# PRELIMINARY BAT ROOST ASSESSMENT

# 27 THE SQUARE
# SPENCER'S WOOD, WOKINGHAM
# RG7 1BS

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Our reference: ECO3618
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# 1.0 Introduction

## Survey and reporting

1.1 This report details the results of a Preliminary Bat Roost Assessment of 27 The Square, Spencer's Wood, Wokingham, RG7 1BS.

1.2 The survey, carried out on 19 September and 31 October 2024, was undertaken to inform proposals to extend the house.

## Application site

1.3 The application site is located at the north eastern corner of The Square, a residential lane in Spencers Wood, south of Reading (Ordnance Survey Grid Reference SU71666681; Figure 1).

1.4 It comprises a semi-detached one- and two-storey house, driveway and rear garden.

## Details of proposed works

1.5 It is proposed to erect a single-storey side and rear extension (see Figure 2). The main roof and loft space will not be affected by the proposed works.

1.6 It is understood that no trees will be affected by the proposed works.

**Figure 1 – Site location**

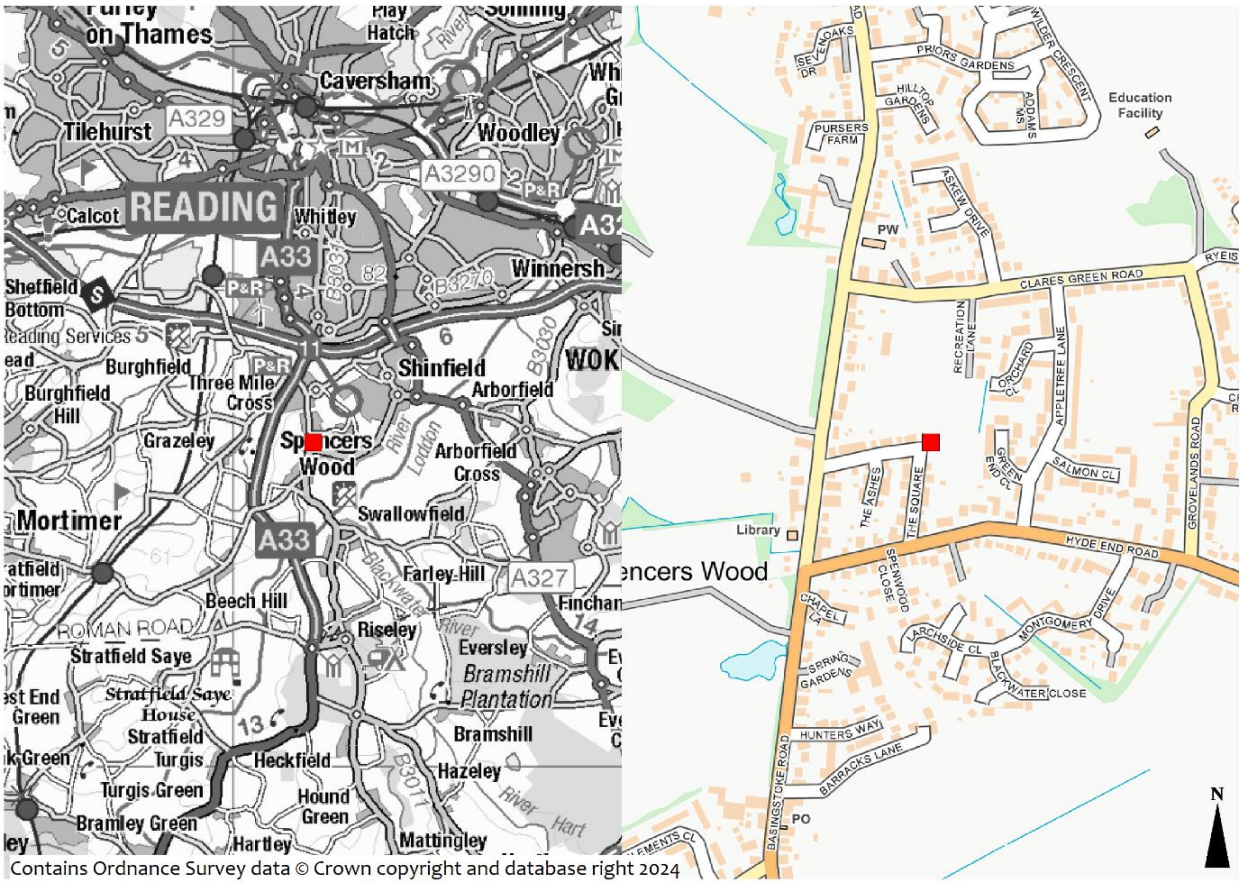


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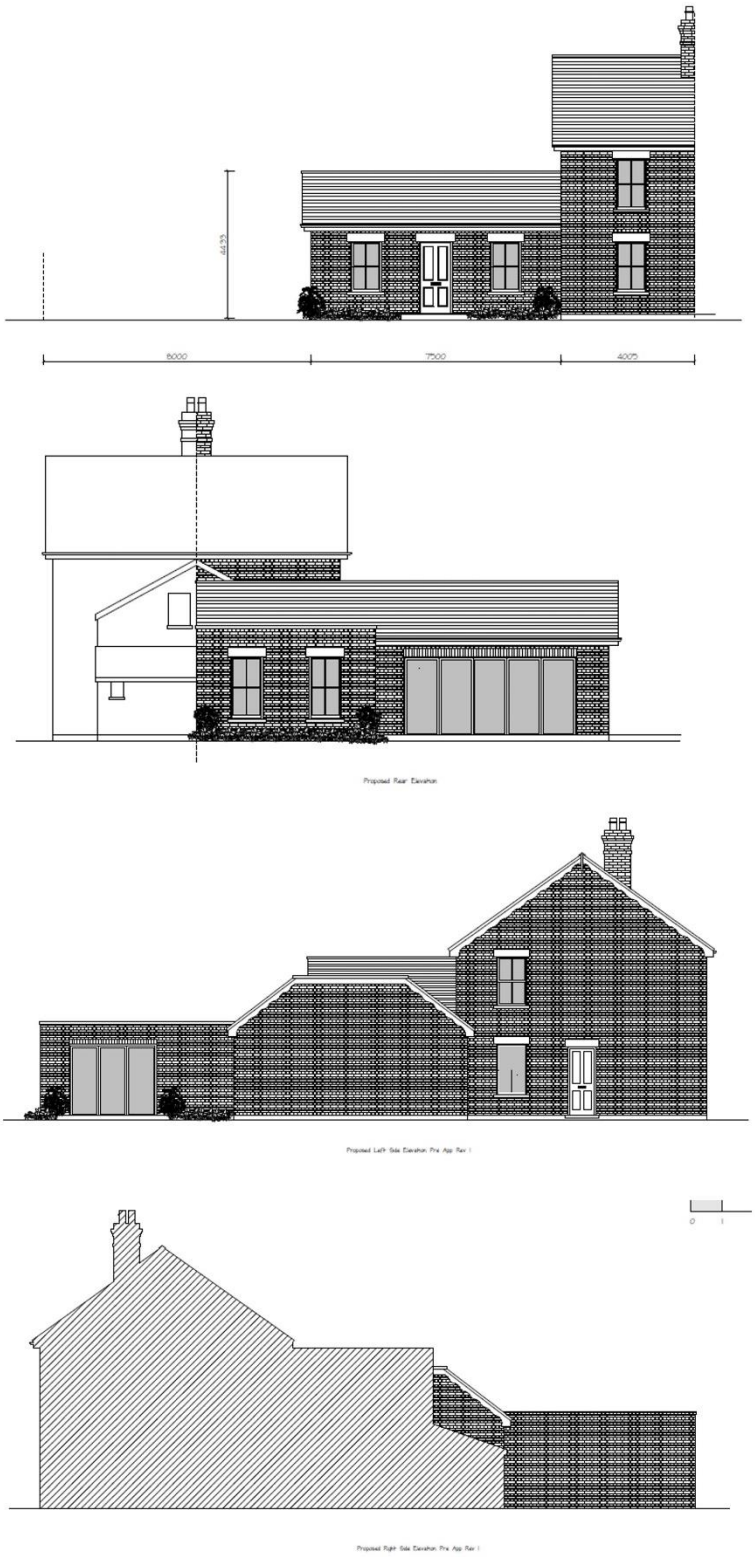
**Figure 2 – Proposed elevations**



## 2.0 Methodology

### Desk study

2.1 A desk study data search was undertaken. This involved reviewing publicly available datasets and citations of statutory designated sites of importance for nature conservation and Natural England's Ancient Woodland Inventory for sites within the zone of influence of the survey area (considered to be a maximum of 1km in this case).

2.2 In addition, species records (on the MAGIC website[1]) were accessed, and aerial photographs and Ordnance Survey maps were studied for features of interest.

### Bat survey

**Daytime Bat Walkover (DBW)**

2.3 A survey to assess the suitability of habitats for bats to roost, commute and forage within and adjacent to the site (where accessible). Habitat suitability was assessed as per Table 1 below.

**Preliminary Bat Roost Assessment**

2.4 This survey consisted of a detailed search of the interior and exterior of the building looking for bats and/or evidence of bats including droppings (on walls and windowsills and in roof and loft spaces), rub or scratch marks, staining at potential roosts and exit holes, live or dead bats and features, such as raised or missing tiles, potentially suitable for use by roosting bats. Binoculars, an endoscope, a ladder and a high-powered torch were used as required.

2.5 Buildings are classified in terms of their suitability for use by roosting bats (see Table 2) and in accordance with the Bat Conservation Trust's Bat Survey Guidelines[2].

2.6 Classification is dependent on a number of factors including:

- Bats and/or signs of bats
- External and internal features potentially suitable for use by roosting bats (e.g. raised or missing tiles, gaps behind fascia boards)
- Setting
- Night time light levels
- Disturbance levels
- Proximity of suitable foraging habitat and flight-paths (e.g. ponds, streams, woodland, large gardens, hedgerows)

### Elevated inspection

2.7 Features D and E were inspected from a roof ladder on 31 October 2024 by a licensed bat worker (Ryan Davies), using an endoscope and a high-powered torch.

2.8 It was possible to fully inspect these areas, no bats or signs of bats were found, and both areas were found to be either; blocked with bird nesting material, dense cobwebs and debris, and/or, not lead into a crevice or cavity suitable for use by roosting bats.

### Surveyor details

2.9 The survey was undertaken by Ryan Davies ACIEEM (senior ecologist) and Matthew Stephenson (assistant ecologist) of GS Ecology Ltd. Ryan is an associate member of the Chartered Institute of

1 http://www.natureonthemap.naturalengland.org.uk/

2 Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Bat Conservation Trust

Ecology and Environmental Management and holds a Natural England WML A34 Level 2 bat survey licence.

**Table 1 – Habitat suitability scale for potential flight-paths and foraging bats**

| | ***Potential Suitability*** | ***Description*** |
|---|---|---|
| ***Potential Suitability of potential flight-paths and foraging habitats*** | High | Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge.<br>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.<br>Site is close to and connected to known roosts. |
| | Moderate | Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens.<br>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water. |
| | Low | Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.<br>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub. |
| | Negligible[3] | No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour. |
| | None [Not suitable] | No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats). |

3Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant.' This category may be used where are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute)

**Table 2 – Description of the categories used to assess a building's bat roost potential and the survey effort required to determine the likely presence or absence of bats**

| | *Roost status* | *Description* | *Survey effort required to determine the likely presence or absence of bats* |
|---|---|---|---|
| ***Bat Roost Potential** Status* | Confirmed | Bats or evidence of bats found. | Surveys would be required to establish the status of the roost. Generally, three dusk emergence surveys between May and September. Optimum period May – August (two surveys should be undertaken during the optimal period). Surveys should be carried out at least three weeks apart. |
| | High | A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions (For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site. | Three dusk emergence surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period. Surveys should be carried out at least three weeks apart. |
| | Moderate | A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed). | Two dusk emergence surveys, between May and September (one of the surveys needs to be carried out between May and the end of August). Surveys should be carried out at least three weeks apart. |
| | Low | A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats). | One dusk emergence survey between May and the end of August (but only if features will be affected by the proposals). |
| | Negligible | No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. | No further surveys required. |
| | None [No potential] | No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels). | No further surveys required. |

# 3.0 Results

## Weather conditions

3.1 Weather conditions during the initial site visit were 22°C, 4/8ths cloud cover with no rain.

3.2 Weather conditions during the elevated inspection were 7°C, 7/8ths cloud cover with no rain.

## Desk study

**Statutory sites of importance for nature conservation and ancient woodland**

3.3 There are no statutory site of importance for nature conservation or areas of woodland listed on Natural England's Ancient Woodland Inventory within 500m of the application site.

**Bat licence records**

3.4 Within 2km of the site there are eleven records of licenses issued by Natural England for works affecting bat roosts on The MAGIC website, one of which is within 0.1km of the site. These records are summarised in Table 3 below.

**Table 3 – Summary of Natural England bat licence records within 2km of the application site**

| Distance and direction from the application site | Species affected | Breeding site | Year licence was issued |
|---|---|---|---|
| 0.1km South | Common pipistrelle | No | 2013 |
| 0.6km Northeast | Brown long-eared | No | 2017 |
| 0.6km Northeast | Brown long-eared | No | 2017, 2018 |
| 0.6km Southeast | Brown long-eared | No | 2015 |
| 0.8km Southeast | Brown long-eared | No | 2010 |
| 0.9km North | Brown long-eared, soprano pipistrelle | No | 2012 |
| 1.1km East | Brown long-eared, common pipistrelle | Yes | 2018, 2019 |
| 1.3km North | Brown long-eared, common pipistrelle | No | 2009 |
| 1.3km North | Brown long-eared, common pipistrelle | No | 2015 |
| 1.7km West | Brown long-eared, common pipistrelle | Yes | 2016 |
| 1.9km Northeast | Common pipistrelle, soprano pipistrelle | No | 2016 |

## Surrounding land use

3.5 The application site is located at the north eastern corner of The Square, a residential lane in Spencers Wood, south of Reading. Directly adjacent to the east, south and west, and, further to the east and south are residential properties and their associated gardens with trees. In places – notably to the east and south east – the surrounding gardens meet to form areas of continuous green space.

3.6 Adjacent to the northern boundary is Recreation Lane Allotment, a series of allotment gardens bound by hedgerows in places. Further north is Spencers Wood Recreation Ground a large area of amenity grassland bound by hedgerows at its peripheries.

3.7 Further to the west, approximately 150m from the application site, is a large area of parkland with numerous scattered trees and blocks of woodland (situated approx. 200m, 600m and 700m from the site).

3.8 Approximately 200m east is the Shinfield Cemetery with a number of scattered trees and a small block of woodland. Further to the south (approximately 400m and beyond) are large grassland fields bound by hedgerows with trees.

3.9 The habitats surrounding the site are therefore of 'moderate' to 'high' suitability for commuting and foraging bats (see Table 1).

## Habitats within the application site

3.10 The application site comprises a semi-detached one- and two-storey house, a gravel driveway and rear garden.

3.11 The rear garden comprises short-cut lawn with beds of garden planting and scattered ornamental trees.

3.12 The habitats within the site are therefore of 'moderate' suitability for commuting and foraging bats.

## Bat survey (preliminary roost assessment)

3.13 27 The Square is a semi-detached one- and two-storey house with single skinned brick walls. The main roof is pitched and clad with slate, with clay ridge tiles. At the eastern elevation there is a secondary pitch (perpendicular to the main pitch) also clad with slate and with clay ridge tiles. At the eastern elevation there is a single-storey lean-to with clay-tiled roof. At the north east of the building there is a UPVC lean-to conservatory. The house has painted wooden barge boards and soffit boxes throughout.

3.14 The house has a number of features potentially suitable for use by roosting bats including:

- A) Small gaps under ridge tiles on the main roof [unaffected by proposals]
- B) Gap between the soffit and brickwork wall at the apex of the main roof (northern elevation) [unaffected by proposals]
- F (main roof) [unaffected by proposals]
- D) Hole in the barge board below slates at north eastern corner of secondary pitch
- E) Gaps under end tiles on the eastern lean-to

3.15 The house has a single loft space, below the main roof pitch. The main roof has wooden beam and ridge board, although the majority of these are not exposed as the roof is lined – below the rafters – with foil-backed insulation. It appears that the roof is not lined above the rafters as no lining was observed through gaps in the roof insulation. The loft floor is insulated with fibreglass, boarded out and used for storage.

3.16 Below the secondary pitch there is a small, inaccessible void. The eastern lean-to is lined with plasterboard panels below the rafters – which have slipped in paces – and is unlined above the rafters.

3.17 No bats or signs of bats were observed inside or outside of the building.

3.18 27 The Square is therefore being assessed as having 'moderate' potential to host a bat roost (see Table 2).

**Elevated inspection**

3.19 Features D and E were inspected from a roof ladder on 31 October 2024 by a licensed bat worker (Ryan Davies), using an endoscope and a high-powered torch. It was possible to fully inspect these areas and no bats or signs of bats were found.

3.20 Feature D was found to contain bird nesting material which blocked access further into the fabric of the building, rendering the area unsuitable for use by roosing bats.

3.21 Feature E (all gaps) were found to be blocked with dense cobwebs and other debris.

3.22 As such, it is concluded that these areas do not host a bat roost.

## 4.0 Assessment

### Legislation

4.1 All species of bats receive special protection under UK law and it is a criminal offence under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (The Habitat Regulations), deliberately or recklessly to destroy or damage their roosts, or to disturb, kill or injure them without first having obtained the relevant licence for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).

### Survey constraints

4.2 The survey was carried out at a time of year suitable for undertaking preliminary bat roost assessments and there were no constraints to the survey.

### Site status

4.3 27 The Square is assessed as having 'moderate' potential to host a bat roost (see Table 2). This is because it has a number of features potentially suitable for use by roosting bats, is located in habitats of 'moderate' to 'high' suitability for commuting and foraging bats, and, is in close proximity to a known bat roost (see Table 3).

4.4 However, no bats or signs of bats were found during the survey, and, the features potentially suitable for use by roosting bats (Features A to C) will be completely unaffected by the proposed works

4.5 NB. Features D and E were found to be either; blocked with bird nesting material, dense cobwebs and debris, and/or, not lead into a crevice or cavity suitable for use by roosting bats. As such, it is concluded that these areas do not host a bat roost.

4.6 It is therefore very unlikely that bats will be affected by the works, there is no need to undertake further surveys, and there should be no bat related constraints to the proposals.

4.7 Appendix 2 provides further information on bat ecology and legislation.

### Planning policy

4.8 Paragraph 99 of the Government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System (NB this document has not been revoked by the National Planning Policy Framework) states that:

> *"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted. "*

4.9 In this case, because it has been established that the proposed works are very unlikely to have any adverse impact upon bats (or other protected species) the proposals will be in accordance with the above planning policy.

### Nesting birds

4.10 Bird nesting material was found in a hole in the barge board below slates at north eastern corner of secondary pitch during the elevated inspection. As such, works to the building should be

undertaken outside of the bird nesting season (March – August inclusive depending on weather conditions).

4.11 If this is not practicable the areas to be affected will first need to be checked by a suitably qualified ecologist for nesting birds and, if any nests are found, works that would disturb the nest must be postponed until all young have fledged the nest and it is no longer in use.

## 5.0 Summary

5.1 27 The Square is assessed as having 'moderate' potential to host a bat roost. This is because it has a number of features potentially suitable for use by roosting bats, is located in habitats of 'moderate' to 'high' suitability for commuting and foraging bats, and, is in close proximity to a known bat roost.

5.2 However, no bats or signs of bats were found during the survey, and, the features potentially suitable for use by roosting bats (Features A to C) will be completely unaffected by the proposed works

5.3 It is therefore very unlikely that bats will be affected by the works, there is no need to undertake further surveys, and there should be no bat related constraints to the proposals.

5.4 If the recommendations in this report about nesting birds are adhered to there should be no other ecology related constraints to the proposals.

## Appendix 1 - Photographs

Photos 1 and 2 – 27 The Square viewed from the west and north

Photo 3 – 27 The Square viewed from the east, and, Photo 4 – The rear garden

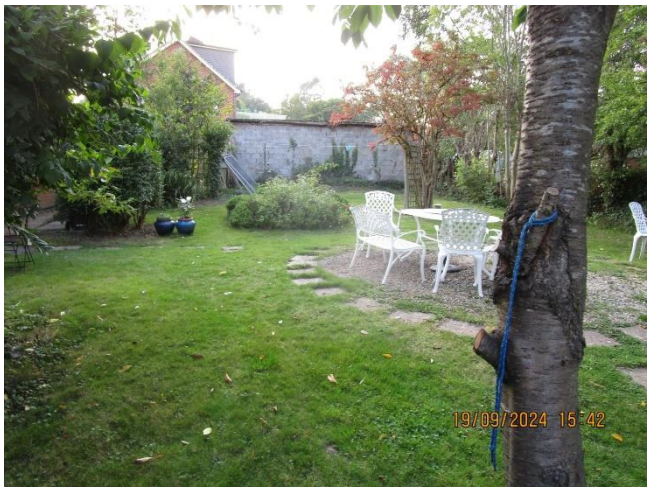



Photo 5 – [Feature A] - Small gaps under ridge tiles on the main roof (unaffected by the proposals), and Photo 6 – [Feature B] - Gap between the soffit and brickwork wall at the apex of the main roof (unaffected by the proposals)

Photo 7 – [Feature C] - Gaps between end slate tiles and barge board at the northern gable (unaffected by the proposals), and, Photo 8 – [Feature D] - Hole in the barge board below slates at north eastern corner of secondary pitch (inspected with an endoscope and found to be blocked by bird nesting material with no bats or signs of bats found)

Photo 9 – [Feature E] - Gaps under end tiles on the eastern lean-to(inspected with an endoscope and found to be blocked by dense cobwebs and debris with no bats or signs of bats found) - Photo 10 – Inside the main loft

Photo 11 – Inaccessible void below secondary pitch, and, Photo 12 – Inside eastern lean-to

Photos 13 and 14 – Photos from endoscope inspection of Features D and E

## Appendix 2 - Bat ecology and conservation status

### Background

Bats are the only true flying mammals and belong to their own taxonomic group, the *Chiroptera*. Worldwide there are almost 1,000 species, with 16 in the UK. All species in the UK are insectivorous. They have a highly sophisticated echolocation system that allows them to avoid obstacles and catch invertebrates, either in flight or by picking them off water, the ground or foliage.

### Bat species in the UK

There are 16 species of bat that are known to exist in the UK mainland, with a further two - the greater mouse eared bat *Myotis myotis*, and the parti-coloured bat *Vespertilio murinus* - that are thought to occur as rare migrants or to have small populations in the UK. Bats in the UK belong to one of two taxonomic families, the Rhinolophidae (horseshoe bats) and the Vespertilionidae (all other UK bats).

### Bat Conservation Status

Bat populations have undergone a significant decline in the past sixty years. For example, estimates from the National Bat Colony Survey suggest that the UK pipistrelle population (one of our commonest bat species), declined by approximately 70% between 1978 and 1993. Factors contributing to this decline include:

- Loss of, and damage to, roosting sites, including buildings, trees, and underground structures (mines, tunnels, ice-houses, cellars, etc).
- Loss and fragmentation of suitable insect-rich feeding habitats such as wetlands and deciduous woodland.
- Reduction in the abundance and diversity of insect prey due to intensive agriculture, particularly over-grazing and the use of pesticides.
- Loss of linear features such as tree-lines and hedgerows, depriving bats of commuting routes between roosts and feeding areas.
- Loss of winter roosting sites in buildings and old trees.
- Disturbance and destruction of roosts, including the loss of maternity roosts due to the use of toxic timber treatment chemicals.

### Roosts

Bats use a variety of roosts of different types including trees, buildings, caves, mines and other structures. Most species are colonial and roost in groups. This can make populations particularly vulnerable to loss of roosts as the loss of a single roost may affect the whole population. Some species hang in obvious locations, such as the timbers near to the apex of a roof, others roost in cracks and crevices, such as the gaps under tiles, and as such can be very difficult to locate.

During the winter (November to February), when there is a reduction in insect numbers, bats hibernate to conserve energy. They prefer sites with a constant low temperature and a high relative humidity. On mild winter's nights, bats may wake up and feed. However, bats are particularly vulnerable to disturbance at this time of year, as flying in winter uses up large quantities of energy that cannot easily be replaced.

In the spring, after emerging from hibernation, bats often move from site to site and may congregate in small groups. Female bats gather together in the summer (approximately May to August dependant on species) in maternity roosts. Once the young have stopped suckling, and the baby is independent, bats tend to disperse and use other roosts. Maternity roosts are particularly vulnerable to disturbance, as

bats may have come from a wide geographical area, and have a strong tradition of returning to the same roost year after year.

During the late summer and early autumn males occupy mating roosts which are visited by several females. After mating some species gather together at swarming sites to fatten up prior to hibernation.

## Habitat associations

In addition to roosts, bats also need foraging habitats to find suitable food resources, and commuting routes to get to these areas. As would be expected, the highest numbers of bats are found in areas with abundant invertebrates. Some species specialise in catching small invertebrates in flight, whilst others specialise in catching larger invertebrates such as moths and beetles. The distances that bats travel to foraging areas varies between species; records have shown some greater horseshoe bats travel up to 22km to forage, although many species will typically feed within 1km of a roost.

Bats, especially the smaller species, tend to follow linear features (such as hedgerows and tree lines) to their foraging habitats and will often not cross open spaces. A gap of 10m in a linear feature will often not be crossed by bats, and it is important that developments do not create such gaps if linear features are used by bats.

## Appendix 3 - Legislation and planning policy

Planning Authorities have a legal duty to consider biodiversity when assessing planning applications. Where there is a reasonable likelihood that a planning application might affect important protected sites, species or habitats, information on the species, habitat or site likely to be affected, together with an assessment of the impacts of the proposals, will almost certainly be required.

The legal duty for Planning Authorities to have regard to the conservation of biodiversity was introduced in the 2006 Natural Environment and Rural Communities Act (The NERC Act). This act clarified existing commitments with regard to biodiversity, raised the profile of biodiversity and aimed to make the consideration of biodiversity a natural and integral part of policy and decision making.

In addition to the NERC Act there is also national and international biodiversity legislation. This includes legislation in relation to protected species and sites which operates outside of the planning system. Local Authorities and developers have a duty to comply with this legislation.

### National planning policy

Paragraph 99 of the Government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System (this document has not been revoked by the recently published National Planning Policy Framework) states that:

*'It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.'*

As such, in line with national planning policy, most planning authorities will ask for this information to be provided before a planning decision is made and in many cases before it is registered.

### Local planning policy

In addition to national planning policy, most councils have planning policies to protect biodiversity, and to enhance it where practicable within and adjacent to development sites.

### European protected species

The United Kingdom hosts a number of European Protected Species (EPS) of animals (table 1) and plants (table 2). These species receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and the European Habitats and Species Directive (92/43/EC), enacted in the UK through The Conservation of Habitats and Species Regulations 2017, to deliberately or recklessly destroy or damage their habitat, or to disturb, kill or injure the species without first having obtained the relevant licence from Natural England.

Planning Authorities have a statutory duty under these regulations to have regard to the requirements of the Habitats Directive and need to be satisfied that the development is likely to receive a licence from Natural England, and therefore comply with the Habitats Directive, before granting planning permission.

## Table 1 – European Protected Species of Animal found in the UK

| Common name | Scientific name |
|---|---|
| Bats, Horseshoe (all species) | *Rhinolophidae* |
| Bats, Typical (all species) | *Vespertilionidae* |
| Butterfly, Large Blue | *Maculinea arion* |
| Cat, Wild | *Felis silvestris* |
| Dolphins, porpoises and whales (all species) | *Cetacea* |
| Dormouse | *Muscardinus avellanarius* |
| Frog, Pool | *Rana lessonae* |
| Lizard, Sand | *Lacerta agilis* |
| Moth, Fisher's Estuarine | *Gortyna borelii lunata* |
| Newt, Great Crested (or Warty) | *Triturus cristatus* |
| Otter, Common | *Lutra lutra* |
| Snail, Lesser Whirlpool Ram's-horn | *Anisus vorticulus* |
| Snake, Smooth | *Coronella austriaca* |
| Sturgeon | *Acipenser sturio* |
| Toad, Natterjack | *Bufo calamita* |
| Turtles, Marine | *Caretta caretta* |
| | *Chelonia mydas* |
| | *Lepidochelys kempii* |
| | *Eretmochelys imbricata* |
| | *Dermochelys coriacea* |

## Table 2 – European Protected Species of Plant found in the UK

| Common name | Scientific name |
|---|---|
| Dock, Shore | *Rumex rupestris* |
| Fern, Killarney | *Trichomanes speciosum* |
| Gentian, Early | *Gentianella anglica* |
| Lady's-slipper | *Cypripedium calceolus* |
| Marshwort, Creeping | *Apium repens* |
| Naiad, Slender | *Najas flexilis* |
| Orchid, Fen | *Liparis loeselii* |
| Plantain, Floating-leaved water | *Luronium natans* |
| Saxifrage, Yellow Marsh | *Saxifraga hirculus* |

## Nationally protected species

Many species of animal are protected under the 1981 Wildlife and Countryside Act (as amended). 'Full protection' applies to EPS and some non EPS species such as the water vole. This prohibits the intentional killing, injuring or taking (capture. etc); possession; intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places; sale, barter, exchange, transporting for sale and advertising to sell or to buy. Many species, such as common species of reptile and amphibian, are protected from intentional killing and injuring and trading.

## Badgers

Badgers and their setts are protected under the 1992 Protection of Badgers Act and the Wildlife and Countryside Act 1981 (as amended). It is illegal to intentionally or recklessly kill, injure or take badgers or to interfere with a badger sett. Interference with a sett includes blocking tunnels, or damaging the sett in any way, and could include blocking a badger pathway if it were to stop badgers entering or leaving a

sett. Penalties for offences can be severe, with fines of up to £5,000 plus up to six months' imprisonment, for each illegal sett interference, badger death or injury.

Work that disturbs badgers occupying a sett is illegal without the appropriate licence from the relevant statutory authority being held. Natural England issue licences for reasons including science, education or conservation, for development such as the building of houses and for investigation of offences against badgers. They also issue licences for the prevention of serious damage to land, crops or other form of property, as well as for agriculture, forestry, drainage operations and prevention of the spread of disease.

## Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), whilst they are actively nesting or roosting. Section 1 of this Act makes it an offence to kill, injure or take any wild bird, and to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built. It is also an offence to take or destroy any wild bird eggs.

In addition, bird species listed under Schedule 1 of the Act receive extra protection. The Act states that 'it is an offence to intentionally or recklessly disturb any wild bird listed in Schedule 1 while it is nest building, or at (or near) a nest containing eggs or young, or disturb the dependent young of such a bird'.

In practice this means that in areas where birds are likely to be nesting works should not be undertaken during the nesting season, which is generally considered to be March to September, although this very much depends on weather conditions, habitats and the species involved. If works cannot be avoided then areas should first be checked for nesting birds. Habitats likely to host nesting birds include trees, hedgerows and dense scrub, buildings, reedbeds and riverine habitats and open areas with tussocky vegetation.

## Appendix 4 - About GS Ecology

Established in 2009, GS Ecology is an independent ecological consultancy in Berkshire. We carry-out surveys and ecological consultancy services for public and private sector clients including in Berkshire, Oxfordshire and Hampshire, London and the south of England. We can advise you on cost effective sustainable solutions for your project, whether it be a bat survey to inform a planning application, the ecology chapter of an Environmental Statement or a Woodland Management Plan.

Our work is undertaken by experienced and qualified ecologists, who are members of the Chartered Institute of Ecology and Environmental Managers. Our services include:

- Ecology surveying and reporting to inform planning applications, e.g.
  - Preliminary Ecological Appraisal
  - Extended Phase 1 Habitat Survey in Hampshire, Berkshire, Oxfordshire, London and Southern England
  - Protected species surveys, e.g. badgers, dormouse, great crested newts
  - Bat surveys in Oxfordshire, Berkshire, Hampshire, London and Southern England
- Code for sustainable homes or BREEAM ecology assessments – to demonstrate the sustainability of a new building
- Protected species licensing such as bat and great crested newt licences for development sites after planning permission has been obtained
- Providing advice to land managers and writing ecological management plans, such as woodland management plans and farm environmental plans for England woodland Grant Scheme and Environmental Stewardship applications
- Providing ecology advice to Local Authorities and Local Planning Authorities