



LAND AT GREEN LANE, ASHWELL
ECOLOGICAL APPRAISAL

Prepared for Osprey Homes

by

Hankinson Duckett Associates

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hankinson duckett associates

t 01491 838175 **f** 01491 838997 **e** consult@hda-enviro.co.uk **w** www.hda-enviro.co.uk

The Stables, Howbery Park, Benson Lane, Wallingford, Oxfordshire, OX10 8BA

Hankinson Duckett Associates Limited Registered in England & Wales 3462810 Registered Office: The Stables, Howbery Park, Benson Lane, Wallingford, OX10 8BA

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HDA Document Control and Quality Assurance Record

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1 INTRODUCTION

- 1.1 This report describes an Ecological Appraisal, including a Phase 1 bat scoping survey and Badger survey, of approximately 0.38ha of Land at Green Lane, Ashwell, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference TL 27312 40096. The study was commissioned by Osprey Homes in October 2023.
- 1.2 The site is located to the north of the village of Ashwell in Hertfordshire, and comprises part of a residential garden. The site is dominated by a well-managed modified grassland lawn with an area of mixed scrub to the north of the site and a small area of semi-natural broadleaved woodland spanning much of the eastern boundary. The site is bordered by paddocks to the north; arable farmland to the west and east; and the village of Ashwell to the south. The location and boundary of the site are shown in *Appendix B*.
- 1.3 The site is proposed for the provision of residential development comprising 7 homes, vehicular access, landscaping and associated works.
- 1.4 The aims of this study are:
- i. To assess the likely nature conservation importance of habitats within the site;
 - ii. To assess the likely presence of protected species and Habitats and Species of Principal Importance identified under Section 41 of the 2006 NERC Act;
 - iii. To identify any potential constraints to development due to the above;
 - iv. To identify requirements for any additional ecological surveys in support of a planning application; and
 - v. To identify measures to avoid and mitigate potential effects of development on identified features of ecological interest.

2 METHODOLOGY

2.1 Desk study

- 2.1.1 Existing ecological and nature conservation data relevant to the site was collated from various sources including the 'Multi Agency Geographic Information for the Countryside' (MAGIC) online database (magic.defra.gov.uk), Hertfordshire Environmental Records Centre (HERC) and Cambridgeshire and Peterborough Environmental Records Centre (CPERC). Protected species records were obtained for an area of approximately 2km around the site and the check for statutory designated sites located within an area of up to 10km from the site boundary was carried out using the MAGIC database. The findings of the desk study are summarised in *Section 3* below and the full results are given in *Appendix A*.

2.2 Field survey

UK Habitat Classification Survey

- 2.2.1 The field survey comprised a UK Habitat Classification Survey of the site (UKHAB, 2023), a Badger survey and a Phase 1 bat roost scoping survey carried out by Filippo Faraone of HDA on 9th November 2023. A total of three hours was spent carrying out the field survey. Weather conditions were dry with light cloud.

UK Habitat Classification Survey

- 2.2.2 The habitat survey involved walking over the site, mapping the main habitat types and compiling detailed 'target notes'. Target notes record habitat features, and a list of vascular plant species noted, together with a qualitative assessment of relative abundance where appropriate. An initial assessment was also made of the potential for the site to support protected and notable species based on the character of habitats present.

- 2.2.3 The full results of the UK Habitat Classification survey are given in *Appendix B*. Botanical names follow Stace (2019) for higher plants.

Phase 1 bat roost scoping survey

- 2.2.4 All trees and buildings within the site were assessed for their potential to support roosting and/or hibernating bats and classified accordingly.

Phase 1 bat roost building survey

- 2.2.5 All buildings within the site were inspected externally from ground level using binoculars and a powerful torch to identify and investigate any potential entry and exit points such as missing roof tiles, loose fascia's and lifted lead flashing, and to look for evidence of entry/exit in the form of staining, discolouration and/or scratch marks.
- 2.2.6 Buildings were also searched internally where possible to look for evidence of current or former occupation by bats. A powerful torch was used to investigate any accessible cavities, crevices and recesses in each building.
- 2.2.7 In view of the findings of the building inspections, the potential of the buildings to support roosting bats ('confirmed roost', 'high', 'moderate', 'low' or 'negligible') was assessed in accordance with current best practice guidelines (BCT, 2023). Assessment of bat roosting potential requires consideration of a number of criteria, including the design and construction of the building or structure, the size and location of potential features and access points, the position of the building or structure, aspect, geographical location, surrounding land use and adjacent landscape linkages.

Phase 1 bat roost tree survey

- 2.2.8 All trees within and immediately adjacent to the site were inspected from ground level with the aid of binoculars and a powerful torch to identify potential features suitable for use by roosting and/or hibernating bats. Potential features include splits, cracks and cavities, peeling bark, woodpecker holes, broken branches and a covering of Ivy where this is of a sufficient age to provide a suitable microclimate between the tree and Ivy stem(s).
- 2.2.9 In accordance with current best practice guidelines (BCT, 2023), trees were placed into one of the following four categories based on the nature, size, location and quality of features present in each tree and surrounding habitat:
- Negligible suitability - Trees with no or negligible features for roosting bats;
 - Low suitability (PRF-I) - Trees supporting features only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitat;
 - Moderate or higher suitability (PRF-M) - Trees supporting features suitable for multiple bats and may therefore be used by a maternity colony; or
 - Known or confirmed bat roost.

Badger survey

- 2.2.10 The Badger survey comprised a systematic search of the site and a 30m buffer around the edge of the site, where accessible, for Badger setts and evidence of Badger activity. For each confirmed Badger sett a recording card was completed detailing the type of sett, number of entrances and level of activity (from disused to active). Natural England's 2009 guidance was used to determine whether setts should be regarded as being in 'current use' (Natural England, 2009).

Other species

- 2.2.11 Observations on the presence, or potential presence, of other protected species were recorded as incidental information to the UK Habitat Classification survey and this information should not be relied on as a comprehensive assessment of the presence or otherwise of all protected species on the site. This is because there is a wide range of protected species, many of which can occur on one site and most require specialist expertise to locate them and/or season-critical survey techniques to confirm their presence, and this is outside the scope of the present report.

2.3 Evaluation criteria

- 2.3.1 The evaluation of the site, and the habitats within it, is based on the results of the field surveys described above, any designations pertaining to the site, and existing ecological information collected during the desk study.

2.3.2 Each ecological resource (site, habitat, species or feature) was assigned a value at the following geographic scales (CIEEM, 2018):

- International
- National
- Regional
- County / Metropolitan
- District / Borough
- Local / Parish
- within immediate zone of influence only (Site / Negligible)

2.3.3 Assigning value is relatively straightforward in the case of designated sites, and undesignated sites meeting designation criteria. However, in most cases evaluation of ecological resources is not straightforward and requires a degree of knowledge, training, experience and professional judgement (Usher, 1986; Spellerberg, 1992). Evaluation of an ecological resource was based on a number of criteria (Ratcliffe, 1977; CIEEM, 2018). These are summarised in *Appendix E*.

2.3.4 The potential for protected species and Habitats and Species of Principal Importance identified under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act to be present within the site has been assessed on the basis of the habitats and features present and the results of the desk study.

2.4 Limitations

2.4.1 UK Habitat Classification surveys during the period mid-October to early April are generally less efficient than during the spring or summer and it is possible that some species may have been inconspicuous or absent at the time of survey. This is unlikely to be a significant limitation however in this instance due to the limited quality of the grassland which is largely a residential garden lawn under high levels of management, and the site was visited by HDA ecologists on several occasions between May and June 2024 during which the extent and character of the habitats within the site was reviewed and confirmed.

2.4.2 During the Badger survey, some areas of land outside the site but within 30m of the boundary, including the paddocks of small holdings located to the north and east of the site, could not be accessed or viewed adequately to confirm the absence of Badger setts. It is considered unlikely however that these areas contained active Badger setts at the time of survey as there were no signs of Badger using these areas or immediately adjacent land was recorded during the survey.

2.4.3 With due regard to the above, the field survey and desk study are considered adequate to allow a robust assessment of the likely nature conservation significance of the site and its

development, and to form the basis of the recommendations provided in *Sections 7 and 8* of this report.

3 DESK STUDY

3.1 Introduction

3.1.1 The following section summarises the findings of the desk study. The original data is provided in *Appendix A*.

3.2 Designated Sites

Statutory designated areas

3.2.1 No statutory nature conservation designations pertain to the site or adjacent land. This is confirmed by information from the MAGIC online database, HERC and CPERC.

Internationally designated areas

3.2.2 There are no internationally designated areas located within 10km of the site boundary.

Nationally designated areas

3.2.3 There are no nationally designated areas located within 5km of the site boundary.

3.2.4 Three Sites of Special Scientific Interest (SSSIs) are located within 5km of the site. These are:

- Ashwell Springs SSSI, located approximately 360m to the southwest of the site. This 0.3ha SSSI is designated for its series of freshwater springs arising from the foot of the Hertfordshire chalk and forming a source of the River Cam. The springs maintain an almost constant low temperature providing a specialised cold water habitat for a diverse invertebrate community.
- Therfield Heath SSSI, located approximately 4.5km to the northeast of site. This 143.33ha SSSI is designated for being a good example of the East Anglian type of chalk grassland. This plant community has suffered severe losses throughout its range during the post-war agricultural intensification so the remaining examples are of high conservation value. This site contains some of the richest chalk grassland in England.

3.2.5 The site falls within the 250m-500m and 3-5km Impact Risk Zone (IRZ) for the above two SSSIs respectively, as identified from the MAGIC online database. Natural England uses IRZs to identify development activities in the vicinity of SSSIs, Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) which in the absence of mitigation and avoidance measures may adversely affect designated features, thereby requiring planning authorities to consult with Natural England where potentially damaging activities are

proposed. The IRZs in which the site falls reference the following types of development as a type which could have adverse impacts on the designated sites:

- Infrastructure: Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.
- Minerals, Oil and Gas: Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
- Residential: Any residential developments with a total net gain in residential units.
- Rural Residential: Any residential developments outside of existing settlements/urban areas with a total net gain in residential units.
- Air Pollution: Livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t.
- Waste: Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.
- Water Supply: Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply

As such, despite the small scale of the proposed development of 7 new homes, Natural England would be expected to be consulted by the planning authority due to the net increase in residential dwellings at the site.

- 3.2.6 There are no locally designated Local Nature Reserves (LNRs) within 2km of the site boundary.

Non-statutory designated areas

- 3.2.7 Four Local or County Wildlife Sites (CWS/LWS) are located within 2km of the site. These include:

- The closest non-statutory designated site to the site is the Duckdale Farm, Ashwell Local Wildlife Site (LWS), located approximately 350m to the south-east of the site. The LWS provides 'buildings and environments' that are important for protected species.
- Ruddy Pit County Wildlife Site (CWS), located approximately 1km to the east of the site, is a 3.37ha CWS which is designated for supporting frequent numbers of six or more strong calcareous grassland indicators.
- Partridge Hall Field LWS is located approximately 1.5km to the southwest of the site. This 1.98ha LWS is a field supporting long-standing secondary grassland with old hedges around the margin. Most of the site is open scrub with neutral/calcareous grassland supporting species which are considered to be scarce plants in Hertfordshire.

- Ashwell Quarry LWS is located approximately 2km to the southwest of the site. This 2.9ha LWS is designated for its very old, disused chalk pit with re-established chalk grassland and areas of scrub and exposed chalk faces supporting a diverse flora.

Other

- 3.2.8 No areas of woodland included in Natural England's Ancient Woodland Inventory are located within or adjacent to the site.

3.3 Biodiversity Action Plan (BAP) and NERC Act Habitats and Species of Principal Importance

- 3.3.1 The UK Biodiversity Action Plan (HMSO 1995, 1998, UKBP 2007) lists habitats and species which have undergone significant declines in recent years and for which conservation is a priority in order to preserve biodiversity in the UK. The BAPs provide a list of actions to be implemented to halt or reverse these declines.

- 3.3.2 These species and habitats are identified as Habitats and Species of Principal Importance for the conservation of biological diversity in England under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. Together with the 2023 National Planning Policy Framework (NPPF) and underpinning guidance (ODPM 2005), Section 40 of the 2006 NERC Act requires that these species are a material consideration in the planning process. Consideration to the presence, or potential presence, of Biodiversity Action Plan (BAP) and NERC Act Habitats and Species of Principal Importance at the site is given in *Sections 5 to 8* of this report.

- 3.3.3 The Herfordshire County Council BAP also contains a list of 16 Species Action Plans and 7 Habitat Action Plans, relevant to the Herfordshire area, that will help contribute to implementing the North Hertfordshire Biodiversity Action Plan published in 1998. Where possible these should be considered in the design of any proposed development at the site, both in terms of impact avoidance and opportunities to enhance the site and contribute to the Biodiversity Action Plan. These habitats and species include:

- Woodland
- Wetlands
- Heathland and acid grassland
- Neutral grasslands
- Chalk grasslands
- Farmland
- Urban
- Water Vole
- Common Dormouse
- Natterer's Bat

- Otter
- Tree Sparrow
- Bittern
- Stone-curlew
- Song Thrush
- Great Crested Newt
- Chalkhill Blue
- Grizzled Skipper
- Stag Beetle
- White-clawed Crayfish
- Great Pignut
- Cornflower
- River Water-dropwort
- Pasqueflower

3.4 Protected species

3.4.1 No records of protected or notable species relating directly to the site were provided during the desk study. HERC and CPERC did however provide records of protected and notable species occurring in the wider desk study area including bats, Otters, Badgers, birds, reptiles, Great Crested Newts, invertebrates and plants. Full details of protected and notable species records are provided in *Appendix A* and a summary of the records is given below.

3.4.2 Bats

3.4.2.1 20 records relating to seven bat species were provided for the desk study area, including Common Pipistrelle, Brown Long-eared Bat, Natterer's Bat, Myotis Bat, Serotine, Whiskered/Brandt's Bat and Noctule bats. The closest record to the site pertained to a recording of a Serotine bat approximately 1.1km to the south of the site, dating from 2010.

3.4.2.2 All UK bat species are protected as European Protected Species (EPS) under the 2017 Conservation of Habitats and Species Regulations (as amended). In relation to EPS, the 2017 Regulations make it an offence to:

- Deliberately capture, injure or kill any wild animal of an EPS;
- Deliberately disturb wild animals of any such species, in particular any disturbance which is likely to: (i) impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or to hibernate or migrate; (ii) affect significantly the local distribution or abundance of the species to which they belong;
- Damage or destroy a breeding site or resting place of such an animal; and/or

- To (a) be in possession of, or to control; (b) to transport any live or dead animal or any part of an animal; (c) to sell or exchange or (d) offer for sale or exchange any live or dead animal or part of an animal of an EPS.

3.4.2.3 In addition, all UK bats are protected under the 1981 Wildlife and Countryside Act (as amended). All species are listed on Schedule 5 of the Act and are subject to the provisions of Sections 9.4b and 9.4c, which make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection; and/or
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat.

3.4.2.4 If works are planned that are likely to constitute an offence under the current legislation, then works should be carried out under an appropriate Natural England licence.

3.4.2.5 Seven species of bat (Barbastelle, Bechstein's, Noctule, Soprano Pipistrelle, Brown Long-eared, Greater Horseshoe and Lesser Horseshoe) are also listed as Species of Principal Importance under Section 41 of the 2006 NERC Act. Section 40 of the Act requires planning authorities to regard these species as a material consideration in the planning process.

3.4.3 *Hazel Dormice*

3.4.3.1 No records of Dormice were provided for the area within 2km of the site boundary.

3.4.3.2 The Hazel Dormouse is protected through its inclusion on Schedule 5 of the 1981 Wildlife and Countryside Act (see *Section 3.4.2.3*) and as a European Protected Species through the 2017 Conservation of Habitats and Species Regulations (as amended) (see *Section 3.4.2.2*). It is also a Biodiversity Action Plan species for the UK and is listed as a Species of Principal Importance under Section 41 of the 2006 NERC Act.

3.4.4 *Otter*

3.4.4.1 One record of otter was provided for the desk study data. This record pertains to a field recording approximately 2km to the southwest of the site.

3.4.4.2 The Otter is protected through its inclusion on Schedule 5 of the 1981 Wildlife and Countryside Act (as amended) (see *Section 3.4.2.3*) and as an EPS under the 2017 Conservation of Habitats and Species Regulations (as amended) (see *Section 3.4.2.2*). It is also a UKBAP species and listed as a Species of Principal Importance under Section 41 of the 2006 NERC Act.

3.4.5 *Water Vole*

3.4.5.1 No records of Water Vole were provided for the area within 2km of the site boundary.

3.4.5.2 The Water Vole is protected through its inclusion on Schedule 5 of the 1981 Wildlife and Countryside Act (as amended). Unless permitted under a licence issued by Natural England this makes it an offence to:

- Intentionally or recklessly kill, injure or take Water Voles;
- Possess or control live or dead specimens or anything derived from a Water Vole;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place which Water Voles use for shelter or protection; and/ or
- Intentionally or recklessly disturb Water Voles while they are using such a place.

3.4.5.3 The Water Vole is also a priority species on the UKBAP and is listed as a Species of Principal Importance under Section 41 of the 2006 NERC Act.

3.4.6 *Badger*

3.4.6.1 21 records of Badger were received for the desk study data. The closest of these records pertains to a female Badger found dead on a road approximately 300m to the southwest of the site. The next closest record pertains to a sett entrance located approximately 1km to the west of site dating from 2015.

3.4.6.2 Badgers and their setts are protected under the 1992 Protection of Badgers Act. Unless permitted under a licence issued by Natural England, this makes it an offence to:

- Kill, injure or capture a Badger;
- Damage, destroy or obstruct access to a Badger sett; and/or
- Disturb Badgers while they are occupying a sett.

3.4.7 *Birds*

3.4.7.1 All nesting birds are afforded a basic level of protection under the 1981 Wildlife and Countryside Act (as amended). Species listed on Schedule 1 of the Act receive additional protection against disturbance when breeding. Records of 64 notable species were provided for the desk study area. *Table 1* below details the specially protected and notable bird species recorded within 2km of the site.

Table 1: Specially protected and notable bird species recorded within desk study area

Common Name	Scientific Name	Annex I ¹	WCA 1 ²	NERC 41 ³	BOCC5 (2021) ⁴
Barn Owl	<i>Tyto alba</i>				Green

Black-headed Gull	<i>Chroicocephalus ridibundus</i>				Amber
Brambling	<i>Fringilla montifringilla</i>				Green
Bullfinch	<i>Pyrrhula pyrrhula</i>				Amber
Common Gull	<i>Larus canus</i>				Amber
Corn Bunting	<i>Emberiza calandra</i>				Red
Cuckoo	<i>Cuculus canorus</i>				Red
Curlew (Eurasian)	<i>Numenius arquata</i>				Red
Dunnock	<i>Prunella modularis</i>				Amber
Fieldfare	<i>Turdus pilaris</i>				Red
Golden Plover	<i>Pluvialis apricaria</i>				Green
Great B.b. Gull	<i>Larus marinus</i>				Amber
Greenfinch	<i>Carduelis chloris</i>				Red
Grey Partridge	<i>Perdix perdix</i>				Red
Grey Plover	<i>Pluvialis squatarola</i>				Amber
Grey Wagtail	<i>Motacilla cinerea</i>				Amber
Hawfinch	<i>Coccothraustes coccothraustes</i>				Red
Hen Harrier	<i>Circus cyaneus</i>				Red
Herring Gull	<i>Larus argentatus</i>				Red
Hobby	<i>Falco subbuteo</i>				Green
House Martin	<i>Delichon urbicum</i>				Red
House Sparrow	<i>Passer domesticus</i>				Red
Kestrel	<i>Falco tinnunculus</i>				Amber
Kingfisher	<i>Alcedo atthis</i>				Green
Lapwing	<i>Vanellus vanellus</i>				Red
Lesser B.b. Gull	<i>Larus fuscus</i>				Amber
Lesser Redpoll	<i>Acanthis cabaret</i>				Red
Linnet	<i>Carduelis cannabina</i>				Red
Mallard	<i>Anas platyrhynchos</i>				Amber
Marsh Harrier	<i>Circus aeruginosus</i>				Amber
Marsh Tit	<i>Poecile palustris</i>				Red
Meadow Pipit	<i>Anthus pratensis</i>				Amber
Mediterranean Gull	<i>Larus melanocephalus</i>				Amber
Merlin	<i>Falco columbarius</i>				Red
Mistle Thrush	<i>Turdus viscivorus</i>				Red
Moorhen	<i>Gallinula chloropus</i>				Amber
Peregrine Falcon	<i>Falco peregrinus</i>				Green
Quail	<i>Coturnix coturnix</i>				Amber
Red Kite	<i>Milvus milvus</i>				Green
Redshank	<i>Tringa totanus</i>				Amber
Redwing	<i>Turdus iliacus</i>				Amber
Reed Bunting	<i>Emberiza schoeniclus</i>				Amber
Rook	<i>Corvus fruilegus</i>				Amber

Ruff	<i>Calidris pugnax</i>				Red
Skylark	<i>Alauda arvensis</i>				Red
Snipe	<i>Gallinago gallinago</i>				Amber
Song Thrush	<i>Turdus philomelos</i>				Amber
Sparrowhawk	<i>Accipiter nisus</i>				Amber
Spotted Flycatcher	<i>Muscicapa striata</i>				Red
Starling	<i>Sturnus vulgaris</i>				Red
Stock Dove	<i>Columba oenas</i>				Amber
Stone curlew	<i>Burhinus oediconemus</i>				Amber
Swift	<i>Apus apus</i>				Red
Tawny Owl	<i>Strix aluco</i>				Amber
Tree Pipit	<i>Anthus trivialis</i>				Red
Turtle Dove	<i>Streptopelia turtur</i>				Red
Wheatear	<i>Oenanthe oenanthe</i>				Amber
Whitethroat	<i>Sylvia communis</i>				Amber
Willow Warbler	<i>Phylloscopus trochilus</i>				Amber
Woodcock	<i>Scolopax rusticola</i>				Red
Woodpigeon	<i>Columba palumbus</i>				Amber
Wren	<i>Troglodytes troglodytes</i>				Amber
Yellow Wagtail	<i>Motacilla flava</i>				Red
Yellowhammer	<i>Emberiza citrinella</i>				Red

Notes:

- 1 Species listed in Annex I of Council Directive 79/409/EEC on the conservation of wild birds.
- 2 Species specially protected under Schedule 1 of the 1981 Wildlife and Countryside Act (as amended).
- 3 Species included in the UKBAP and Species of Principal Importance under the 2006 NERC Act.
- 4 Species included in the Birds of Conservation Concern Red and Amber lists (RSPB, 2021)¹.

3.4.8 Reptiles

3.4.8.1 One record for reptiles was received within the desk study data. This record pertains to a field sighting of a Grass Snake approximately 1.2km to the southwest of the site dating from 2015.

3.4.8.2 All native reptiles are protected against killing and injuring under the 1981 Wildlife and Countryside Act (as amended) and are listed as Species of Principal Importance under Section 41 of the 2006 NERC Act. Due to their rarity, Sand Lizards and Smooth Snakes have additional protection.

¹ **Red Listed** (RSPB, 2021): Red list species are those that are globally Threatened according to IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery.

Amber Listed (RSPB, 2021): Amber list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations.

3.4.9 *Great Crested Newt*

3.4.9.1 Two Great Crested Newt records were provided within a 2km radius of the site. Both records obtained were low resolution for a location approximately 1.7km to the south-west of the site, dating from 2019.

3.4.9.2 The Great Crested Newt is protected through its inclusion on Schedule 5 of the 1981 Wildlife and Countryside Act (see *Section 3.4.2.3*) and as a European Protected Species (EPS) under the 2017 Conservation of Habitats and Species Regulations (as amended). (see *Section 3.4.2.2*). The Great Crested Newt is also listed as a priority species on the UKBAP and identified as a Species of Principal Importance under Section 41 of the 2006 NERC Act.

3.4.10 *Invertebrates*

3.4.10.1 159 Records invertebrates records were provided for the desk study area, none of which relate to the site or adjacent land. The records include:

- Small Heath, Beaded Chestnut, Blood Vein, Brown Spot Pinion, Dark Spinach, Fox Moth, Dusky Brocade, Flounced Chestnut, Ghost Moth, Grey Dagger, Large Nutmeg, Mottled Rustic, Mouse Moth, Shaded Broad-bar, Small Emerald, Small Square-Spot, White Ermine, Cinnabar, and Buff Ermine, which are listed as Species of Principal Importance under Section 41 of the 2006 NERC Act and are listed as UKBAP species. Small Heath butterfly is also listed as Near Threatened on the IUCN Red List²;
- Chalk Hill Blue butterfly which is also listed as Near Threatened on the IUCN Red List; and
- Ivy Ladybird which is listed as Vulnerable on the IUCN Red List³.

3.4.11 *Plants*

3.4.11.1 HERC and CPERC provided 13 records of higher plants for the wider desk study area. These include:

- Martin's Rampion which is protected under Schedule 8 of the Wildlife and Countryside Act 1981 against commercial exploitation only;

² **Near Threatened** (IUCN Red List, 2012): A taxon is Near Threatened when it does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future in Great Britain.

³ **Vulnerable** (IUCN Red List, 2012): A taxon is Vulnerable (VU) when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable, and it is therefore considered to be facing a high risk of extinction in the wild

- Sheperd's-needle which is listed as a Species of Principal Importance under Section 41 of the 2006 NERC Act, UKBAP and is listed as Endangered on the IUCN Red List⁴;
- Prickly Poppy which is also listed as Endangered on the IUCN Red List;
- Strawberry Clover, Dwarf Spurge and Sainfoin which are all listed as Vulnerable on the IUCN Red List; and
- Hoary Plantain and Field Scabious which are both listed as Near Threatened on the IUCN Red List.

3.4.11.2 A full list of the plant records received for the search area is provided in *Appendix A*.

3.4.12 *Invasive species*

3.4.12.1 HERC and CPERC provided one record of Giant Hogweed which is included on Schedule 9 of the 1981 Wildlife and Countryside Act (as amended). It is an offence to release, plant or cause to grow in the wild any plant included on this schedule of the Act.

3.4.13 *Other species*

3.4.13.1 Other notable species for which desk study records were provided for the desk study area include Common Toad, Brown Hare and Hedgehog which are identified as Species of Principal Importance under Section 41 of the 2006 NERC Act.

3.5 **Planning Policies**

3.5.1 Relevant policies from the North Hertfordshire Local Plan (Adopted 2022) relating to the nature conservation and the environment include:

Policy SP11: Natural resources and sustainability

This Plan seeks to meet the challenges of climate change and flooding. We will:

- a) Support proposals for renewable and low carbon energy development in appropriate locations;*
- b) Take a risk based approach to development and flood risk, directing development to areas at lowest risk in accordance with the NPPF and ensuring the provision of Sustainable Drainage Systems (SuDS) and other appropriate measures;*
- c) Support the principles of the Water Environment (Water Framework Directive) Regulations 2017 and seek to protect, enhance and manage the water environment;*
- d) Give consideration to the potential or actual impact of land contamination and support proposals that involve the remediation of contaminated land; and*

⁴ **Endangered** (IUCN Red List, 2012): A taxon is Endangered (EN) when the best available evidence indicates that it meets any of the criteria A to E for Endangered, and it is therefore considered to be facing a very high risk of extinction in the wild

e) Work with utilities providers, East Hertfordshire District Council and relevant agencies to ensure additional wastewater treatment capacity is delivered without harm to protected European sites.

Policy SP12: Green infrastructure, landscape and biodiversity

We will accommodate significant growth during the plan period whilst ensuring the natural environment is protected and enhanced. We will:

a) Protect, identify, manage and where possible enhance a strategic multi-functional network of green infrastructure;

b) Consider and respect landscape character, scenic beauty and locally sensitive features, particularly in relation to the Chilterns Area of Outstanding Natural Beauty;

c) Protect, enhance and manage designated sites in accordance with the following hierarchy of designations and features:

☐ *Internationally designated sites*

☐ *Nationally designated sites*

☐ *Locally designated sites;*

☐ *Non-designated sites that include important habitats and species*

d) Protect, enhance and manage biodiversity networks including wildlife corridors, ancient woodlands and hedgerows, wetland and riverine habitats, Local Geological Sites, protected species, priority species and habitats, and non-designated sites of ecological value and ensure measurable net gains for biodiversity; and

e) Protect other open spaces and support provision of new and improved open space

4 UK HABITAT CLASSIFICATION SURVEY

4.1 General description

4.1.1 The results of the UK Habitat Classification survey are presented in map form with target notes (represented by numbered dots) in *Appendix B*. A brief non-technical description of the site's habitats and features is given below. Numbers in brackets refer to target notes.

4.1.2 In general terms the site comprises a well managed modified grassland lawn with associated garden habitats such as native and non-native scrub and garden buildings with an area of semi-mature broadleaved woodland along the southeastern boundary of the site. A mix of young, species-poor native hedgerows border the site to the north and east with a mature hedgerow forming part of the western boundary.

4.1.3 The site is bordered to the north by livestock paddocks beyond which lie arable fields; to the east and west by arable fields; and to the south by residential properties beyond which lies the village of Ashwell.

4.2 Grassland

4.2.1 The majority of the site consists of modified grassland managed as a garden lawn, comprising Perennial Ryegrass, Creeping Buttercup, Cock's Foot, Spear Thistle, Dandelion, Hemlock, Creeping Bent, Common Daisy, Annual Meadow-grass, Ground Ivy, Spear Thistle, Garlic Mustard and Feather Moss (18).

4.3 Hedgerows

4.3.1 Hedgerows associated with the site include:

- A native species-poor defunct hedgerow running along the northeastern boundary of the site, comprising Hawthorn and Dog Rose (10). This hedgerow is approximately 0.5m wide and 1.5m tall.
- A native species-rich defunct hedgerow forming part of the northwestern site boundary comprising Hawthorn, Blackthorn, Dog Rose, Hazel, Holly, Bramble and Old Man's Beard (13). A semi-mature Ash is present within the hedgerow.
- A native species-poor defunct hedgerow comprising newly planted sapling Holly plants (14).

4.4 Woodland

4.4.1 A small area of semi-mature woodland is present along much of the eastern boundary of the site. Elm is the predominant species with Beech and Birch also present. The understory is comprised of Elm saplings, Elder, Common Nettle, Common Ivy, Ground Ivy, Hemlock, and Garlic Mustard. A small partially collapsed animal pen is also present within the woodland (8).

4.5 Scrub

4.5.1 Two patches of scrub are present within the site, comprising a patch of native mixed scrub to the north and a small area of introduced scrub to the south:

- Mixed scrub: A fairly dense patch of mixed native scrub in the north of the site comprising, Hawthorn, Elder, Blackthorn, False Spirea, young Ash and Bramble with ground cover vegetation comprised of Common Nettle, Hemlock, Garlic Mustard, Ground Ivy, Cleavers, and White Dead-nettle (11).
- Introduced scrub: A scrub parcel in the south of the site which is largely over bare ground. A large Box overshadows Elm saplings, which is intertangled with Old Man's Beard. Ground flora present includes Ground Ivy, Common Ivy, Black Horehound and Variegated Yellow-archangel (6).

4.6 Trees

4.6.1 Outside of the wooded area on the eastern site boundary, a number of young and mature trees are located around the site. These include three semi-mature fruit trees including Cherry in the central area of the site (19) and a large multistemmed Field Maple is present on the western boundary of the site.

4.7 Bareground

4.7.1 A number of areas of bare ground are present within the site, these include:

- An area of bareground resulting from tree clearance in the east of the site (9). Old stumps are present and young Elm samplings are becoming established alongside ground flora species similar to those recorded in the adjacent woodland.

- An area to the west of the site used for chopping logs with a large, recently felled tree chopped into pieces (17).
- An area used as a fire pit (23).

4.8 Urban

4.8.1 A number of wooden outbuildings are present on site in the form of a workshop, garden room and small potting shed (1, 2, 3) and a collapsed garden building is present in the southeastern corner (7). A small gravel drive is present on eastern boundary of the site.

5 PROTECTED AND NOTABLE SPECIES

5.1 Bats

Roosting bats

5.1.1 The results of the Phase 1 bat roost scoping survey are summarised in *Table 2* below and building/ tree locations are shown in *Appendix C*.

Table 2: Phase 1 bat scoping survey results

Building/Tree	Description	Findings	Bat roost potential
B1	A small delapidated potting shed of timber construction with single skinned shiplap walls and a pitched plyboard roof.	External: No external features. Internal: No lining or insulation. There is likely to be high fluctuations in temperature. Evidence of bat activity: None recorded.	Negligible
B2	Garden room of timber construction. Single skinned shiplap walls with a pitched plyboard and felt roof.	External: Gaps above the French doors on the southern elevation. Internal: No lining or insulation. There is likely to be high fluctuations in temperature. Evidence of bat activity: None recorded.	Very Low
B3	Garden shed of timber construction. Single skinned shiplap walls with a pitched plyboard and felt roof.	External: Small gap at the end of the soffit box on the southeastern elevation which had evidence of nesting birds at the time of the survey. Internal: No internal access was possible. Evidence of bat activity: None recorded.	Very Low
T1*	Elm	Ivy cladding on southwestern elevation	PRF- I (Low)

* All other trees present were recorded as having negligible potential to support roosting bats.

Foraging and commuting habitat

- 5.1.2 The open areas of species-poor grassland and bare ground provide limited opportunities for bats in isolation, although opportunities for foraging and commuting bats are enhanced by the adjacent treelines, woodland edges and hedgerows along the Site boundaries which also provide connective habitat to the wider area. In view of the limited extent of habitat present, the site is unlikely however to be of importance to foraging and commuting bats in a local context. Notwithstanding this measures to ensure continued suitability for foraging and commuting bats at the site following development are given in *Section 8* below.

5.2 Dormouse

- 5.2.1 The site has limited potential Dormouse habitat and limited connectivity with areas of higher quality Dormouse habitat in the wider area. In addition, no records for Dormouse were received for the area within 2km of the site during the desk study. In view of this it is considered highly unlikely that Dormice are present within the site.

5.3 Otter and Water Vole

- 5.3.1 There are no wetland habitats within or adjacent to the site which are suitable for either Otter or Water Vole. In addition, no records of Water Vole were received for the area within 2km of the site and although records of Otter were received, they were located 2km from the site boundary. In view of this it is considered highly unlikely that Otter or Water Vole are present within the site.

5.4 Badgers

Badger setts

- 5.4.1 No Badger setts were recorded within or adjacent to the site during the Badger survey.

Foraging habitat

- 5.4.2 The grassland, hedgerow, scrub and woodland area provide good quality Badger foraging habitat, albeit limited in extent. Although some evidence of Badger foraging was recorded during the Badger survey, it is considered unlikely that the site is of importance to the local Badger population.

5.5 Birds

Breeding birds

- 5.5.1 The buildings and hedgerow, woodland and scrub habitats within the site offer nesting and/or foraging opportunities for common and widespread bird species and it is possible that the site supports a small number of breeding birds typical of woodland edge and garden habitats. Similar habitat is abundant in the wider area however and the site is unlikely to

be of significant ornithological interest in a local context. Notwithstanding this, measures to maintain opportunities for birds within any development proposals for the site and to protect nesting birds during construction are provided in *Section 8* below.

5.6 Reptiles

5.6.1 Suitable habitat for common reptiles such as Common Lizard, Slow-worm and Grass Snake are provided by the limited areas of scrub, hedgerow bases and woodland edge habitats located around the site margins. A Reptile Survey was undertaken by HDA at the site between May and June 2024 during which no reptiles were recorded (HDA, 2024). It is therefore considered highly unlikely that reptiles are present at the site and the site is not expected to be of local interest in this regard.

5.7 Great Crested Newts

5.7.1 There are no suitable waterbodies for Great Crested Newts within the site and this species is therefore not expected to breed within the site boundary. However, limited areas of suitable terrestrial habitat for Great Crested Newts is present in the form of hedgerow bases, scrub and woodland.

5.7.2 A routine maximum migratory range of 250m from breeding ponds has been identified for Great Crested Newts outside the breeding season (Cresswell and Whitworth, 2004). A review of the OS 1:10,000 scale map and aerial photographs did not identify any ponds within 250m of the site.

5.7.3 Given the absence of suitable aquatic habitat within 250m of the site, the limited extent of terrestrial habitat present at the site, and the nearest record of Great Crested Newt in the desk study being some 1.7km to the south-west, it is considered highly unlikely that Great Crested Newts are present within the site during either aquatic or terrestrial phases.

5.8 Plants

5.8.1 No protected or notable plant species were recorded during the UK habitat classification survey. The site is dominated by species-poor amenity grassland, bareground and disturbed semi-mature woodland habitats of generally limited diversity and it is considered unlikely that scarce or threatened native plant species are present.

5.8.2 Variegated Yellow Archangel was recorded at the site in association with the modified grassland woodland and scrub habitats. Variegated Yellow Archangel is a non-native invasive species included in Schedule 9 of the 1981 Wildlife and Countryside Act (as amended), and it is an offence to release, plant or cause to grow in the wild any plant included on this schedule of the Act. Management works within the site should include the

control of Variegated Yellow Archangel to prevent their spread within or outside of the site. This is discussed further in *Section 8*.

6 NATURE CONSERVATION EVALUATION

6.1 The habitats within the site have been assessed against the findings of the UK Habitat Classification survey with consideration given to the criteria summarised in *Appendix D* of this report (Ratcliffe, 1977; CIEEM, 2018). A summary of the site habitat evaluation is given in *Table 3* below.

Table 3: Site habitat evaluation

Value	Habitats present
International	None
National	None
Regional	None
District	None
Local	High: - None Moderate: - None Low: - Semi-mature woodland (8) - semi-mature trees, scrub and species rich hedgerow [in combination] (9, 11, 13)
Site/ negligible	All other habitats recorded

6.2 There are no habitats of International, National, Regional or District nature conservation value within or adjacent to the site.

6.3 The habitat of highest conservation interest within the site is the small area of semi-mature broadleaved woodland located on the eastern site boundary, which is considered to be of **low local value**. Although the woodland is not a good example of this habitat type, it has some longevity, provides opportunity for a range of species and appreciably contributes to the habitat resource of the site and its immediate surrounds.

6.4 The scattered semi-mature trees, scrub and hedgerows located around the site boundaries are considered in combination to be of up to **low local value**. Although these habitats are likely to be of only site value in their own right, in combination (and in consideration of the opportunities also provided by the woodland above) they contribute to form part of a network of semi-natural habitats facilitating the movement of wildlife across the site and the surrounding area.

- 6.5 The remaining habitats recorded within the site, including the species-poor modified grassland and bare ground habitats, are regarded as being of no more interest than at the 'site' level and are assessed as being of **negligible** nature conservation value in a local context in their own right. Where appropriate, consideration of the potential presence of protected or notable species is given below.

7 ADDITIONAL DATA REQUIREMENTS

- 7.1 Additional survey work has been recommended in support of a planning application where significant populations of notable species and/or species protected under the 1981 Wildlife and Countryside Act (as amended) and 2017 Conservation of Habitats and Species Regulations (as amended) were identified as possibly occurring within the site, and that could potentially be impacted by development proposals. The further survey works has been instructed and is the subject of a separate report. The further survey work undertaken is described below.

Reptiles:

- 7.2 The site supports suitable habitat for locally recorded reptile species. A reptile survey was subsequently instructed to establish the status of this group at the site and this is the subject of a separate report (HDA, 2024). No reptiles were recorded during the survey.

Consideration of other species:

- 7.3 Although breeding birds are likely to occur at the site in low numbers it is highly unlikely that locally significant populations of this group would be affected by the proposed works. Nature conservation legislation relating to birds would however still apply, and measures to ensure compliance are set out in *Section 8* below.
- 7.4 The potential of the buildings and trees affected by the proposed works to support roosting bats does not reach the threshold requiring further survey in support of a planning application (BCT, 2023). Notwithstanding this, measures to ensure compliance with nature conservation legislation afforded to bats during site clearance works are set out in *Section 8* below.

8 RECOMMENDATIONS

- 8.1 This section provides a review of the possible implications of development proposals on identified features of ecological interest at the site and the surrounding area and outlines recommended measures for the avoidance and mitigation of potential effects. In addition, opportunities are identified by which development of the site could enhance its current value for species of conservation concern in accordance with planning policy and the 2006 NERC Act.

8.2 Designated sites

- 8.2.1 No statutory or non-statutory sites are expected to be adversely affected by the proposed development of the site in the absence of mitigation or avoidance measures, either alone or in combination with other plans or projects. This is due to a combination of the limited scale and nature of the proposed development, the distance between the site and the designated areas, the limited ecological connectivity with the site and/or the character of the habitats and features for which the areas are designated.

8.3 Habitats

- 8.3.1 The habitat of highest conservation interest within the site is the small area of semi-mature broadleaved woodland located on the eastern site boundary, which is considered to be of **low local value**. Although the woodland is not a good example of this habitat type, it has some longevity, provides opportunity for a range of species and appreciably contributes to the habitat resource of the site and its immediate surrounds.
- 8.3.2 The scattered semi-mature trees, scrub and hedgerows located around the site boundaries are considered in combination to be of up to **low local value**. Although these habitats are likely to be of only site value in their own right, in combination (and in consideration of the opportunities also provided by the woodland above) they contribute to form part of a network of semi-natural habitats facilitating the movement of wildlife across the site and the surrounding area.
- 8.3.3 The modified grassland that dominates the site provides limited opportunities for wildlife and is considered to be of no more than site value.
- 8.3.4 Where possible, development proposals should seek to retain and protect habitats of highest ecological interest. The *Landscape Layout Plan* (HDA, 2024a) indicates that the proposed development will be focussed on areas of modified grassland lawn and bare ground which are of negligible ecological value at a local level. The *Landscape Layout Plan* also indicates that the semi-mature trees, species-rich hedgerow and part of the wooded area will be retained within the development proposals. Where some loss is unavoidable (e.g. to achieve site access), measures should be taken to minimise effects on these habitats as a whole, such as by prioritising loss of habitats of lowest interest, reducing effects of fragmentation, and/or re-creating these habitats elsewhere within the site, affording suitable buffers where required.
- 8.3.5 Retained vegetation should be protected during construction works, with works in the vicinity of retained trees, hedgerows and scrub carried out in accordance with ‘BS5837 *Trees in relation to construction*’ unless otherwise agreed with a suitably qualified arboriculturalist.

- 8.3.6 The *Landscape Layout Plan* (HDA, 2024) indicates that the above measures can be achieved within the proposed development through retention and strengthening of boundary vegetation and creation of habitats in association with retained boundary habitat in the south and west of the site. These would provide new areas of ecological interest on land currently dominated by modified grassland of limited ecological interest.
- 8.3.7 Opportunities for nocturnal wildlife within areas of retained and newly created habitat within and adjacent to the site should be maintained throughout the construction and operational phases of the proposed development through sensitive lighting design. In accordance with the Bat Conservation Trust and Institute of Lighting Practitioners guidance (BCT and ILP, 2018) this could be achieved through employment of a selection of the following measures in the vicinity of retained/newly created areas of suitable foraging habitat such as hedgerows and scattered trees, and in the vicinity of retained trees providing opportunities for roosting bats:
- Use of only the minimum amount of light required for safety and amenity, and minimise upward reflected light.
 - Avoidance of bare bulbs or upward-pointing lights. The spread of light should be kept near to or below the horizontal.
 - Use of narrow spectrum bulbs (ideally <2700k) and/or low UV emitting bulb types.
 - Avoidance of light-spill into adjacent areas through luminaire design or with accessories, such as hoods, cowls, louvres and shields to direct the light.
 - Minimising the height of lighting columns.
 - For pedestrian lighting, use of low level lighting that is as directional as possible and below 3 lux at ground level.
 - Where necessary, use of embedded road lights to illuminate roadways and light only high-risk stretches of roads such as crossings and merges.
 - Limiting the times that lights are on to provide some dark periods for wildlife through use of timers and/or use automatic dimmers to reduce lighting outside times of peak use.
- 8.3.8 Subject to appropriate implementation of the above measures, it is considered that opportunities for wildlife can be maintained at the site following development together with maintenance of corridors for the movement of wildlife around the site and the wider area.
- 8.3.9 Development proposals should also seek to enhance the site to provide new opportunities for wildlife in accordance with national and local planning policy and guidance (NPPF, 2023; ODPM, 2005) and the 2006 NERC Act. Recommendations as to how enhancements can be achieved are provided in *Section 8.5* below.

8.4 Protected and notable species

Bats

- 8.4.1 The development proposals indicate that the Elm tree (T1) identified as having 'low' (PRF-I) potential to support roosting bats will be retained.
- 8.4.2 Although in accordance with current guidelines (BCT, 2023) no further survey of this low potential tree is required to support the planning application, in the event that works to this tree are required in the future (e.g. for reasons of health and safety), then in accordance with current best practice guidance (BCT, 2023) it is recommended that the tree is first subject to a single climbing inspection/emergence survey at an appropriate time of year⁵ or subject to "soft felling". Soft felling involves the progressive removal of features potentially supporting roosting bats under the supervision of a suitably qualified ecologist. Such features are then gently lowered to the ground where they are inspected or left overnight prior to removal in order to allow any bats present to escape.
- 8.4.3 The proposed development will require the removal of Building 2 (Garden Room) and Building 3 (Garden Shed) which have been identified as having 'very low' potential to support roosting bats. Although roosting bats were considered extremely unlikely to be present at the time of survey and no further survey is required in support of the planning application, it is recommended on a precautionary basis that these buildings are either subject to a single emergence survey prior to removal or removal is carried out in the presence of a suitably qualified ecologist.
- 8.4.4 In the unlikely event that a roosting bat is discovered during any of the above works, a Natural England bat licence may need to be applied for, and granted, before works can continue.

Badgers

- 8.4.5 Although no Badger setts were recorded during the survey, Badgers are a highly mobile species and new setts may be created and old setts abandoned over short periods of time. It is therefore recommended that the site is resurveyed prior to commencement of development works to ensure that the status of Badgers has not changed.
- 8.4.6 In addition, in order to avoid entrapment of Badgers and other wildlife foraging and moving around the site during the construction phase, any steep sided holes left open overnight

⁵ Emergence surveys/ aerial inspections can be undertaken between April and September inclusive, but should ideally be undertaken during the bat breeding season (May to August).

during the site preparation, earthworks and construction phases should be equipped with a mammal ladder (a reinforced plywood board >60cm wide set at an angle of no greater than 30° to the base of the pit) and temporarily open pipes with a diameter of >150mm plugged.

Breeding birds

- 8.4.7 Although breeding birds are likely to use the site, in view of its limited extent and the habitats present it is considered unlikely that the site supports an exceptional assemblage in a local context and therefore further survey for this group is not proposed. Notwithstanding the above, all wild birds, their nests and eggs are protected under the 1981 Wildlife and Countryside Act (as amended) and it is therefore recommended that any clearance of open ground or removal of trees, hedgerows, buildings and scrub should avoid the bird breeding season (generally taken as March to September inclusive). If clearance is required during this period then a search for nesting birds should be undertaken by a suitably qualified ecologist immediately prior to works commencing. In the event that breeding birds are discovered, sufficient habitat will need to be retained to ensure birds are not disturbed until nesting activity has been completed and the nest vacated.

Invasive Plants

- 8.4.8 Variegated Yellow Archangel (*Lamium galeobdolon*) was recorded during the UK Habitat Classification survey. Variegated Yellow Archangel is a non-native invasive species included on Schedule 9 of the 1981 Wildlife and Countryside Act (as amended), and it is an offence to release, plant or cause to grow in the wild any plant included on this schedule of the Act. Management works within the site should include the control of this invasive species to prevent its spread within or outside of the site.

8.5 Opportunities for enhancement

- 8.5.1 Where appropriate, development proposals should seek to maintain and provide new opportunities for wildlife in accordance with national and local planning policy and guidance (NPPF, 2023; ODPM, 2005) and the 2006 NERC Act. A selection of measures is given below which could potentially increase the long-term nature conservation interest of the site and provide enhanced habitat for protected and notable species:

- Provision of bat roosting opportunities and bird boxes on new buildings and existing trees;
- Provision of log piles around the site margins to provide habitat for amphibians and invertebrates;
- Provision of new opportunities for movement of wildlife within and around the site through strengthening of existing hedgerows to complement off-site areas of connective habitat;

- Establishment of species-rich grassland habitats within areas of informal open space;
- Ensure presence of gaps in boundary fencing to allow movement of wildlife such as Hedgehogs;
- Use of nectar and pollen-rich and fruit and nut-producing species within formal landscaping schemes to benefit species including birds, invertebrates, bats and foraging Badgers; and
- Removal of invasive Variegated Yellow Archangel which is of low value to wildlife and prevents growth of ground flora.

8.5.2 As discussed in *Section 8.3* above, the emerging development proposals (*Landscape Layout*; HDA, 2024) indicate that the above measures can be achieved within the proposed development through retention and strengthening of boundary vegetation, and native tree and mixed scrub planting.

9 CONCLUSION

9.1 The site is dominated by habitats of limited nature conservation interest in their own right and subject to the implementation of the recommended measures for habitat retention, protection, creation and enhancement, no reduction in the ecological interest of the site or its surrounds is likely to arise as a result of the proposed development.

9.2 It is therefore concluded that, beyond the normal requirements to avoid impacts on protected species and maintain key elements of the habitat resource of the site, there appear to be no overriding nature conservation constraints that would preclude the proposed development of the site.

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Document Title: Ecological Appraisal

Commissioning Party: Osprey Homes

Issue	Description	Date of Issue	Signed
1	Ecological Appraisal	July 2024	
2	Ecological Appraisal – Rev A	August 2024	
3	Ecological Appraisal – Rev B	September 2024	AM

	Personnel	Position
Author	Filippo Faraone	Ecologist
Approved for Issue	Adrian Meurer MCIEEM	Director

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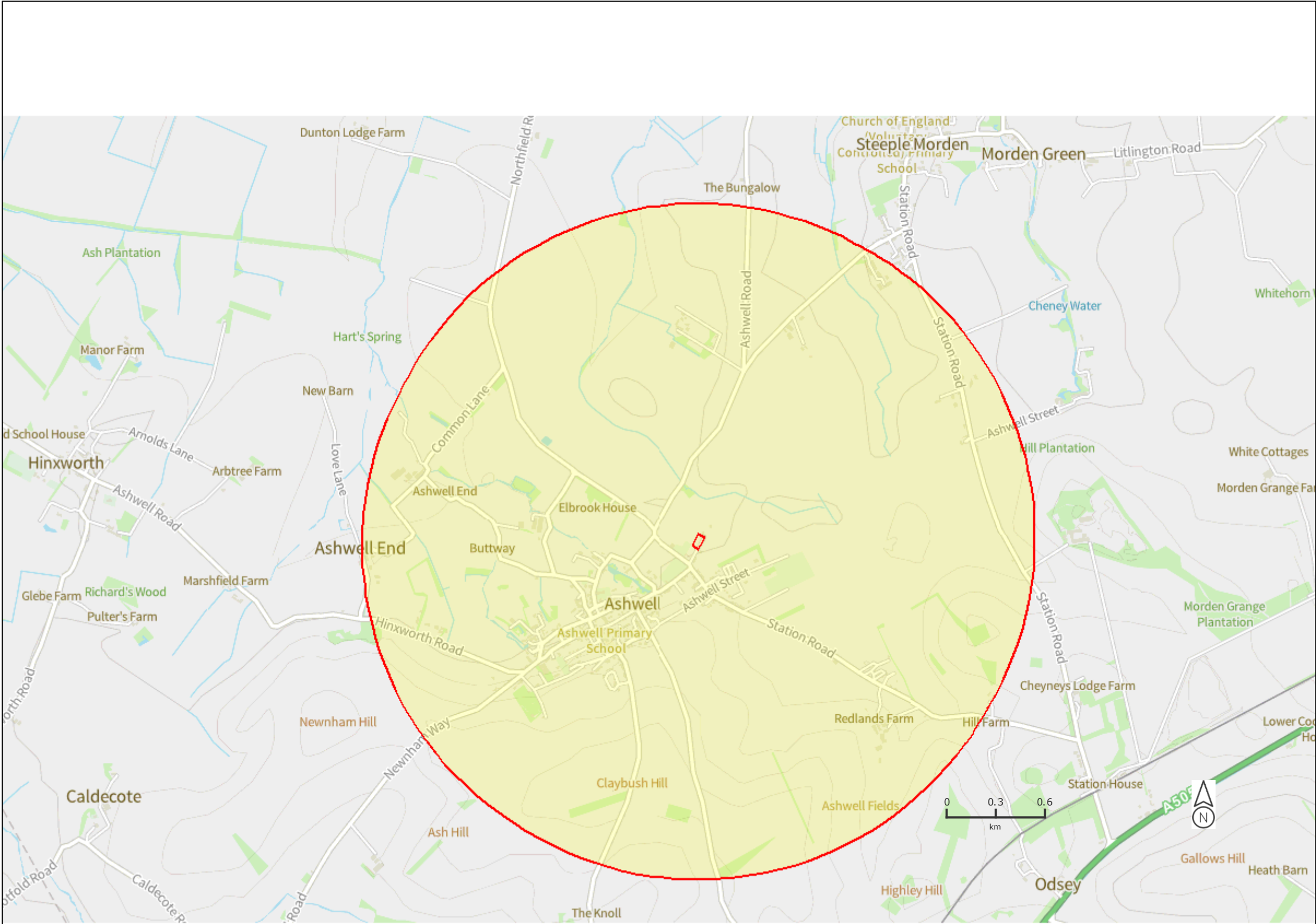
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APPENDIX A

Desk study results

Local Nature Reserves within 2km

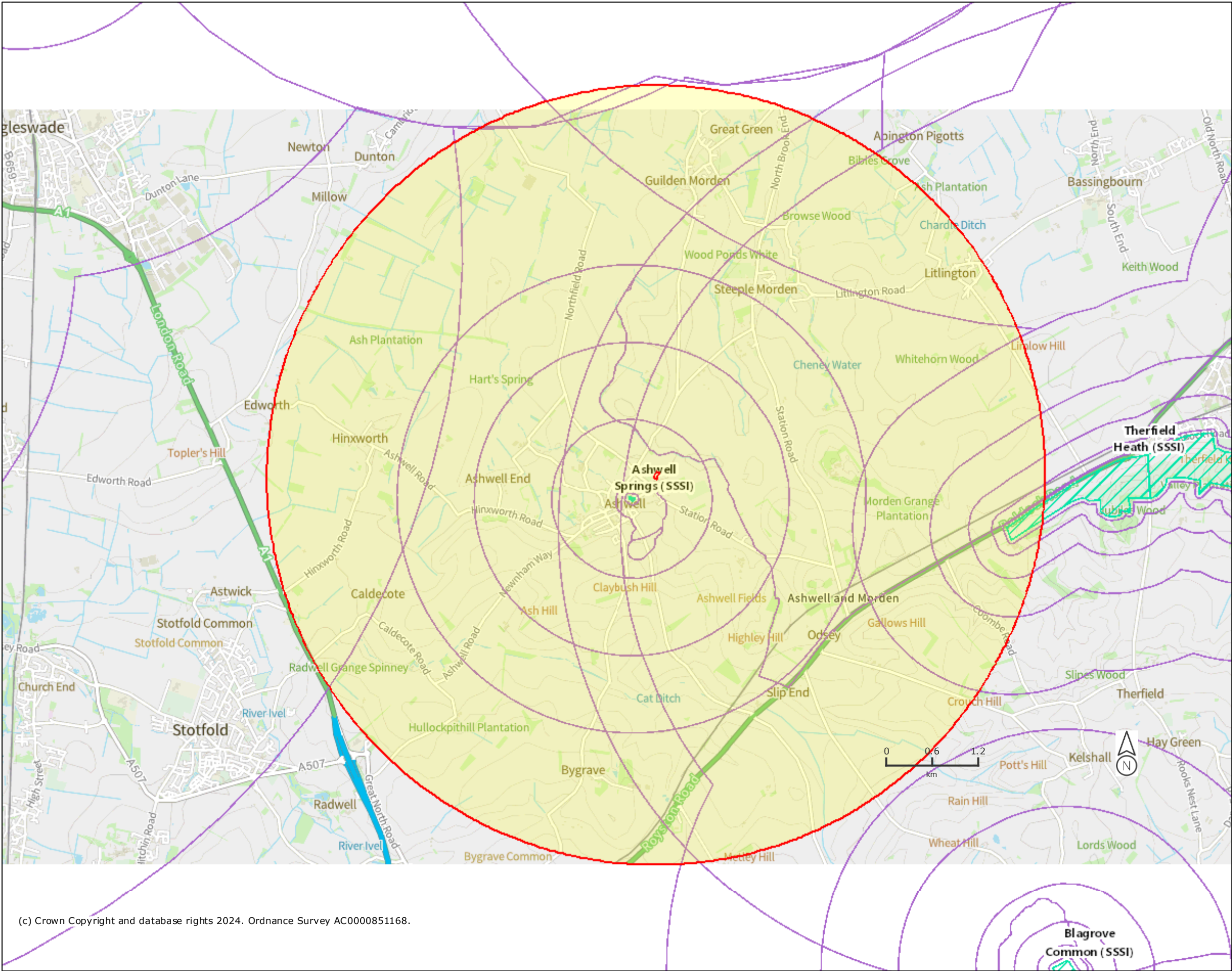


Legend

 Local Nature Reserves (England)

Projection = OSGB36
xmin = 522000
ymin = 237800
xmax = 532200
ymax = 242700

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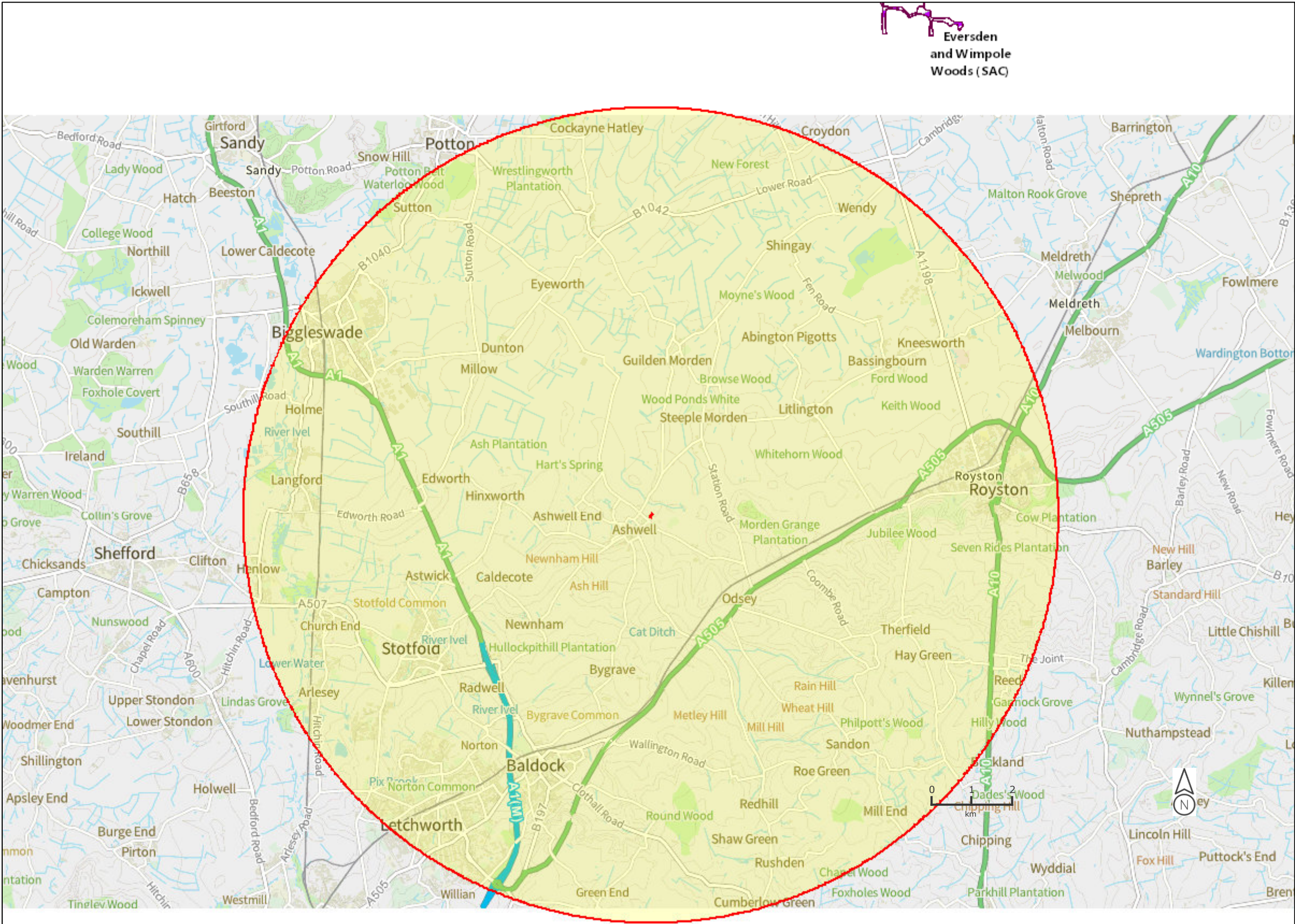
Legend

-  National Nature Reserves (England)
-  Sites of Special Scientific Interest (England)
-  SSSI Impact Risk Zones - for LPA's to determine likely impacts on terrestrial SSSI's and when to consult Natural England

Projection = OSGB36
xmin = 516600
ymin = 235100
xmax = 537000
ymax = 244800

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Internationally Designated Sites within 10km



Legend

- Ramsar Sites (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)

Projection = OSGB36
xmin = 507200
ymin = 230400
xmax = 547300
ymax = 249900

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County: Hertfordshire **Site Name:** Ashwell Springs

District: North Hertfordshire

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authority: North Hertfordshire District Council

National Grid Reference: TL 270398 **Area:** 0.3 (ha) 0.6 (ac)

Ordnance Survey Sheet 1: 50 000: 153 **1: 10 000** TL 23 NE

Date Notified (Under 1949 Act): 1969 **Date of Last Revision:** -

Date Notified (Under 1981 Act): 1986 **Date of Last Revision:** -

Other Information:

Description and Reasons for Notification:

Ashwell Springs are a series of freshwater springs arising from the foot of the Hertfordshire chalk and forming a source of the River Cam. The springs maintain an almost constant low water temperature throughout the year and flow into small pools with a chalk and flint gravel substratum. The springs and pools provide a habitat for a specialised cold water invertebrate community, with species of limited distribution in southern England, and rare elsewhere in the county.

The site is important for flatworms *Platyhelminthes*, and amongst a range of more common species are found *Crenobia alpina* and *Polycelis felina* which represent "glacial relict" populations. Apart from the flatworms the most abundant invertebrate species are the shrimp *Gammarus pulex*, the small snail *Potamopygus jenkinsi*, larvae of the Caddis-fly (Trichoptera) *Drusus annulatus* and chironomid midge larvae. The scarce Caddis-fly *Apatania muliebris* and *Plectrocnemia geniculata* occur, the latter usually a species of more north western distribution. The stonefly (Plecoptera) *Nemurella picteti* is also present, a species typically found at stream sources.

The pools are surrounded by species-poor semi-improved neutral grassland with mature Ash *Fraxinus excelsior*, Sycamore *Acer pseudoplatanus* and Crack Willow *Salix fragilis*, which are important in providing some shade for the pools.

The site has educational value for the study of freshwater invertebrate communities.

County: Hertfordshire **Site Name:** Therfield Heath

District: North Hertfordshire

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authority: North Hertfordshire District Council

National Grid Reference: TL 335400 **Area:** 143.33 (ha) 354.14 (ac)

Ordnance Survey Sheet 1: 50 000: 153, 154 **1: 10 000:** TL 33 NW, 33 NE, 34 SW, 34 SE.

Date Notified (Under 1949 Act): 1953 **Date of Last Revision:** 1969

Date Notified (Under 1981 Act): 1984 **Date of Last Revision:** -

Other Information:

The majority of the site is also a Local Nature Reserve declared under Section 21 of the National Parks and Access to the Countryside Act 1949.

Reasons for Notification:

Therfield Heath is a very good example of the East Anglian type of chalk grassland. This plant community has suffered severe losses throughout its range during the post-war period, mainly as a result of agricultural intensification or the cessation of sheep grazing, so the remaining examples are of high conservation value. The site contains some of the richest chalk grassland in England.

Since the turn of the century the traditional use of the Heath for sheep grazing has gradually given way to a variety of recreational uses, of which golfing has had the greatest impact. Parts of the site were ploughed during the Second World War but have since reverted to grassland.

The remaining unimproved pasture is dominated by upright brome *Bromus erectus* and red fescue *Festuca rubra*. There is a rich assemblage of herbs including such rarities as pasque flower *Pulsatilla vulgaris* which occurs in abundance at Church Hill, spotted cat's ear *Hypochoeris maculata*, wild candytuft *Iberis amara*, bastard toadflax *Thesium humifusum*, and lesser meadow-rue *Thalictrum minus*.

cont.....

cont...

Therfield Heath (cont...)

The plant communities of the partially improved areas have a lesser, though increasing, diversity of species, including purple milk-vetch *Astragalus danicus* and horseshoe vetch *Hippocrepis comosa*.

The site also includes mixed scrub communities at various stages of development, and two areas of mature beech woodland. The latter is best developed at Fox Covert, where the ground flora includes abundant white helleborine *Cephalanthera damasonium*.

The grassland supports a diverse insect fauna, including the chalk hill blue butterfly *Lysandra coridon*.

APPENDIX B

UK Habitat Classification Survey: Plan and Target Notes



KEY

Site boundary

2

 Target notes

UK Habitat Classification key and relevant habitat codes in brackets

Other broadleaved woodland (w1e)

Mature trees (203)

Mixed scrub (h3h)

Introduced scrub (847)

Modified grassland (g4)

Tall forbs (g16)

Developed land sealed surface (u1b)

Fence (u1e)

Native hedgerow (h2a)

Bare ground (510)

CLIENT:
Beechwood Homes

PROJECT:
Green Lane, Ashwell

TITLE:
UK Habitat Classification Survey Plan

SCALE AT A3:
Not to scale

DATE:
September 2024

1139.1 / 01a

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The Stables, Howbery Park, Benson Lane, Wallingford, OX10 8BA
t 01491 838175 e consult@hda-enviro.co.uk w www.hda-enviro.co.uk

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Target Notes

1. Dilapidated small wooden shed.
2. Wooden garden room.
3. Large wooden garden shed.
4. Residential garden adjacent to site boundary.
5. Collection of fruit trees and shrubs including Plum (*Prunus domestica*) and Hawthorn (*Crataegus monogyna*).
6. Scrub patch which is largely over bare ground. A large Box (*Buxus sp.*) overshadows Elm saplings (*Ulmus minor*), Old Man's Beard (*Clematis vitalba*), Ground Ivy (*Glechoma hederacea*), Common Ivy (*Hedera helix*), Black Horehound (*Ballota nigra*) and Variegated Yellow-archangel (*Lamium galeobdolon argenteum*).
7. Dilapidated outbuilding with no roof and missing wall. A Fig tree (*Ficus carica*) is present growing through a disturbed area of ground with Common Ivy, Ground Ivy and Black Horehound also present.
8. Semi-mature other broadleaved woodland comprising Elm, Beech (*Fagus sylvatica*), and Birch (*Betula pendula*). The understory was sparsely vegetated with species including, Elm saplings, Elder (*Sambucus nigra*) Common Nettle (*Urtica dioica*), Common Ivy, Ground Ivy, Hemlock (*Conium maculatum*), and Garlic Mustard (*Alliaria petiolata*). A collapsed animal pen is present within the woodland.
9. Sparsely vegetated area of scrub and bare ground with similar species composition to the understory of the woodland to the west (8). Tree stumps are present providing deadwood habitat.
10. Hawthorn and Dog Rose (*Rosa canina*) hedgerow. The hedgerow is very gappy and sparse, approximately 0.5m wide and 1.5m tall,.
11. A dense patch of mixed scrub comprising Hawthorn, Elder, Blackthorn (*Prunus spinosa*), False Spirea (*Sorbaria sorbifolia*), young Ash (*Fraxinus excelsior*) and Bramble (*Rubus fruticosus*). The ground flora includes Common Nettle, Hemlock, Garlic Mustard, Ground Ivy, Cleavers (*Gallium aparine*) and White Dead-nettle (*Lamium album*).
12. Ruderal vegetation in the form of Common Nettle, Foxglove (*Digitalis sp.*), Black Horehound, Red Dead-nettle (*Lamium purpureum*), White Dead-nettle, Caper Spurge (*Euphorbia lathyris*), Mallow (*Malva sylvestris*) and Garlic Mustard. Garden debris are strewn across the area.
13. Gappy, native, species-rich hedgerow approximately 1.5m high and 3m high. Species include, Hawthorn, Blackthorn, Dog Rose, Hazel, Holly (*Ilex aquifolium*), Bramble and Old Man's Beard.
14. Recently planted Holly hedgerow, very gappy and small, plants still sit individually.
15. Wooden shiplap boundary fence covered in Ivy.
16. Large pile of logs

17. Bare ground used for chopping and storing wood.
18. Well managed modified amenity grassland lawn dominating much of the site. Species include Perennial Rye-grass (*Lolium perenne*), Cocks-foot (*Dactylis glomerata*), Creeping Bent (*Agrostis stolonifera*), Annual Meadow-grass (*Poa annua*), Creeping Thistle (*Cirsium arvense*), Common Daisy (*Bellis perennis*), Ground Ivy, Hemlock, Spear Thistle (*Cirsium vulgare*), Garlic Mustard and Feather Moss (*Hypnales sp.*). A number of tree stumps are present around the lawn.
19. Collection of fruit trees, including Cherry (*Prunus avium*).
20. Large multi-stemmed Field Maple (*Acer campestre*).
21. Empty wooden sleeper raised bed.
22. Rabbit Warren on the edge of the dense scrub.
23. Bare ground firepit.

APPENDIX C

Phase 1 Bat Survey Plan



KEY

 Site boundary

Buildings

 High potential for roosting bats

 Moderate potential for roosting bats

 Low potential for roosting bats

 Very low potential for roosting bats

 Negligible potential for roosting bats

Trees*

 Moderate or higher suitability for roosting bats (PFI-M)

 Low suitability for roosting bats (PRF-I)

Roosting 'categories' relate to roost potential categories in accordance with the BCT 2023 guidelines.

* All other trees within the site are regarded as having 'Negligible' potential to support roosting bats

CLIENT:

Osprey Homes

PROJECT:

Land at Green Lane, Ashwell

TITLE:

Phase 1 Bat Scoping Survey Plan

SCALE AT A3:

Not to scale

DATE:

September 2024

1139.1 / 04a

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t 01491 838175 e consult@hda-enviro.co.uk w www.hda-enviro.co.uk

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APPENDIX D

Evaluation Criteria

Criteria used for the evaluation of ecological receptors (based on Ratcliffe, 1977; CIEEM, 2018)

Assigning value is relatively straightforward in the case of designated sites, and undesignated sites meeting designation criteria. However, in most cases evaluation of ecological resources is not straightforward and requires a degree of knowledge, experience and professional judgement (Usher, 1986; Spellerberg, 1992). Evaluation of an ecological receptor was based on a number of criteria (Ratcliffe, 1977; CIEEM, 2018) summarised below:

- Site designations; SPA, SAC, Ramsar, SSSI, NNR, LNR, SINC or equivalent.
- Site designation criteria; e.g. Guidelines for the Selection of Biological SSSIs, JNCC, 1989.
- Conservation status; whether a habitat or species is rare, declining or threatened at a given geographic scale.
- Geographic location; the value of a habitat or species may change depending on whether it is being assessed in the south of England or the north of Scotland.
- Distribution; habitats or species on the edge of their distribution, particularly where that distribution is changing as a result of global trends and climate change and endemic species or locally distinct sub-populations of a species are more valuable;
- Rarity; the presence of habitats, species, subspecies or varieties that are rare or uncommon at a given geographic scale.
- Diversity; of habitats, or species, particularly of vascular plants. Species-rich assemblages of plants or animals are likely to be important in terms of biodiversity;
- Naturalness; habitats least affected by human disturbance are normally of relatively higher importance.
- Size; larger areas are generally more valuable than lots of small ones. Notably large populations of animals or concentrations of animals considered uncommon or threatened in a wider context may be important.
- Fragility; sensitivity to, and probability of, human impact.
- Typicalness; a good example of the type, particularly plant communities (and their associated animals) that are considered to be typical of valued natural/semi-natural vegetation types, including examples of naturally species-poor communities.
- Potential value (if restored to favourable conservation status).
- Secondary or supporting value; value of a receptor in supporting the integrity or conservation status of another valued receptor.
- Ability to be recreated; the more difficult a habitat is to re-create, were it to be destroyed, the greater the importance usually attached to it.