margins and dry stone walls dividing each field. Several trees are present within the site and a residential building is located directly outside of the site boundary in the southwest of the site. The site is bordered to the north by grazed grassland fields and residential properties beyond the fields. Approximately 500m northeast of the site there is a large body of water known as Boshaw Whams Reservoir. To the east and south of the site there are further areas of grazing / hay fields with occasional farm or residential buildings. The site is bordered to the west by Dunford Road and residential properties of Hade Edge.



Site Location Plan

2.0 METHODOLOGY

DESK STUDY

- 2.1 In order to compile existing baseline information, relevant ecological information was requested from the following organisations which for the purposes of this report, included:
- West Yorkshire Ecology (WYE);
 - Sheffield Biological Records Centre (SBRC).
 - Multi Agency Geographic Information for the Countryside (Magic) website;
- 2.2 A 2km radius was searched for sites of International nature conservation importance, such as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), statutory sites of national, regional and local importance, such as Sites of Special Scientific Interest (SSSIs) and Local Nature Reserves (LNRs), and non-statutory designated sites such as Local Wildlife Sites (LWS) and also for records of protected and notable species.
- 2.3 Further inspection, using colour 1:25,000 OS base maps (www.ordnancesurvey.co.uk) and aerial photographs from Google Earth (www.maps.google.co.uk), was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.

FIELD SURVEY

- 2.4 The site was surveyed on the 27th January 2016 by Daniel Madden – ecologist (AES-LTD) using the standard Extended Phase 1 Habitat Survey methodology (JNCC, 2010)¹ as recommended by Natural England to identify specific habitats of ecological interest. Whilst the species list should not be regarded as exhaustive, sufficient information was gained during the survey to enable classification and assessment of major habitat types.
- 2.5 Any habitats suitable for, or features with the potential to support, protected or notable species were also assessed and recorded.
- 2.6 Checks for notifiable plant species, such as Japanese knotweed (*Fallopia japonica*) were also made during the survey.

¹ JNCC, (2010), Handbook for Phase 1 habitat survey - a technique for environmental audit

BAT RISK ASSESSMENT

- 2.7 Ground based tree risk assessments were also undertaken on the 27th January 2016. Trees were inspected for signs of use by bats and features which have the potential to be used by bats as indicated in **Table 1**. Each inspected tree was placed into a category representing the signs of use by bats and the potential of the tree to support roosting bats as described in **Table 2**

Table 1. Common types of features used by bats for roosting and shelter and field signs that may indicate use by bats. Source: BCT (2012)

| Features of trees used as bat roosts | Signs indicating possible use by bats |
|--------------------------------------|--|
| Natural holes | Tiny scratches around entry point |
| Woodpecker holes | Staining around entry point |
| Cracks/splits in major limbs | Bat droppings in/around/below entrance |
| Loose bark | Audible squeaking at dusk or in warm weather |
| Behind dense, thick-stemmed ivy | Flies around entry point |
| Hollows/cavities | Distinctive smell of bats |
| Within dense epicormic growth | Smoothing of surfaces around cavity |
| Bird and bat boxes | |

Table 2. Categorisation of tree roosting opportunities and signs of bat use from ground-based observations

| BCT category | Level of bat roost potential | Tree roosting opportunities and signs of bat use |
|---------------|------------------------------|--|
| Roost Present | Known or Confirmed bat roost | Field evidence of the presence of bats e.g. scratch marks, oil or urine stains, droppings, audible bat social calls, distinctive odour of bats. |
| 1* | High | High quantity and quality of bat roosting features e.g. abundant holes/cracks/splits in major limbs, dense thick-stemmed ivy, dense epicormic growth. Possible signs of bat use e.g. flies around a hole, smoothing of surfaces. |
| 1 | Medium | Trees with definite bat potential, supporting fewer suitable features than category 1* trees or with potential for use by single bats |
| 2 | Low | Trees with no obvious potential, although the tree is of a size and age that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats. |
| 3 | Negligible | Trees with no potential to support bats |

SURVEY LIMITATIONS

- 2.8 The survey was undertaken early in the year (January), therefore some plant species may not have been recorded. However given the limited range of habitats within the site, it is unlikely that the seasonality of the survey has significantly influenced the results of the survey or prevented appropriate characterisation of the habitats.

ADDITIONAL SURVEY 2017

- 2.9 Update survey was undertaken in April 2017. Habitat verification surveys were undertaken on the 3rd April 2017 by Charlotte Mercer (Principal Ecologist) AES-LTD.

3.0 RELEVANT LEGISLATION & POLICY²

LEGISLATION

HABITAT REGULATIONS

- 3.1 The Conservation of Habitats and Species Regulations 2010 transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive) into English law, making it an offence to deliberately capture, kill or disturb³ wild animals listed under Schedule 2 of the Regulations (such as all bat species and great crested newts). It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

WILDLIFE & COUNTRYSIDE ACT

- 3.2 The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention), making it an offence to:
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act; intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection; and
 - Pick or uproot any wild plant listed under Schedule 8 of the Act. Sites of Special Scientific Interest (SSSI) are designated under this Act.

POLICY

NATIONAL PLANNING POLICY FRAMEWORK

- 3.3 The Government published the National Planning Policy Framework (NPPF) on 27th March 2012. This sets out new guidance for local authorities, focusing on helping to produce planning policies that are clear and easier to understand. The NPPF is effective immediately; however the local

² Please note that this legal information is a summary and intended for general guidance only. The original legal documents should be consulted for definitive information.

³ Disturbance, as defined by the Conservation of Habitats and Species Regulations 2010, includes in particular any action which impairs the ability of animals to survive, breed, rear their young, hibernate or migrate (where relevant); or which affects significantly the local distribution or abundance of the species.

plans are still valid, for the time being, even if they have been produced prior to the NPPF. There is emphasis on the need for economic growth through designing planning policies which are in favour of development but this will not be achieved in isolation from social and environmental development. Section 11 sets out the requirements for conserving and enhancing the natural environment. Land previously used for development (brownfield sites) should be favoured as long as they are not considered to be of high environmental value. Of particular note is paragraph 152 of the Plan-Making Section which states, “Local planning authorities should seek opportunities to achieve each of the economic, social and environmental dimensions of sustainable development, and net gains across all three. Significant adverse impacts on any of these dimensions should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where adverse impacts are unavoidable, measures to mitigate the impact should be considered. Where adequate mitigation measures are not possible, compensatory measures may be appropriate”. The Framework is guidance for local planning authorities on the content of their Local Plans, but is also a material consideration in determining planning applications. The NPPF has replaced much existing planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. However, the government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System, which accompanied PPS9 remains valid.

BIODIVERSITY ACTION PLANS / BIODIVERSITY 2020

- 3.4 The UK Biodiversity Action Plan (UKBAP) (Anon, 1995) was organised to fulfill the Rio Convention on Biological Diversity in 1992, to which the UK is a signatory. A list of national priority species and habitats has been produced with all listed species/habitats having specific action plans defining the measures required to ensure their conservation. Regional and local BAPs have also been organised to develop plans for species/habitats of nature conservation importance at regional and local levels.
- 3.5 The ‘[UK Post-2010 Biodiversity Framework](#)’, published in July 2012, succeeds the UK BAP and ‘Conserving Biodiversity – the UK Approach’, and is the result of a change in strategic thinking following the publication of the CBD’s ‘[Strategic Plan for Biodiversity 2011–2020](#)’ and its 20 ‘Aichi Biodiversity Targets’, at Nagoya, Japan in October 2010, and the launch of the new [EU Biodiversity Strategy \(EUBS\)](#) in May 2011. The Framework demonstrates how the work of the four countries and the UK contributes to achieving the Aichi Biodiversity Targets, and identifies the activities required to complement the country biodiversity strategies in achieving the targets. The UKBAP is no longer an active strategy, and has been replaced by biodiversity strategies in England, Northern Ireland,

Scotland and Wales. While the UKBAP is no longer an active policy, species listed on the UKBAP have been incorporated into the new biodiversity strategies for each country. In England under Biodiversity 2020: A strategy for England's wildlife and ecosystem services and undersection 41 of The Natural Environment and Rural Communities (NERC) Act 2006, where UKBAP species were recognised as of principal importance for the conservation of biodiversity. Section 40 of the NERC Act 2006 requires all public bodies to have regard for biodiversity conservation when carrying out their function. This is commonly referred to as the '**biodiversity duty**'.

LOCAL STRUCTURE PLANS

- 3.6 County, District and Local Councils have Structure Plans and other policy documents that include targets and policies which aim to maintain and enhance biodiversity. These are used by Planning Authorities to inform planning decisions

NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT (2006)

- 3.7 Public authorities have a duty to conserve biodiversity under the Natural Environment and Rural Communities (NERC) Act, which came into force in 2006. This states that 'any public body or statutory undertaker in England and Wales must have regard to the purpose of conservation of biological diversity in the exercise of their function and that decisions of public bodies work with the grain of nature and not against it' (Part 3, Paragraph 60). The Act also includes a range of measures to strengthen the protection of wildlife and habitats.

WILDLIFE LEGISLATION

- 3.8 In addition to the above, a range of legislation is in place to ensure that habitats and species of conservation importance are protected from harm, either directly or indirectly. A summary of this legislation is given in Table 3.

Table 3: Overview of Key Legislation

| Legislation | Relevance |
|---|--|
| The Conservation of Habitats and Species Regulations 2010 | <p>This transposes the EC Habitats Directive 1992 (<i>Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna</i>) and the EC Birds Directive 1979 (<i>Council Directive 79/409/EEC on the protection of wild birds</i>) into UK law.</p> <p>Annexes I and II of the Habitats Directive list (respectively) habitats and species for which member states are required to establish and monitor SACs. The EC Birds Directive provides a similar network of sites (SPAs) for all rare or vulnerable species listed in Annex I and all regularly occurring migratory species, with particular focus on wetlands of international importance. Together with SACs, SPAs form a network of pan-European protected areas known as ‘Natura 2000’ sites.</p> <p>The Habitats Regulations also make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4.</p> |
| The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979) | The Bern Convention aims to ensure conservation and protection of all wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to afford special protection to the most vulnerable or threatened species (including migratory species). |
| The Wildlife and Countryside Act (WCA) 1981 (as amended) | The WCA is the primary UK mechanism for statutory site designation (Sites of Special Scientific Interest, SSSIs) and the protection of individual species listed under Schedules 1, 2, 5 and 8 of the Act, each subject to varying levels of protection |
| The Countryside and Rights of Way Act 2000 | This legislation strengthens the provision of the 1981 WCA (as amended), both in respect of statutory sites such as SSSIs and protected species. It also places a statutory obligation on Local Authorities and other public bodies to further conservation of biodiversity in the exercise of their functions, thus providing a statutory basis to the Biodiversity Action Plan (BAP) process, which began in 1994. Section 74 of the Act lists the habitat types and species of principal importance in England. |
| Hedgerow Regulations 1997 | The Hedgerow Regulations 1997 are intended to protect important countryside hedges from destruction or damage in England and Wales. |
| Natural Environment and Rural Communities Act 2006 | The ‘NERC’ Act makes provision in respect of biodiversity, pesticides harmful to wildlife, protection of birds and invasive non-native species. Section 40 of the act also introduced a new duty on public bodies to have regard to the purpose of conserving biodiversity in the exercise of their functions. |

3.9 Due to its location the site may have the potential to support or provide habitat for a number of those species protected by the various pieces of legislation summarised in Table 4. A summary of

the key legislation is given in Table 4.

Table 4: Key Legislation for protected species

| Species | Key legal protection |
|--------------------|---|
| Bats (all species) | <p>All European species of bat are listed on Annex IV of the EC Habitats Directive as being in need of “strict protection”. This is implemented in Britain under The Conservation of Habitats and Species Regulations 2010. All British bats are included on Schedule 5 of the WCA (1981) and the whole of Section 9 of The Act applies to European bat species. In summary, the above legislation collectively prohibits the following:</p> <ul style="list-style-type: none"> • Deliberately or recklessly capturing, injuring, taking or killing of a bat; • Deliberately or recklessly harassing a bat; • Intentionally or recklessly disturbing of a bat in its place of rest (roost), or which is used for protection or rearing young; • Deliberately or recklessly damaging, destroying or obstructing access to any resting place or breeding area used by bats; • Deliberately or recklessly disturbing a bat in any way which is likely to significantly affect the local populations of the species, either through affecting their distribution or abundance, or affect any individuals ability to survive, reproduce or rear young; • Possession or advertisement/sale/exchange of a bat (dead or alive) or any part of a bat. <p>In England, licenses are issued by Natural England for any actions that may compromise the protection of a European protected species, including bats, under the Habitats Regulations 2010. This includes all developments, regardless of whether or not they require planning permission. Bats are also protected by the Wild Mammals (Protection) Act 1996 and selected species are listed on the UK Biodiversity Action Plan (BAP) and the Local Biodiversity Action Plan (LBAP)</p> |
| Great crested newt | <p>Great crested newts are protected under European and British law, having the same level of protection as bats (see above). Licenses are issued by Natural England for any actions that may compromise the protection of this species, under the Habitat Regulations 2010. This includes all developments, regardless of whether or not they require planning permission. The species is also listed on the UK and Local BAPs.</p> |

Table 4 continued

| | |
|--------|---|
| Birds | <p>The majority of bird species, with the exception of some species listed on Schedule 2, are protected under the WCA 1981 (as amended). This makes it an offence to intentionally or recklessly:</p> <ul style="list-style-type: none"> • Kill, injure or take any wild bird; • Take, damage or destroy any nest which is in use or being built; and • Take, damage or destroy the eggs of any such bird. <p>Additional protection against disturbance whilst at the nest is also afforded to any bird species, whether an adult bird or their dependent young, which is listed on Schedule 1 of the Act. Certain species are also listed as being of priority conservation importance on the UK and Local BAPs</p> |
| Badger | <p>Badger are protected under the Protection of Badgers Act 1992, which makes it an offence to:</p> <ul style="list-style-type: none"> • Knowingly kill, capture, injure or disturb any individual; • Intentionally damage or destroy a badger sett, or any part thereof; • Obstruct access to an area which is used for breeding, resting or shelter; and • Disturb a badger while it is using any place used for breeding, resting or shelter. <p>The species is also protected by the Wild Mammals (Protection) Act 1996.</p> |

4.0 RESULTS AND DISCUSSION

DESK STUDY

DESIGNATED SITES

- 4.1 There are several designated sites within a 2km radius of the site. These include Statutory designated sites; Special Area of Conservation (SAC); Special Protection Area (SPA); Site of Special Scientific Interest (SSSI) and non-statutory designated sites, which include four Sites of Scientific Interest (SSI), one of which is also a Local Wildlife Site (LWS) and one LWS, all of which are discussed in more detail in Table 5. In addition, one Site of Wildlife Significance, Boshaw Whams Reservoir, is present 500m northeast of the site. This reservoir is used by Huddersfield sailing club and is stocked with trout and fished by Huddersfield Angling Association.

Table 5: Designated sites within 2km proximity

| Site Name | Designation | Grid reference | Distance (KM) and Direction from Site |
|--|-------------|----------------|---------------------------------------|
| South Pennine Moors The area designated as SAC contains several habitats that are a primary reason for designation as a SAC. These include European dry heaths, blanket bog, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> , Northern Atlantic wet heaths with <i>Erica tetralix</i> and transition mires and quaking bogs. | SAC | SK 144 960 | 1.2 S |
| Peak District Moors (South Pennine Moors Phase 1) The South Pennine Moors SPA includes major moorland blocks of the South Pennines, covering extensive tracts of semi-natural moorland habitats including upland heath and blanket mire. The area is of European importance for several upland breeding bird species including golden plover, merlin, peregrine and short-eared owl, as well as being important for the migration of dunlin. | SPA | SK 157 968 | 1.2 S |
| Dark Peak An area of wild, open and more or less continuous moorland, predominantly at an altitude of 400 – 600m. Underlays of millstone grit produces a coarse, gravelly soil which is usually overlain by blanket peat creating blanket mires, wet and dry heaths, acid grasslands, and flushes and mires on moorland slopes. These habitats | SSSI | SK 110 960 | 1.2 S |

| | | | |
|--|-----------|------------|---------|
| represent an extensive tract of moorland vegetation of the South Pennines. | | | |
| Holme Styles Heathland The site is a typical example of mature acidic heathland, dominated by heather and bilberry, with some acid grassland and a strip of deciduous woodland. The main ecological interest is the presence of a large colony of green hairstreak butterfly. | SSI | SE 140 055 | 670m W |
| Wild Boar Clough The site is a single field consisting of neutral and acid grassland with a good range of plant communities. The site supports a good population of the regionally rare <i>Dactylorhiza ericetorum</i> with species rich grassland. | SSI | SE 153 053 | 550m E |
| Yateholme Reservoirs and Plantation The site is potentially the best example of south Pennine upland habitats for breeding birds outside the South Pennine Moors and Dark Peak SSSI. The site also displays a good range of upland habitats including woodlands, grassland, heath, open water, mires and flushes. Which support over 50 regular breeding bird species. | SSI | SE 115 050 | 1.7 SW |
| Morton Wood Oak/birch woodland with diverse streamside flushes and wet woodland communities. The herb layer is diverse in places and includes some ancient woodland indicators, such as <i>Lamium galeobdolon</i> and <i>Anemone nemorosa</i> . | SSI & LWS | SE 158 065 | 920m NE |
| Western Moors Unimproved acid grassland | LWS | SE 165 037 | 960m S |

ECOLOGICAL RECORDS

- 4.2 A data search of a 2km radius around the centre of the site extended over regions covered by two different Ecological Record Centres. The majority of the 2km search radius was within the area covered by West Yorkshire Ecology (WYE). A smaller section of the search area, to the south, was within the area covered by Sheffield Biological Records Centre (SBRC).
- 4.3 A total of 291 records of protected and notable species were returned from a data search by West Yorkshire Ecology (WYE) from within a 2km radius of the site. Records were filtered to the last 10 years and there are 244 records since 2005.
- 4.4 282 records of protected and notable species were returned from a data search by Sheffield Biological Records Centre. 181 of these records exist from 2005 onwards. The data from 2005

onwards, from both Record Centres, are discussed below.

Amphibians

- 4.5 WYE returned no records of amphibian species. SBRC returned three records of common toad *Bufo bufo* from 2013 and two records of common frog *Rana temporaria* from 2014. These records are from approximately 1.4km south of the site.

Bats

- 4.6 Six records of common pipistrelle *Pipistrellus pipistrellus* were returned from WYE. one of these records is that of a roost from 2010, approximately 1.9km northeast of the site. Other records of common pipistrelle are those of field and aural recordings. These records exist from 2008, 2009, 2010 and the most recent records being in 2014. The closest record to the site is from 2014 and is approximately 500m east of the site.

Terrestrial mammals

- 4.7 WYE returned one record of brown hare *Lepus europaeus* from 2015 approximately 630m east of the site.

Bird species

- 4.8 Bird species make up the majority of records returned by WYE from the 2km radius around the site, with 230 records from 41 species since 2005. The majority of bird records came from between 1.2 and 2km to the west of the site from Cartworth Moor and Yateholme Reservoirs and Plantation. There were no bird records from within the site boundary. There are several bird species represented in the dataset which Kirklees Council consider to be considered designated features of the SPA (golden plover, merlin, Short-eared owl, dunlin, twite, curlew and lapwing) and those species are discussed here.

- Golden Plover *Pluvialis apricaria* - seven records of field observations all from 2012. The closest record to the site is from March 2012 and is of a single bird at Bowshaw Whams reservoir 500m to the north east of the site. The remaining records are all to the west of the site boundary from Cartworth Moor and surrounding area. The largest counts of birds are of 10 individuals (two separate records) and are 1.6 km distant from the site boundary.
- Merlin *Falco columbarius* – One record of a single bird from 2010 from Bowshaw Whams Reservoir

- Curlew *Numenius arquata* - 17 records from between 2010 and 2013. Three records are from Bowshaw Whams Reservoir, two records of single birds and the remaining record of three birds. The remaining records are all to the west of the site boundary from Cartworth Moor and surrounding area.
- Lapwing *Vanellus vanellus* – 24 records from between 2010 and 2014. Five of the records are from Bowshaw Whams reservoir. One of these records from 2010 is of a count of 19 birds. The other records are all from Cartworth Moor and surrounding area to the west of the site.

4.9 Bird species also make up the majority of records returned by SBRC, with 173 records from 42 species since 2005. All the records are from over 950m to the south of the site boundary. The bird species that Kirklees Council considers to be considered designated features of the SPA are discussed here:

- Golden Plover *Pluvialis apricaria* - four records of field observations all from 2014 and one record from 2010. Three of the records (2014) are of birds heard calling but not seen, but of note the 2010 record is of ca500 resting birds however there is not a specific location for the record which is given as SE10 Whitley Common.
- Merlin *Falco columbarius* – Five records all from 2010 approximately 1.5km to the south of the site boundary from Flight Hill and Harden Vismig.
- Short Eared Owl *Asio flammeus* – Two records from 2009 and 2010 from over 1.36km to the south of the site boundary.
- Curlew *Numenius arquata* - Seven records from between 2009 and 2014. One of the records is of 15 birds nesting at fields at Broadstones Winscar Reservoir.
- Lapwing *Vanellus vanellus* – Nine records from 2009, 2011 and 2014. The records are from Snittlegate, Flight Hill and Western Moors LWS

Flowering plants

4.10 WYE returned 4 records of bluebell *Hyacinthoides non-scripta*, with the nearest recording being approximately 980m northeast of the site.

Butterflies

4.11 3 records of small heath *Coenonympha pamphilus* are present from 2007, 2012 and 2013 from near Snailsden and Harden Reservoir and from approximately 1.6km southwest of the site.

FIELD RESULTS AND DISCUSSION - HABITATS/FLORA

GENERAL SITE DESCRIPTION

- 4.12 The site consists of improved grassland fields that have been cut for hay, with longer rough grass margins and dry stone walls dividing each field. Several trees are present within the site and an old building is located outside of the site boundary to the southwest of the site.

IMPROVED GRASSLAND

- 4.13 Grassland located within the site was improved grassland. The fields consisted of short sward grassland that had been cut and margins of 1 – 2m wide that supported longer and coarser grasses were located around the edges of the fields. Species recorded within the field areas included perennial rye grass *Lolium perenne*, white clover *Trifolium repens*, ragwort *Jacobaea vulgaris*, and creeping buttercup *Ranunculus repens*. Species diversity of the fields increased at their margins with the following species recorded in addition to those detailed previously; Yorkshire fog *Holcus lanatus*, cock's-foot *Dactylis glomerata*, meadow buttercup *Ranunculus acris*, dandelion *Taraxacum* agg, and broad leaved dock *Rumex obtusifolius*. In addition to this, a small area of this grassland type had damper soil than other areas, and as a result had soft rush *Juncus effusus* present (TN 8).

INDIVIDUAL TREES

- 4.14 Several trees were present within the site; species included elder *Sambucus nigra*, ash *Fraxinus excelsior* and sycamore *Acer pseudoplatanus*. The trees were approximately 10m in height, but age was difficult to determine due to difficult growing conditions from exposure and strong wind in the area. Several conifer trees were also present, but outside of the site boundary (TN 11).

DRY STONE WALLS

- 4.15 Dry stone walls were present as field boundaries throughout the site and were approximately 1.5 tall. The walls were in good condition although there were many gaps and evidence of water ingress.

BUILDINGS

- 4.16 A residential, two-story building (TN 9) was located adjacent the southern site-boundary. This building was brick-built with slate roof tiles and skylights in the roof. The building is not located within the site boundary and will not be affected by the proposals.

FIELD RESULTS AND DISCUSSION – FAUNA

BATS

- 4.17 The site has low potential for bats overall, this assessment is based on the extremely exposed nature of the site and that potential roosting sites are limited to residential areas off site. There are limited features which bats could use to forage / commute across the site all the boundaries being dry stone walls which offer little shelter / protection.
- 4.18 There are several individual trees within the site boundary, however based on the ground-based tree risk assessment none of the trees provided any roosting potential for bats and characteristic signs of bat activity were not recorded. The trees on site have been classified as having negligible bat roosting potential.
- 4.19 Although there were many gaps present within all sections of the walls, many were too large and open to be of any use to bats and thermal properties were extremely poor, it is highly unlikely bats will use these areas for roosting as they would be susceptible to predation, being close to ground-level.
- 4.20 The building that is located on the southern site boundary (**TN 9**) (but outside of the site) had several small gaps between roof tiles and under lead flashing and may provide some potential entry/exit points that could allow bats to be present within the building. However the building is outside of the site boundary and will not be affected by the proposals.

BADGER

- 4.21 The site provides limited potential for badgers in terms of sett creation. There were no characteristic field signs of badger observed on the site at the time of survey.

GREAT CRESTED NEWT & OTHER AMPHIBIANS

- 4.22 The site does not support habitat suitable for this species. The two records centres have no records of GCN within a 2km radius of the site. Additionally, no ponds are present within 500m that would be suitable for GCN.

BIRDS

- 4.23 The site provides some potential to support nesting / foraging birds. Bird surveys are currently underway to investigate the sites use by SPA designated features. Methodology has been discussed and agreed with Kirklees Biodiversity Officer and the RSPB.

BROWN HARE

- 4.24 Brown hare, a UK BAP, WYBAP and Kirklees BAP species, a single animal was observed on site. Its form where it lay is shown as Target note 2.



5.0 SUMMARY & RECOMENDATIONS



- 5.1 The site supports a limited range of habitat types of low ecological importance being dominated by improved grassland. The site offered low potential for protected species to be present.
- 5.2 Phase 1 surveys were updated in April 2017. Habitats on site remained unchanged from the original surveys undertaken in 2016.
- 5.3 Eight designated sites are present within the 2km search area, the closest of which were SSI's Wild Boar Clough 550m to the east and Holme Styles Heathland 670m to the west. There were no direct / similar habitat links between the site and these designated areas and there is no feasible mechanism by which development of the site could negatively impact upon them.
- 5.4 The site lies within 1.2km of South Pennine Moors SAC (Special Area of Conservation) and Peak District Moors (South Pennine Moors -Phase 1) SPA (Special Protection Area), and Dark Peak SSSI (Site of Special Scientific Interest). The South Pennine Moors is designated for internationally important populations of birds and any land that is used for foraging by individual birds breeding within the SPA should be considered functionally linked to the SPA. Kirklees Council have recommended that a suite of bird surveys are undertaken during the breeding season to determine whether the site is used for foraging by SPA breeding birds. Golden Plover has been identified as the key species to survey as it qualifies for SPA designation in its own right as an Annex 1 species under Article 4.1 of the Birds Directive. These surveys are continuing at the time of writing and any mitigation required will be determined through the results of the survey.
- 5.5 The site has potential to support nesting birds. It is recommended that any vegetation clearance (includes all ground level vegetation as well as standard trees) undertaken within the site is conducted outside of the breeding bird season (March – end August inclusive) or in accordance with checking surveys undertaken by appropriately qualified ecologists prior to and during the construction phase of the development.
- 5.6 Bird nesting facilities will be incorporated into the fabric of the build. Results of the bird survey will identify which species to target.
- 5.7 A single brown hare was observed in the site the animal was accidentally disturbed and was seen running away from the surveyor during the survey. The proposal will result in the reduction of

open grassland in the area of the development for this species, although similar and more diverse grassland habitats were available in the surrounding area.

- 5.8 The site has very little potential for bats due to its exposed situation; with limited features providing sheltered foraging / commuting across the site and negligible potential for bats to roost on site itself. However if permission for the proposal were to be granted this would create areas through landscaping and building that would be sheltered and would provide opportunities for roosting through the provision of bat roosting facilities. AES-LTD available to advise.
- 5.9 Consideration will be given to low level lighting of the development as well as consideration to minimise light pollution to reduce impact on retained habitat.
- Use low pressure sodium lamps or high pressure sodium instead of mercury or metal halide where glass glazing is preferred due to its UV filtration properties;
 - Lighting should be directed to where it is needed and light spillage avoided. This may be achieved through design and using accessories such as hoods, cowls, louvres and shields;
 - The lighting should be as low as guidelines permit, if lighting is not needed don't light;
 - Many security lights may be fitted with movement sensors which if well installed and aimed will reduce the amount of time a light is on each night; and
 - The light should be aimed to light only the immediate area required by using as sharp a downward angle as possible.
- 5.10 Where practicable boundary features including stone walls, trees and marginal areas should be retained and incorporated into the overall site design. This will retain a measure of maturity around the site and will aid the development of species movement corridors around and into the local landscape. Any planting will be characteristic of the natural area. AES-LTD available to advise.

APPENDIX 1: TARGET NOTES

| TN No. | Note | Photo |
|--------|--|--|
| 1. | Improved grassland field with rough grass field boundaries. |  |
| 2. | Brown hare was observed on the site, the image shows the form in which the hare was resting. |  |



| | | |
|-----------|---|--|
| <p>3.</p> | <p>Stock grazing in surrounding fields.</p> |  |
| <p>4.</p> | <p>Individual trees, including ash and sycamore, - no defects - provide negligible potential for roosting bats.</p> |  |

| | | |
|-----------|--|--|
| <p>5.</p> | <p>Wider areas of rough grassland were present in some sections of the site. The coarser grasses found within these areas are generally unsuitable for use in hay for animal forage.</p> |  |
| <p>6.</p> | <p>A close up picture of the condition of the dry stone wall. Note the staining from water ingress</p> |  |

| | | |
|----|---|--|
| 7. | Smaller scrub / trees, possibly an old field boundary. |  |
| 8. | Small area of damper grassland in field corner containing soft rush and unsuitable for cutting. |  |

9. Residential property located directly adjacent to the southern site boundary



| | | |
|-----|---|---|
| 10. | Dry stone wall field boundary, 1.5m high. |  |
| 11. | Conifer trees outside of the site boundary. |  |

APPENDIX 2: PHASE 1 HABITAT PLAN

