AEWC Ltd

Animal Ecology & Wildlife Consultants

Extended Phase 1 Habitat Survey

South House Farm

Marringdean Road
Billingshurst
RH14 9HH

Natalie Arscott & Brigitte de Coriolis

24-003
October 2024

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Summary

- AEWC Ltd were commissioned by Batcheller Monkhouse on behalf of their client to undertake an extended Phase 1 habitat survey at South House Farm, Marringdean Road, Billingshurst, RH14 9HH at grid reference TQ 09587 23542 to help inform the proposed development of the site.

- This report details the results of the survey, which was carried out on the 9th April 2024 by qualified ecologists Natalie Arscott and Brigitte de Coriolis, to record and map the habitats present, assess the site for the potential presence of any protected species or species of conservation concern and identify habitats of conservation importance.

- Additional information regarding the present and historical ecological interest of the site and within a 2km radius was provided by the Sussex Biodiversity Records Centre. This helps to inform the likelihood of protected species occurring within the site boundary.

- The site is approximately 0.36ha in size and comprises buildings, a shingle driveway, short-mown grass lawn, introduced shrubs, a pond, ruderal vegetation, non-native and ornamental hedges, a native hedgerow with trees, a line of trees, a wet ditch, and three individual trees.

- The site has potential to support foraging/commuting [redacted] bats, breeding birds, great crested newts, hazel dormice, reptiles, common amphibians, and hedgehogs. It is noted that the proposed working area focuses on the buildings and short-mown grass lawn, which have limited ecological value and negligible potential for several of the protected species that may be found elsewhere on the site. Higher ecological value is found in the boundary habitats and onsite pond.

- **Further bat surveys will be required for the existing barn and cottage in the east of the site to determine the presence or likely absence of roosting bats and categorise any roosts present.**

- **An eDNA survey will be required for the onsite pond to determine the presence or likely absence of great crested newts.**

- **In addition, a Precautionary Working Method Statement for bats is to be followed for works to the outbuilding in the east, as detailed in Section 7 of this report, and Reasonable Avoidance Measures are to be adopted to safeguard amphibians. It is also recommended that spread of invasive species is prevented, habitats of principal importance are retained and protected, good building practice is followed, lighting is controlled, features suitable for nesting birds are cleared outside of the nesting season or immediately following a survey, and that the area of lawn that falls within the proposed working area is maintained as a short sward in the interim before works commence.**

This report has been prepared by AEWC Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the 'Guidelines for Preliminary Ecological Appraisal' and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1 Introduction

1.1 AEWC Ltd were commissioned by Batcheller Monkhouse on behalf of their client to undertake an extended Phase 1 habitat survey at South House Farm, Marringdean Road, Billingshurst, RH14 9HH to help inform the proposed development of the site.

1.2 This survey comprised a desktop study of biological records within the vicinity of the site, an ecological walkover survey to record and map the habitats present, and an assessment for protected wildlife and species of conservation importance, including habitats, and was carried out by qualified ecologists Natalie Arscott and Brigitte de Coriolis on the 9th April 2024.

1.3 This report presents the results of the following:

- Desktop Biodiversity Report
- UK Habs Habitat Survey
- Protected Species Walkover Survey

1.4 In addition, the report outlines any recommendations/further surveys that may be necessary. This will ensure that any protected species are not detrimentally impacted by the proposed development works on site, that there is no loss of ecological viability, and that the favourable conservation status of the species in the local area are not affected.

2 Background

2.1 The proposed development site is located at South House Farm, Marringdean Road, Billingshurst, RH14 9HH at central grid reference TQ 09587 23542.

2.2 The site is located in a rural area to the southeast of Billingshurst, 900m to the southwest of the A272. The surrounding landscape comprises predominantly pasture and agricultural land, with small blocks of woodland and scattered residential properties. See Figure 1.

2.3 The site is approximately 0.36ha and comprises buildings, a driveway, grass lawn, a swimming pool, and a pond. There is a hedgerow with trees on the northern boundary and lines of trees on the southern and western boundaries. The site is bordered by pasture to the north and south, the associated residential property to the east, and a separate residential property to the west. See Figure 2.

2.4 The proposed development plan involves alterations to the existing dwelling and barn to form an enlarged dwelling house and creation of a parking and turning area. For the existing cottage this will involve the removal of the porch and construction of a new porch on the north elevation, installation of a rooflight on the south roof aspect, and creation of new door on the south elevation. For the existing barn, there will be internal redevelopment, widening and infilling of the doors on the west elevation, removal of a window, installation of new windows, and installation of a flue and collar. For the existing outbuilding, there will be installation of new glass doors, fixed sidelights, and a timber door. A small area of lawn will be cleared to create a parking

and turning area and new path, using grasscrete and gravel. There will also be new hedge planting. The majority of the habitat area on site is unlikely to be negatively affected by these proposals. See Figure 3.



FIGURE 1: SHOWING THE SITE LOCATION



FIGURE 2 : AERIAL VIEW OF THE SITE SHOWING THE SITE BOUNDARY

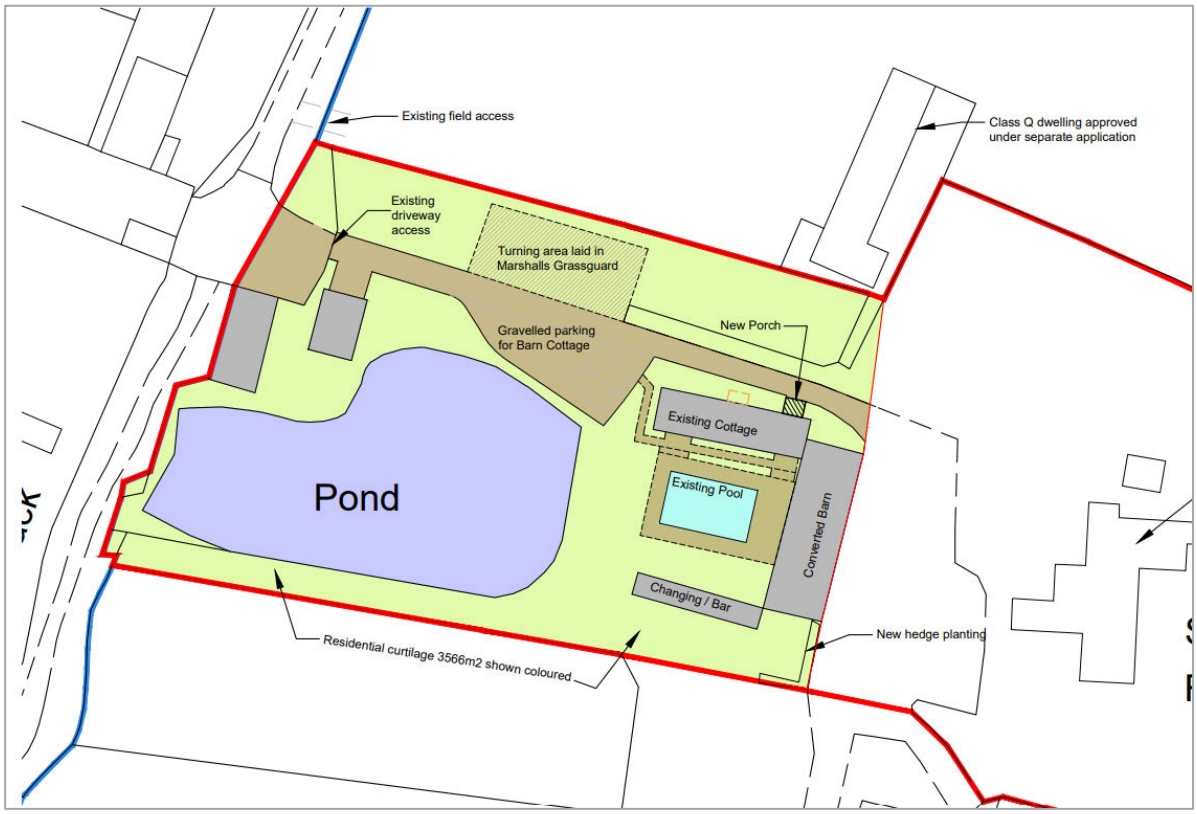

FIGURE 3 : PROPOSED PLAN

3 Methods

Desk Study

3.1 The Multi Agency Geographic Information for the Countryside (MAGIC) website provided by the Department for Environment, Food and Rural Affairs (Defra) was consulted to obtain information about any international or European level designated nature conservation sites within 2km of the site boundary, afforded protection either directly by the Conservation of Habitat and Species (Amendment)(EU Exit) Regulations 2019 or to the same level of protection through planning policy (the National Planning Policy Framework and Local Development Framework). Information regarding statutory designated sites, such as Sites of Special Scientific Interest (SSSI) within a 2km radius of the site, were also obtained from MAGIC.

3.2 Aerial photos of the site (Google Earth, 2024) were examined to determine habitats surrounding the site and hence species likely to be present in order to make appropriate recommendations in the wider landscape context.

3.3 Records of protected and notable species and non-statutory designated sites within 2km of the site were requested from the local biological records centre (Sussex Biodiversity Records Centre).

3.4 Records were screened for relevance and age with only those from the last 10 years and of species that could occur on site considered further.

3.5 A search for waterbodies within 500m of the site boundary was undertaken using MAGIC mapping in order to assess their connectivity to the site.

UK Habs Habitat Survey

3.6 A daytime ecological walkover assessment was carried out on the 9th April 2024 to record and map the habitats present, evaluate the site for its potential to support protected species in addition to other species of conservation importance that could be relevant in respect of planning policies.

3.7 The survey involved a UK Habitat Classification System Survey which was carried out based on the standard methodology produced by UKHab Ltd (2023) and included searches for signs of protected species, as described in the Guidelines for Preliminary Ecological Assessment (CIEEM, 2017). This involves the following elements:

- Habitat mapping using a set of standard colour codes to indicate habitat types on a UK Habitat Classification Map.
- Description of features of ecological or nature conservation interest in notes relating to numbered locations on the UK Habitat Classification Map, called Target Notes (for habitat and features of possible interest).
- A plant species list with subjective estimates of the relative abundance of species in selected habitat parcels using a modified DAFOR scale. The DAFOR scale ranks species according to their relative abundance in a given parcel of land as follows: d – dominant, a – abundant, f – frequent, o – occasional, r – rare. In addition, the following prefixes are used: l – locally, v – very.

3.8 Plant nomenclature in this report follows Stace (2010) for native and naturalised species of vascular plant. Nomenclature for mosses and liverworts follow the Checklist for British and Irish Bryophytes 2009. Plant names in the text are given with the English name first, followed by the Latin name. Latin names for all species are given just once and not repeated.

Protected Species Walkover

3.9 An assessment was made of habitat suitability in and around the site for those protected species that occur in the region. Obvious signs and incidental sightings of protected species are noted when encountered, but walkover surveys do not usually confirm species presence or absence.

3.10 Taking into consideration the geographical region and habitat type, species that could be encountered are:

- [redacted]
- barn owl;
- bats;
- breeding birds;
- great crested newt;
- hazel dormice;
- reptiles;
- other mammals; and
- other Species of Principal Importance (SPI) (e.g. hedgehog, stag beetle etc).

3.11 In addition, observations of any invasive species, important plant communities, plant species of note, Habitats of Principal Importance (HPI) or other valuable ecological features will be recorded and detailed.

3.12 Details of the initial survey method for each species are given below.

3.13 [redacted]

3.14 **Barn owl –** The buildings were subject to a full external and internal inspection for evidence of use by barn owl, namely live/dead owls, pellets, droppings, feathers, nest debris, nestling fluff and eggs or eggshells.

3.15 **Bats** – The site was assessed for bat roosting potential and the surrounding area was assessed for the suitability of the habitat to support bats. Any buildings to be impacted were examined and assessed for evidence of bats, such as rub marks, staining or droppings or for features that have good potential to be used by bats, such as loft voids, raised tiles, hanging tiles, gaps in soffits and lead flashing cracks, crevices and mortise joints. Such features are noted and examined by using equipment such as a high-powered torch and binoculars, in order to determine their suitability for bats.

3.16 **Breeding Birds** - habitats were assessed for their suitability for nesting birds. This would centre on birds that favour hedgerows, scrub, trees, as well as buildings.

3.17 **Great Crested Newt** - initial surveys centre on identifying suitable habitat within the site. If breeding ponds are present within the locality then great crested newt (*Triturus cristatus*) could potentially be using the terrestrial habitat on the site. Maps are used to identify any ponds (that are not isolated by unsuitable habitat or physical barriers) within 500 metres of the site. A Habitat Suitability Index (HSI) is used to quantifiably assess whether a pond is suitable, this is undertaken for any onsite ponds during the walkover survey.

3.18 **Hazel Dormice** – scrub and areas of dense vegetation are assessed for their suitability for foraging and nesting hazel dormice (*Muscardinus avellanarius*). Favoured berry and nut bearing species such as hawthorn, hazel and bramble were looked for in particular. Additionally, the connectivity of this habitat and to suitable habitat beyond the site is also assessed. If hazel nuts are present a brief search for nuts that have been chewed by hazel dormouse (i.e. displaying the characteristic smooth round hole) was conducted.

3.19 **Reptiles** - the site was assessed for habitat suitable for reptiles, such as long grassland and areas of scrub, with particular attention paid to those features that provide suitable basking areas (e.g. south-facing slopes and walls), hibernation sites (e.g. banks, log piles and piles of rotting vegetation) and opportunities for foraging (e.g. rough grassland and scrub).

3.20 **Other mammals** – any signs of occupancy by other mammals (e.g. Rabbit warrens) are recorded.

3.21 **Other Species of Principal Importance (SPI)** – the habitats present on site were assessed for the likelihood of presence for species of regional and national importance.

3.22 **Invasive species** - Any invasive plant or animal species identified during the site walkover are recorded.

3.23 **Plant species of note** – Any plant species of conservation concern found on the site are recorded.

3.24 **Habitats of Principal Importance** - Habitats of Principal Importance within or adjacent to the site (such as arable field margins, traditional orchards, ponds, rivers, wet woodlands) are recorded.

3.25 **Other valuable ecological features -** Other ecological features e.g. ancient woodland, veteran trees, bird feeding stations etc, habitat enhancements etc. within or adjacent to the site are recorded.

4 Constraints/Limitations

4.1 An initial site assessment such as this is only able to act as a snapshot to record any flora or fauna that is present at the time of the survey. It is therefore possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.

4.2 Some protected species records are confidential and therefore not included within the data search results provided by the records centre. Absence of records does not automatically correspond to absence of species within the impact zone of the development.

4.3 The survey was carried out early in the growing season, therefore some plant species may not have been visible above ground or readily identifiable.

5 Results

Desk Study

Sites and Habitats

Statutory Designated Sites

5.1 There is one statutory designated site located within 2km of the proposed site. This is Coneyhurst Cutting Site of Special Scientific Interest (SSSI), located 980m to the northeast at its closest point.

Non-statutory Designated Sites

5.2 There are two non-statutory sites located within 2km of the proposed site. The nearest is Rosier Wood Local Wildlife Site (LWS) located 770m to the north. The second non-statutory site is Wilden's Meadow LWS located 1.9km to the north.

Habitats of Principal Importance

5.3 Habitats data available via MAGIC was reviewed for the presence of Habitats of Principal Importance (HPI). There are no HPI located within or immediately adjacent to the site. There is a small block of traditional orchard priority habitat approximately 10m to the northeast of the site at its closest point. See Figure 4.

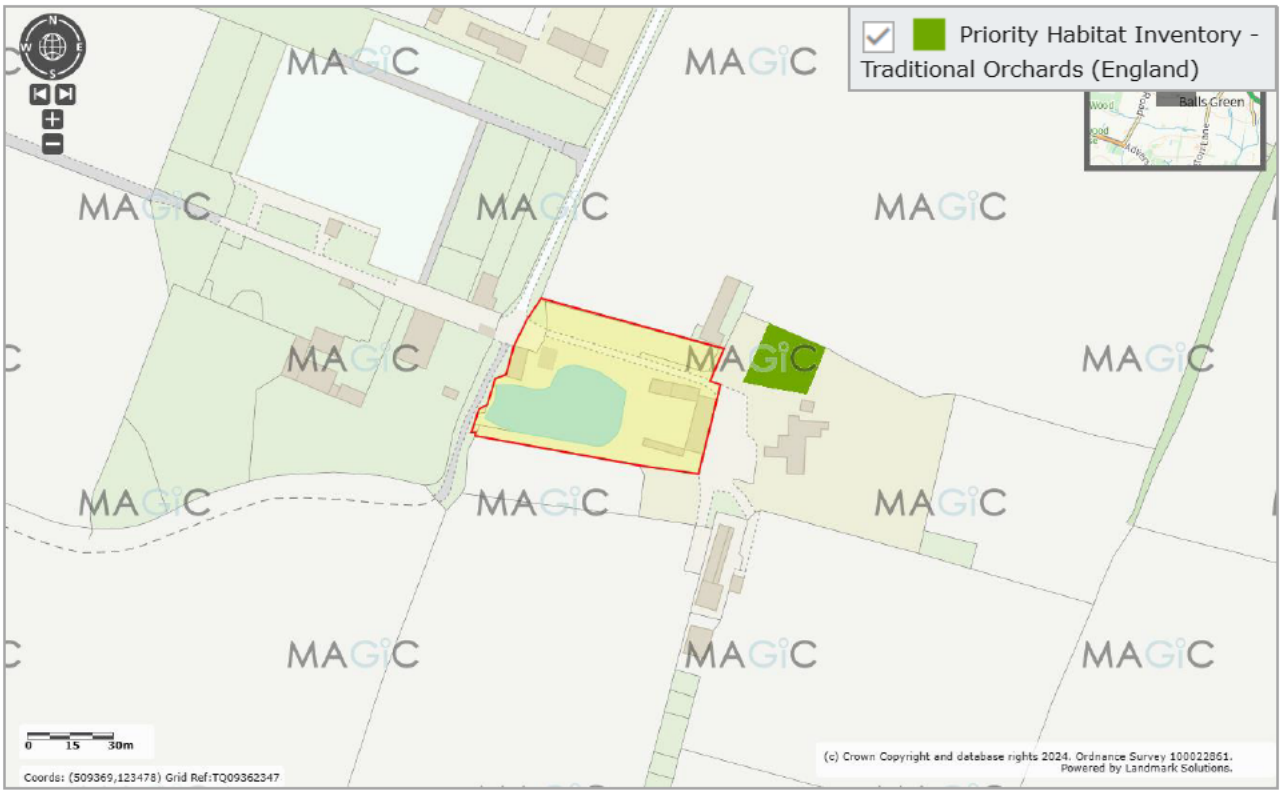

FIGURE 4: HABITATS OF PRINCIPAL IMPORTANCE ON AND ADJACENT TO THE SITE

Waterbodies within 500m of the site boundary

5.4 The Ordnance Survey map available via MAGIC was reviewed for ponds within the accepted dispersal distance of 500m that are not separated from the site by significant barriers to dispersal such as main roads. There is one pond onsite and a further 11 ponds within 500m occurring in all directions (see Figure 5): These are listed below:

- Pond 1: onsite.
- Pond 2: 380m to the northwest.
- Pond 3: 455m to the northwest.
- Pond 4: 490m to the north.
- Pond 5: 345m to the north.
- Pond 6: 195m to the southeast.
- Pond 7: 495m to the southeast.
- Pond 8: 460m to the south.
- Pond 9: 485m to the south.
- Pond 10: 450m to the southwest.
- Pond 11: 450m to the southwest.
- Pond 12: 460m to the west.

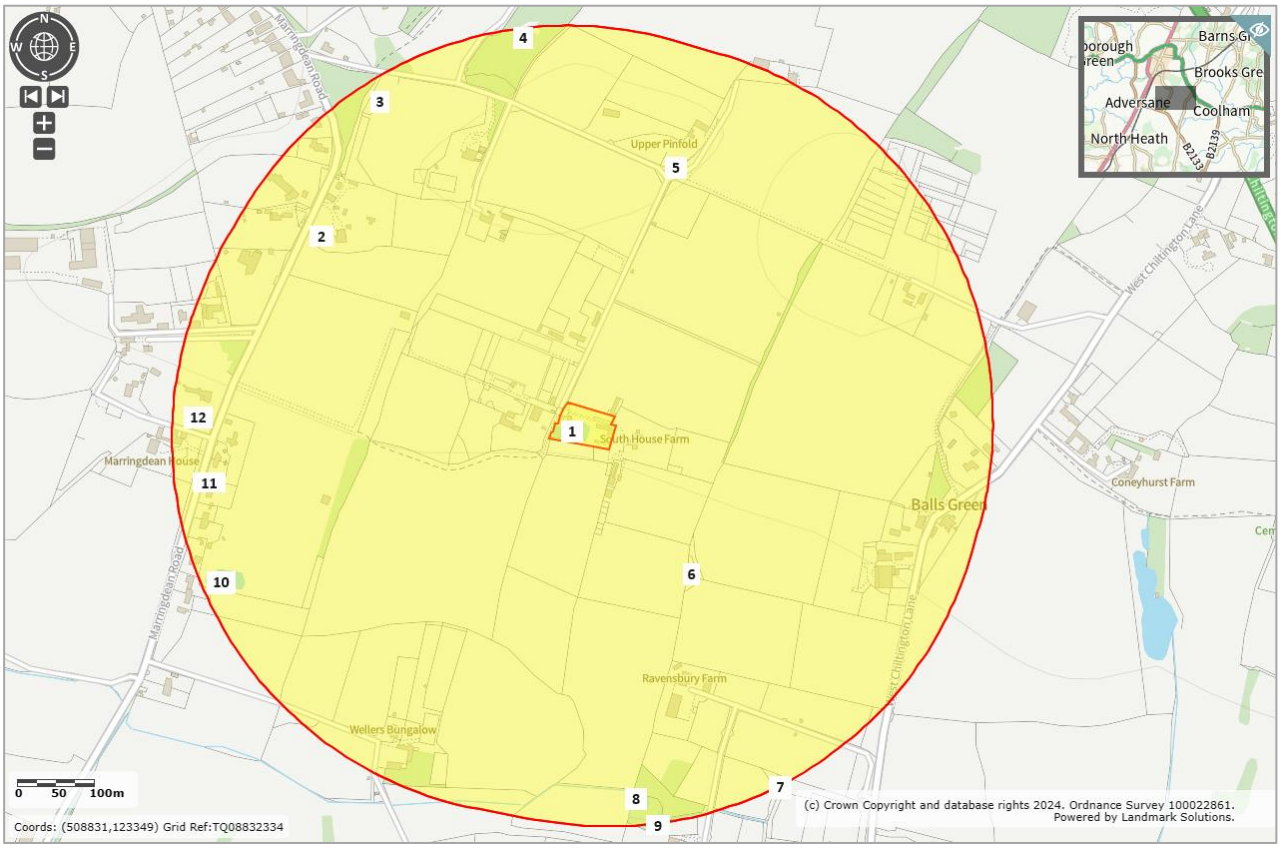

FIGURE 5: WATERBODIES WITHIN 500M

Protected Species

[redacted]

Barn owl

5.6 Two records of barn owl were recorded within 2km of the site in the last 10 years.

Bats

5.7 Records of at least six bat species were recorded within 2km of the site in the last 10 years, including serotine (*Eptesicus serotinus*), whiskered bat (*Myotis mystacinus*),

noctule bat (*Nyctalus noctula*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), and brown long-eared bat (*Plecotus auritus*). There were also unidentified recordings from the genus *Myotis*, *Pipistrellus*, and *Plecotus*.

Birds

5.8 Records of 24 bird species were recorded within 2km of the site in the last 10 years. These include song thrush (*Turdus philomelos*), house sparrow (*Passer domesticus*), and green woodpecker (*Picus viridis*).

Great crested newt

5.9 Five records of great crested newt were recorded, all from 2016. The closest record is from 1.3km to the northwest.

Hazel dormice

5.10 A single record of hazel dormouse was recorded, 1km to the northwest of the site in 2021.

Reptiles

5.11 Records of slow-worm (*Anguis fragilis*) and common lizard (*Zootoca vivipara*) were recorded within 2km of the site in the past 10 years.

Other Mammals

5.12 No records of other mammals were found within 2km of the site.

Other Species of Principal Importance (SPI)

5.13 Records of common toad (*Bufo bufo*), palmate newt (*Lissotriton helveticus*), smooth newt (*Lissotriton vulgaris*), common frog (*Rana temporaria*), and West European hedgehog (*Erinaceus europaeus*) were recorded within 2km of the site in the past 10 years.

Field Survey

Habitats and Plants

5.14 A UK Habs Habitat map and list of target notes are included in Figure 6 and Table 1 respectively and a species list is given in Appendix 3. The habitats present on the site are described below.

Artificial unvegetated, unsealed surface

5.15 There is a shingle driveway from the site entrance near the northwest corner to the site's eastern boundary, providing site access. Occasional emergent ruderal plants were seen.



Photograph 1 – shingle driveway.



Photograph 2 – shingle with occasional emergent ruderal plants.

Developed land; sealed surface

5.16 There are three adjoining buildings in the east of the site and two outbuildings in the west of the site. In the courtyard between the three adjoining buildings in the east is a swimming pool, surrounded by paving slabs. Near the northwest corner, at the site entrance, is an area of tarmac hardstanding where the lane joins the driveway.



Photograph 3 – the swimming pool and paving slabs, surrounding by buildings.



Photograph 4 – hardstanding at the site entrance.



Photograph 5 – an outbuilding in the west of the site.



Photograph 6 – second outbuilding in the west of the site.

Introduced shrub

5.17 In the northeast and southeast corners of the site are small areas of introduced shrubs. Species noted include bluebell hybrid (*Hyacinthoides x massartiana*), laurestine (*Viburnum tinus*), daylily (*Hemerocallis* sp.), gooseberry (*Ribes* sp.), lily magnolia (*Magnolia liliiflora*), tulip (*Tulipa* sp.), St John's wort (*Hypericum perforatum*), hawthorn (*Crataegus monogyna*), pampas grass (*Cortaderia selloana*), bramble (*Rubus fructicosus* agg.), nettle (*Urtica dioica*), lesser celandine (*Ficaria verna*), and cow parsley (*Anthriscus sylvestris*). Non-native and invasive cotoneaster (*Cotoneaster* sp.) was also noted in two locations adjacent to the buildings.



Photograph 7 – introduced shrubs in the southeast corner.



Photograph 8 – introduced shrubs in the northeast corner.

Modified grassland

5.18 Most of the site is covered by modified grassland, which is short-mown and maintained as lawn. There are occasional individual ornamental shrubs scattered within the modified grassland. The modified grassland was dominated by perennial ryegrass (*Lolium perenne*) and white clover (*Trifolium repens*), with frequent yarrow (*Achillea millefolium*), common daisy (*Bellis perennis*), creeping buttercup (*Ranunculus repens*), dandelion (*Taraxacum* sp.), and ribwort plantain (*Plantago lanceolata*). Occasional daffodil (*Narcissus* sp.), English bluebell (*Hyacinthoides non-scripta*), bramble, red dead-nettle (*Lamium purpureum*), and hogweed (*Heracleum sphondylium*) were present.



Photograph 9 – modified grassland in the north of the site.



Photograph 10 – modified grassland in the centre of the site.

Pond

5.19 A pond covers the southwestern quarter of the site. The priority habitat status of the pond cannot currently be determined. The water was found to be very turbid, and there is little in the way of aquatic vegetation except for yellow flag (*Iris pseudacorus*) at the pond edge. It is understood that the pond supports low numbers of fish. There is a duck house within the pond.



Photograph 11 – the onsite pond.



Photograph 12 – the onsite pond.

Ruderal/Ephemeral

5.20 Around the shaded southern and western edges of the pond is low-level ruderal vegetation. This includes woodland-like ground flora and ancient woodland indicators. Species noted include butcher's broom (*Ruscus aculeatus*), English bluebell, dog's mercury (*Mercurialis perennis*), ivy (*Hedera helix*), cleavers (*Anthriscus sylvestris*), bramble, hawthorn, cow parsley, and buttercup witch hazel (*Corylopsis pauciflora*).



Photograph 13 – ruderal/ephemeral at the pond edge.



Photograph 14 – ruderal/ephemeral at the pond edge.

Non-native and ornamental hedgerow

5.21 In the northwestern corner of the site are short sections of ornamental *Thuja* hedge either side of the entrance. This does not meet the criteria of 'important hedgerow' under the 1997 Hedgerow Regulations.

	
Photograph 15 – ornamental hedge in the northwestern corner of the site.	**Photograph 16 –** ornamental hedge in the northwestern corner of the site.

Ecologically valuable line of trees

5.22 Along the site's southern and western boundaries, adjacent to the pond, is a line of trees. This is considered 'ecologically valuable' due to the presence of mature trees. Species included oak (*Quercus* sp.), holly (*Ilex aquifolium*), hawthorn, and elder (*Sambucus nigra*).

	
Photograph 17 – line of trees at the site's southern boundary.	**Photograph 18 –** line of trees at the site's western boundary.

Native hedgerow with trees

5.23 Along the site's northern boundary and around the northeastern corner is a native hedgerow with trees. The hedgerow is composed entirely of hawthorn, with tree species including field maple (*Acer campestre*) and oak. This is unlikely to meet the criteria of 'important hedgerow' under the 1997 Hedgerow Regulations due to being a single-species hedgerow. As a native hedgerow, this is a priority habitat.

	
Photograph 19 – native hedgerow with trees on the northern boundary.	**Photograph 20 –** native hedgerow with trees on the northern boundary.

Ditch

5.24 In the northeast of the site, adjacent to the driveway, is an approximate 15m length of wet ditch. The ditch is narrow, contained approximately 1 inch depth of water, and was flowing slowly.

	
Photograph 21 – wet ditch in the northeast of the site.	**Photograph 22 –** wet ditch in the northeast of the site.

Individual trees

5.25 There are three individual trees on the site. There is a large oak to the north of the pond. To the north of the wet ditch is a large pine (*Pinus* sp.) with an adjacent small tree.

	
Photograph 23 – pine tree and an adjacent small tree in the northeast of the site.	**Photograph 24 –** oak tree to the north of the pond.



FIGURE 6: UK HABS HABITAT MAP

Table 1 - Target Notes from Figure 6 - Habitat Plan

Target Note	Description
1	Cotoneaster (*Cotoneaster* sp.) was seen in two locations, adjacent to buildings. Five species of cotoneaster are listed as invasive on Schedule 9 of the Wildlife and Countryside Act.
2	Bird boxes had been installed in the introduced shrub.

Habitat evaluation

5.26 Much of the site is covered by modified grassland, ruderal/ephemeral, introduced shrubs, and non-native and ornamental hedgerow, all of which have low ecological value. There are also areas of artificial unvegetated, unsealed surface and developed land; sealed surface of negligible ecological value. The line of trees and native hedgerow have higher ecological value, with the native hedgerow being a priority habitat, and both provide opportunities for wildlife. The pond may also qualify as a priority habitat.

Plant species of note

5.27 No plant species of note were identified.

Invasive species

5.30 Cotoneaster was identified in two locations on the site (see Target Note 1). Five species of cotoneaster are listed as invasive on Schedule 9 of the Wildlife and Countryside Act.

Protected species and species of conservation concern

[redacted]

Barn owl

5.32 Whilst there would be access into the outbuildings on the site, these did not contain ledges of a suitable size for barn owl nesting. All buildings were inspected internally, and no evidence of barn owls was identified.

Bats

5.33 The line of trees, native hedgerow, and pond provide good commuting and foraging habitat, since they offer sheltered linear features and features that may attract prey species. The remainder of the site is of low value to foraging and commuting bats.

5.34 It is understood that no trees will be impacted by the proposed works, therefore these were not assessed for roosting potential during the survey.

5.35 There are five buildings on the site. Three of these are adjoining and in the east of the site, comprising a barn, cottage, and outbuilding, and will be impacted by the proposed development. These have therefore been assessed for their suitability for roosting bats and are described below. There are also two outbuildings in the west of the site, however it is understood that these will not be impacted by the proposals and therefore a detailed inspection for bat suitability has not been carried out.

Barn

5.36 At the centre of the adjoining buildings in the east of the site is a barn, which is to be converted for residential use as part of an enlarged dwelling with the existing cottage.

5.37 The barn is a large, single storey building with brick foundations, a hipped roof covered by clay tiles, and external walls covered by timber weatherboards. Several lifted tiles were seen on the barn roof, as well as a low number of missing tiles. These may provide crevice roosting spaces and/or access into the batten space.

5.38 Whilst the weatherboards on the external walls were mostly in good condition, some were lifted enough to create gaps suitable for crevice-dwelling bat species. Most gaps were found to be cobwebbed, indicating they were not used by bats.

5.39 Under the eaves there were gaps next to the joists which may provide access into the batten space.

5.40 Internally the building appeared very well sealed, except for a significant gap where the door frame had come away from the wall, which would enable bat access into the building. It is also understood that the door is routinely left open overnight. The barn is open to the rafters, with no enclosed roof void and the roof timbers exposed.

5.41 A large number of potential crevice roosting spaces have been created by the timber beams within the barn. Crevices were present between the beams and the walls, within the mortise and tenon joints, and in cracks in the beams. These crevices were inspected where possible and no roosting bats were found, although droppings were identified caught in cobwebbing below some of these features.

5.42 A low number of bat droppings were found scattered across the barn, including fresh droppings. There were no significant accumulations of droppings, with the majority of the droppings instead being spread over most of the building in low densities indicating likely internal flight activity. Small accumulations caught in cobwebbing below crevice features indicate likely roosting locations for low numbers or individual bats.



Photograph 25 – the barn, viewed from the southeast.



Photograph 26 – the barn, viewed from the west.



Photograph 27 – barn roof with lifted clay tiles.



Photograph 28 – gaps under timber weatherboards on the external walls.



Photograph 29 – internal layout of the barn.



Photograph 30 – damaged door frame, providing bat access.

	
Photograph 31 – gap between a timber beam and the wall.	**Photograph 32 –** crack in a timber beam.
	
Photograph 33 – a bat dropping on the building's floor.	**Photograph 34 –** bat droppings in cobwebs on the internal walls.

Cottage

5.43 On the northern wing of the adjoining buildings in the east of the site is a cottage, which is to be subject to renovation works, including the replacement of the porch and installation of a rooflight.

5.44 The cottage is a single storey brick and stone built building, with a hipped roof covered by clay tiles. There were a large number of lifted roof tiles and ridge tiles across the roof, and some broken roof tiles on the southern aspect. These may provide crevice roosting spaces and/or access into the batten space. It was noted that much of the northern roof aspect was heavily moss covered, with the moss blocking many of the gaps under tiles and therefore reducing accessibility for bats.

5.45 The external walls were in good condition, and no crevices or gaps were seen.

5.46 Under the eaves, gaps were seen between the timber boards which may provide access for bats into the batten space.

5.47 There is a small, enclosed roof void with an open access hatch in part of the cottage. The roof void is timber boarded. Two of the boards had come loose which would provide bat access into this space, however there were no beams or crevices within

the roof void that would facilitate roosting. The access hatch was also permanently open, meaning high light levels in the void during the day which may deter day-roosting bats. No evidence of bats such as droppings was found.

5.48 The remainder of the building has a vaulted ceiling with timber sarking boards. This was fully sealed with no opportunities for bat access to the main internal area.



Photograph 35 – the cottage, viewed from the northwest.



Photograph 36 – the cottage, viewed from the southwest.



Photograph 37 – the roof with gaps under tiles.



Photograph 38 – gaps under the eaves.



Photograph 39 – the enclosed roof void in part of the building.



Photograph 40 – main internal area with vaulted ceiling

Outbuilding

5.49 On the southern wing of the adjoining buildings in the east of the site is an outbuilding, which is to be subject to renovation works. Most of the works will be internal, with the existing roof and walls retained. The open section on the northern elevation will be infilled with glass doors and fixed sidelights.

5.50 The outbuilding is a single storey building with brick foundations, walls covered by timber weatherboarding, and a gable roof covered by clay tiles. The central section of the building is open on the northern elevation with glass windows on the southern elevation.

5.51 There are a large number of lifted, broken and missing roof tiles and lifted ridge tiles across the roof. Since the roof is unlined, there is no batten space and any crevices created by the roof tiles would be shallow, making them sub-optimal. Crevices beneath the ridge tiles may be of higher suitability to crevice-dwelling bat species.

5.52 The timber weatherboarding on the external walls was in good condition and tightly fitting, with no crevices of suitability to bats seen.

5.53 The eaves were unsealed across the building and would provide open access for bats to enter the internal structure.

5.54 There is a very small, enclosed roof void near the western end of the building, with the remainder of the building being open to the rafters. Whilst the central part of the building is openly accessible to bats, no crevice roosting opportunities were found in this section. There are timber beams, however the high light levels during the day limit the suitability for use by day roosting bats. The other sections that were open to the rafters similarly lacked any crevice spaces, and windows mean the light levels are high during the day. No evidence of bats such as droppings was found in these sections.

5.55 The internal roof void was small, unlined, and heavily cobwebbed. There are timber beams, but no crevice spaces were seen. No evidence of bats such as droppings was found. Whilst the roof void would be accessible by bats, it is considered to be sub-optimal for void-dwelling bat species due to its small size and lack of roosting features, and there was no evidence that it had been used by bats.

	
Photograph 41 – the outbuilding, viewed from the northeast.	**Photograph 42 –** the outbuilding, viewed from the southeast with tile gaps visible.

	
Photograph 43 – the unlined roof within the central open section.	**Photograph 44 –** unsealed eaves.
	
Photograph 45 – inside the room at the western end of the building.	**Photograph 46 –** the small, enclosed roof void in part of the building.

Breeding birds

5.56 The hedgerows and trees on the site provide suitable nesting habitat for a range of bird species. The outbuildings also offer open access and may be used by nesting birds. In addition, bird boxes were seen in the introduced shrub on the site (see Target Note 2).

Great Crested Newt (GCN)

5.57 The site is considered to have some potential to support terrestrial GCN, however this is largely restricted to the boundary habitats where there is hedgerow and a line of trees. The modified grassland covering most of the site is considered to be unsuitable for GCN as it is short-mown and offers little shelter.

5.58 One pond is present within the site boundary. The pond onsite is potentially suitable for GCN given an HSI score of 0.66, equating to an 'average' suitability. See Table 2.

Table 2 – HSI calculations

Pond ref	**1**
SI[1] - Location	1
SI[2] - Pond area	0.97
SI[3] - Pond drying	0.9
SI[4] - Water quality	0.33
SI[5] - Shade	1
SI[6] - Fowl	0.67
SI[7] - Fish	0.3
SI[8] - Ponds	1
SI[9] - Terrestrial habitat	0.67
SI[10] - Macrophytes	0.35
HSI Score	**0.66**
HSI Category	**Average**

5.59 The wet ditch on the site is not considered to be suitable for great crested newts, since the water depth was very shallow, despite a period of wet weather preceding the survey, and the water was flowing.

Hazel dormice

5.60 The line of trees and native hedgerow on the site boundaries have suitability to support hazel dormouse since they offer foraging and commuting opportunities and are connected to other tree lines and hedgerows in the wider landscape. The remainder of the site is unsuitable for dormice.

Reptiles

5.61 There is some suitable habitat on the site for common reptiles such as slow worms, common lizards, and grass snakes. However, this is largely restricted to the boundary habitats where there is hedgerow and a line of trees. Grass snakes may also make use of the pond. The modified grassland covering most of the site is highly unlikely to be used by reptiles as it is short-mown and offers little shelter.

Other Mammals

5.62 No evidence of other mammals was recorded within the site.

Other Species of Principal Importance

5.63 The pond and adjacent terrestrial habitats could support amphibians such as smooth newt, palmate newt, common toad, and common frog.

5.64 Boundary habitats, including the line of trees and native hedgerow, may be used by hedgehogs.

6 Conclusions & Recommendations

6.1 In line with Natural England's Standing Advice, where further survey for protected species is recommended these should be conducted prior to submitting a planning application and appropriate mitigation measures be incorporated into the development design.

Invasive species

6.1 **Care must be taken to prevent the further spread of cotoneaster. Ideally efforts should be made to remove these from the site.**

Plant species of note

6.2 No plant species of note were identified therefore no further action is required.

Habitats of Principal Importance

6.3 **The native hedgerow on the northern site boundary is an HPI and therefore must be retained. The pond may also qualify as priority habitat and should be retained and protected.**

[redacted]

6.3 [redacted]

Barn owl

6.4 The survey did not identify any evidence of barn owls on the site. While the outbuildings permit access into the interior for owls, they lack areas suitable for nesting. As such, no further action is required.

Bats

6.4 It is understood that no trees are to be impacted by the proposed development, therefore these have not been assessed for suitability for roosting bats. **Should any trees be proposed to be removed, a ground-level tree assessment would need to be undertaken in the first instance to identify whether these trees have any features suitable for roosting bats and whether any further surveys are required.**

6.5 It is understood that the two outbuildings in the west of the site are not to be impacted by the proposed development, therefore these have not been assessed for suitability for roosting bats. **Should any proposals impact on these outbuildings, a bat assessment would need to be undertaken in the first instance to identify whether these buildings have any features suitable for roosting bats and whether any further surveys are required.**

6.6 The existing outbuilding in the east of the site is to be subject to minor renovation works only and the roof, which was the only part of the building with potential roosting features, is to be unimpacted. Given the nature of the proposed works and the

features identified on the building, it is considered to be highly unlikely that there would be any significant impacts on roosting bats, if present. Therefore, no further surveys are required. **Work must be carried out under a Precautionary Working Method Statement, as detailed in Section 7 of this report. Should any future works be proposed which impact the roof of the building, further detailed bat survey will be required.**

6.7 **Due to the presence of bat droppings internally, the barn in the east has been confirmed to contain a bat roost. The proposed works may impact on roosting bats, therefore sufficient surveys are required in order to confirm species and characterise all roosts in order to inform the licence application and associated mitigation strategy. Three surveys are recommended within the Good Practice Guidelines.**

6.8 **The existing cottage is considered to have low potential to support roosting bats in crevices associated with the roof and the batten space. The proposed works will impact on the roof through the installation of a rooflight and replacement of the porch. Therefore, a minimum of one survey is required to be carried out in the peak active season of May to August. Should bats be found to be present with roosts likely to be impacted by the proposed works, sufficient surveys to characterise the roosts and determine likely impacts will be required in order to inform a Natural England licence to permit the works.**

6.9 As the proposed work to the barn will have a detrimental effect on bats or disturb or damage their roost then an EPS licence from Natural England has to be applied for. If the work to other buildings can be timed or controlled to ensure there is no negative impact on bats, then a licence for these may not be required.

6.10 The Natural England development licence will encompass a Mitigation Strategy to ensure that the development is designed to protect bats during the construction phase and to minimise long term impacts upon the local bat population.

6.11 **Lighting can have notable negative impacts on commuting bats, that are known to be present locally. There is potential for lighting during and post-development to cause indirect disturbance in these areas. Lighting directed at the native hedgerow with trees, line of trees, and pond in particular should be avoided or kept to the minimum necessary, and preferably on a motion sensor to reduce lighting time.**

Breeding birds

6.12 **Vegetation or tree removal should be undertaken outside the breeding bird period from March to August. Should any vegetation clearance be scheduled to take place between the beginning of March and the end of August, this must be immediately preceded by a survey to check for nesting birds. No vegetation can be cleared whilst a nest is occupied, regardless of species**.

6.13 **The buildings must also be checked for any active nests before works start. Works around the location of any active nest will have to cease until the young birds have fledged.**

Great Crested Newt (GCN)

6.14 Based on the HSI result of the onsite pond and the presence of several ponds within 500m of the site, the onsite pond could be used by GCN. GCN may also use terrestrial habitats around the site boundaries, such as the native hedgerow. However, most of the terrestrial habitat area, comprising mown grass lawn, driveway, and buildings, is unsuitable for GCN.

6.15 The majority of the development works are to the buildings only. There will be removal of a small amount of grass lawn around the driveway to create a parking and turning area, and creation of a pathway to the buildings. This may involve excavation up to 20cm depth. The area to be impacted by this comprises entirely short mown grass lawn which has negligible potential to support GCN. As such, it is considered highly unlikely that there would be any impacts on GCN in terrestrial habitats.

6.16 Due to the very close proximity of the pond to the proposed parking and turning area, there is a risk of direct impacts to the pond and minor disturbance of any newts present within the pond. The Rapid Risk Assessment calculation carried out for the site identifies that if GCN are present in the onsite pond and in the absence of mitigation, an offence is highly likely. See Figure 7.

Component	**Likely effect** (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	**Notional offence probability score**
Great crested newt breeding pond(s)	Damaged or destroyed	1
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	Minor disturbance of newts	0.5
	Maximum:	1
Rapid risk assessment result:	**RED: OFFENCE HIGHLY LIKELY**	

FIGURE 7: RAPID RISK ASSESSMENT OF THE SITE

6.17 **The onsite pond will need to be subject to eDNA sampling, to determine the presence or likely absence of breeding GCN. eDNA samples need to be taken between mid-April and the end of June.**

6.18 **It is recommended that the area of lawn that falls within the proposed working area is maintained as a short sward in the interim before works commence, to prevent this habitat from becoming suitable for GCN.**

6.19 **October 2024 update:** An eDNA survey has been carried out for the onsite pond, confirming the absence of GCN here. No licencing is required, however Reasonable Avoidance Measures must be adopted to safeguard any newts that may use the site, as detailed below.

6.20 Vegetation removal is to be carried out by hand and these clearance works must be supervised by a suitably licenced ecologist. This licenced ecologist would only be required onsite during vegetation removal but would brief all site workers on amphibian identification and what to do if one is found and where to relocate it to, with the workers given advice on how to proceed with care and where to relocate any

amphibian if required. If GCN are found, works must cease, and consultation sought with the licenced ecologist.

6.21 Clearance works should only be carried out when temperatures are consistently above 5°C, and amphibians are likely to be more active and able to move away from potential danger. Clearance works should be avoided between November and February when amphibians are more likely to be hibernating and vulnerable to harm.

6.22 Hibernaculum habitat is to be created prior to the start of the construction phase, with this being situated outside of the works impact zone. This would consist of a mixture of soil over stone and untreated wood, normally cut vegetation. Any amphibians found would be moved to this hibernaculum.

6.23 Any excavations should be covered at night to prevent any amphibians falling in and becoming trapped. This would also be applicable to terrestrial mammals and any transient reptiles.

6.24 Ground works would be carried out for a short a period as possible and all works would be conducted during daylight hours only, so as to avoid the time when great crested newt are most active.

6.25 The storage of any debris, soil or cut vegetation on site would be avoided to prevent this becoming hibernaculum for great crested newt.

6.26 Temporary fencing, such as heras fencing, is to be erected between the proposed working area and the pond, to physically prevent works, material storage, or machinery movement any closer to the pond than necessary and therefore prevent damage. Should any works be carried out adjacent to the pond that will generate significant dust, dust reduction measures and/or protective sheet fencing must be utilised to prevent dust from being deposited on the pond.

Hazel dormice

6.27 Suitable habitat on the site for hazel dormouse is restricted to the native hedgerow and the line of trees on the site boundaries. It is understood that these will not be impacted as part of the proposed development, therefore no impacts on hazel dormouse are likely and no further surveys for this species are required.

Reptiles

6.28 The site provides a small amount of habitat for reptiles in the site boundaries such as the native hedgerow and tree line. However, the proposed works will only impact on areas that are unsuitable for reptiles, including mown lawn, driveway, and buildings. Therefore, it is considered highly unlikely that there would be any impacts on reptiles resulting from the proposed development.

6.29 **It is recommended that the area of lawn that falls within the proposed working area is maintained as a short sward in the interim before works commence, to prevent this habitat from becoming suitable for reptiles.**

Other Mammals

6.30 Based on the proposed plans, which will include works to mown lawn, driveway, and buildings, it is considered highly unlikely that there would be any impacts on other

mammals resulting from the proposed development. Therefore, no further action is required.

Other Species of Principal Importance

6.31 Common amphibians such as smooth newt, palmate newt, common toad, and common frog could use the onsite pond and boundary terrestrial habitats. The Reasonable Avoidance Measures detailed above for GCN will serve to also protect common amphibians.

6.32 Following good building practice, as recommended [redacted] above, will prevent any hedgehogs that may be present from coming to harm through entrapment or contact with building materials.

Impact Assessment

6.33 **The potential impacts on roosting bats and GCN cannot currently be determined until further survey has been undertaken. If further surveys identify the presence of roosting bats in locations that may be impacted by the proposed works and/or GCN in the onsite pond, site-specific mitigation will be required.**

6.34 Overall, it is considered that there are no likely significant impacts to other fauna or flora populations within the local area from the proposed works provided the recommendations above are adhered to.

7 Precautionary Working Method Statement for Bats

7.1 Prior to works commencing, the outbuilding in the east of the site must be fully inspected by a licensed bat ecologist to check for presence of bats.

7.2 When works commence, a licensed bat worker will provide a toolbox talk for all workers on site, detailing the mitigation to be followed during this stage of the development and the procedure to follow in the unlikely event a bat is found during works (detailed below).

7.3 Any areas with potential for bats to be impacted will be soft-stripped under direct supervision of the licensed ecologist.

7.4 In the unlikely event a bat is found present, works must stop and be assessed by a licensed Natural England bat worker and a Natural England licence may be required for works to continue.

7.5 Stripping must only be conducted when the air temperature is sufficiently high (at least 8°C) and in the absence of strong wind and rain, so as to not risk harming bats which may be found.

7.6 Once all areas with suitability for bats have been soft-stripped, the remaining works can be undertaken without an ecologist present.

7.7 The roof and cladding of the building must not be lined with a modern non-bitumen coated roofing membrane; it must have a traditional Bitumen Type 1F (with a hessian Matrix) roofing felt. Polypropylene filaments used in the manufacture of modern breathable underlays are known to entangle and kill bats and warranty can be invalidated; therefore, they must not be used in known or potential bat roosts. This applies to existing roof areas to be fitted with a lining, as well as any new roofs over proposed extensions, and under tile hangings and weather boarding.

7.8 **This Precautionary Working Method Statement is to be adopted on the basis of works not impacting the roof of the building. Should the roof be proposed to be impacted, further detailed bat survey will first be required**.

8 Procedure to follow in the event a bat is found on site at unsupervised times.

8.1 Bats are present on and within the vicinity of the site and may be found at any location on, in or around the buildings. Bats are protected species, and these procedures must be followed to avoid committing an offence.

8.2 If a bat is found at any location around the site DO NOT TOUCH unless necessary for the safety of the bat.

8.3 If the bat was uncovered in a roosting location carefully replace covering ensuring the bat is not crushed or harmed. If this is not possible cover the animal with a loose covering.

8.4 Stop all work at that area and the immediate vicinity. Work may continue at other areas around the site.

8.5 Call the AEWC Ltd bat licensed project ecologist Brigitte de Coriolis [redacted], call the office on 08452 505585, or licensed ecologist Daniel Whitby [redacted].

Appendix 1 – Survey timetable

Species	Survey	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
[redacted]	[redacted]												
Bats	Roost assessments												
	Ground level tree assess												
	Emergence and activity												
	Hibernation												
	Trapping												
Birds	Wintering												
	Breeding												
Great crested newt	HSI												
	eDNA												
	Presence/absence & popn												
	Refugia												
Hazel dormouse	Tube												
	Nut search												
Otter	Field signs												
Reptiles	Refugia & search												
Water vole	Field signs												
Invertebrates	Presence & communities												
Vegetation	Phase 1 habitat & NVC												

Optimal

Sub-optimal

Outside survey season

Appendix 2 – legal protection

General

This section briefly describes the legal protection afforded to protected species and habitats. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation but summarises the salient points.

[redacted]

Barn Owl

Barn owls are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981 (as amended)* which makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- take, damage or destroy the nest while that nest is in use or being built;
- take or destroy the egg;
- disturb them while they are in, on, or near a nest containing eggs or young, or to disturb their dependent young;
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

The penalty for an offence involving a barn owl, its nest, or egg, includes a fine of up to £5,000, or up to six months imprisonment, or both, per bird, nest or egg.

Bats

All species of bats are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

A roost is defined as ‘any structure or place which a bat uses for shelter or protection’. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present.

Furthermore, seven bat species (barbastelle, bechstein’s, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe) are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Breeding Birds

All species of wild bird are protected under Section 1 of the *Wildlife and Countryside Act 1981 (as amended)*. Protection was extended by the *Countryside and Rights of Way (CRoW) Act 2000*. Under the above legislation, it is an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

Certain species are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981 (as amended)* and receive protection under *Sections 1(4)* and *1(5)*. There are special penalties where the offences listed above are committed for any *Schedule 1* species and it is also an offence to intentionally or recklessly:

- disturb any such bird when it is building its nest or while it is in or near a nest containing dependant young; or
- disturb the dependant young of any such bird.

Amphibians

Natterjack toad, northern pool frog and great crested newt are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Palmate newts and smooth newts are also afforded protection against sale only under Schedule 5 of the *Wildlife and Countryside Act 1981 (as amended)*.

Natterjack toad, common toad, great crested newt and northern pool frog are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Hazel dormouse

Hazel dormouse is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Hazel dormouse is also a Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Otter

Otter is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Otter is also a Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Reptiles

Common lizard (*Lacerta vivipara*), grass snake (*Natrix natrix*), slow worm (*Anguis fragilis*), and adder (*Vipera berus*) are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the *Countryside and Rights of Way (CRoW) Act 2000*. Under the legislation, it is an offence to:

- intentionally or deliberately kill or injure any individual of these species; or
- sell or attempt to sell any part of these species either alive or dead.

Smooth snake *(Coronella austriaca)* and sand lizard *(Lacerta agilis)* are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

All UK reptile species are Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Water vole

Water vole *(Arvicola amphibious*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. This makes it an offence to:

- capture, kill or injure;
- damage, destroy or block access to a place of shelter;
- disturb whilst in a place of shelter or possessing, and

- sell any part of a water vole, dead or alive.

Other Mammals
All mammals receive some protection under the *Wild Mammals (Protection) Act 1996*, which makes it an offence to crush or asphyxiate an animal (e.g. within its burrow).

Species and Habitats of Principal Importance
Section 41 of the *Natural Environment and Rural Communities (NERC) (2006)* requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list has 56 Habitats of Principal Importance and 943 species of principal importance listed and has been drawn up in consultation with Natural England.
The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under *Section 40* of the *Natural Environment and Rural Communities Act 2006*, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Invasive species
It is an offence to plant, or otherwise cause to grow in the wild non-native plant species listed under *Schedule 9* of the *Wildlife and Countryside Act 1981 (as amended)*, for which *Section 14* of the Act applies. These include, but are not limited to:

- Himalayan balsam
- Cotoneaster sp.
- Japanese knotweed
- Giant hogweed.

Ancient woodland
The *National Planning Policy Framework (2012)* states that '*Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss'*. In addition, Natural England's standing advice for ancient woodland states that *an appropriate buffer zone of semi-natural habitat* [be in place] *between the development and the ancient woodland (depending on the scale and impact of development), a minimum buffer should be at least 15 metres to avoid root damage and at least 50m for pollution or trampling"*. Ancient woodlands, and ancient and veteran trees, may also be protected by Tree Preservation Orders.

Sites of Special Scientific Interest (SSSI's)
SSSI's are areas notified under the *Wildlife and Countryside Act 1981, as amended*, as being of special interest for nature conservation. They are the finest sites for wildlife and natural features supporting many characteristic, rare and endangered species, habitats and natural features. LPAs have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI.

National Site Network: Special Protection Areas (SPA), Special Areas of Conservation (SAC) & RAMSAR sites.

Development proposals which will adversely affect these sites are not permitted (except where there are no alternative solutions and the proposal is necessary for imperative reasons of overriding public interest). If a development could possibly impact on a SPA or SAC, the applicant will need to submit an assessment of potential impacts and their significance with their planning application for the local authority to make an 'Appropriate Assessment'.

Local Nature Reserves (LNRs)

These are a statutory designation made by local authorities. LNRs may be given protection against damaging operations and development on and around them via the local plan.

Local Wildlife Sites (LWS)

This is a non-statutory designation for sites identified at a county level. They typically form a network of sites that are recognised of being of conservation importance locally and are often included in Local Authority development plans.

Appendix 3 – Species list

Common Name	**Scientific name**	**DAFOR**
Bluebell hybrid	*Hyacinthoides x massartiana*	O
Bramble	*Rubus fructicosus* agg.	O
Butcher's broom	*Ruscus aculeatus*	*O*
Buttercup witch hazel	*Corylopsis pauciflora*	O
Cleavers	*Anthriscus sylvestris*	*O*
Common daisy	*Bellis perennis*	F
Cow parsley	*Anthriscus sylvestris*	O
Cotoneaster	*Cotoneaster* sp.	R
Creeping buttercup	*Ranunculus repens*	F
Daffodil	*Narcissus* sp.	O
Dandelion	*Taraxacum* sp.	F
Daylily	*Hemerocallis* sp.	R
Dog's mercury	*Mercurialis perennis*	*O*
Elder	*Sambucus nigra*	R
English bluebell	*Hyacinthoides non-scripta*	O
Field maple	*Acer campestre*	O
Gooseberry	*Ribes* sp.	R
Hawthorn	*Crataegus monogyna*	LF
Hogweed	*Heracleum sphondylium*	O
Holly	*Ilex aquifolium*	R
Ivy	*Hedera helix*	*O*
Laurestine	*Viburnum tinus*	R
Lesser celandine	*Ficaria verna*	R
Lily magnolia	*Magnolia liliiflora*	R
Nettle	*Urtica dioica*	O
Oak	*Quercus* sp.	O
Pampas grass	*Cortaderia selloana*	R
Perennial ryegrass	*Lolium perenne*	F
Pine	*Pinus* sp.	R

Red dead-nettle	*Lamium purpureum*	O
Ribwort plantain	*Plantago lanceolata*	F
St John's wort	*Hypericum perforatum*	O
Thuja	*Thuja* sp.	R
Tulip	*Tulipa* sp.	R
White clover	*Trifolium repens*	F
Yarrow	*Achillea millefolium*	F
Yellow flag	*Iris pseudacorus*	*LF*

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