

Sunnyside Cottage, Mortimers Lane, Fair Oak, Eastleigh, Hampshire, SO50 7EA

Ecological Appraisal Report

July 2026

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Ecological Appraisal Report
Sunnyside Cottage, Mortimers Lane, Fair Oak, Eastleigh, Hampshire, SO50 7EA
for
Mr & Mrs Moody

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This report represents sound industry practice; reports and recommends correctly, truthfully and objectively; is appropriate given the local site conditions; scope of works proposed and resources allocated to us by the client; and avoids invalid, biased, and exaggerated statements.

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1. This report provides information from an ecological appraisal carried out by Hampshire Ecological Services Ltd for Mr & Mrs Moody in connection with a proposal to change the use of a C3 residential dwelling to a C1 guest accommodation with a first-floor rear and single-storey side and rear extensions at Sunnyside Cottage, Mortimers Lane, Fair Oak, Eastleigh, Hampshire, SO50 7EA (approximate Ordnance Survey Grid Reference SU 509 190). The site location is shown in *Figures 1* and *2*; and a site plan is given in *Figure 3* in *Section 6*.
2. An ecological appraisal was carried out during the daytime on the 14th May 2026 by Finn Parker MSci (Hons) accredited under bat licence 2025-86835-CL18-BAT.
3. The site consists of a house as well as vegetation that has grown since clearance of the site two months prior to the survey date. There is paving along the west boundary as well as east of the house, and a mature *Acer campestre* (Field Maple) tree adjacent to the driveway at the south end of the site. There is a timber panel fence on the north and east boundaries, and a wire fence on the south and west boundaries. A UKHab Survey map showing the various habitats on site is given in *Figure 4* in *Section 6*.
4. The habitats and plant species observed on site are widespread and common and are of negligible nature conservation value from a botanical perspective. No plant species listed on *Schedules 8* or *9* of the *Wildlife and Countryside Act 1981* (as amended) were recorded on the site.
5. The house is a two-storey rendered brick building with a pitched, slate roof. Full details of this building are given in *Table 4.3.1.1* in *Section 4.3*. No bats or evidence of bats was found and the slate roof appears well-sealed and good condition with no visible gaps under the eaves (no soffits). There is one minor potential external roosting feature under the lead-flashing of the eastern chimney (illustrated in *Image 4.3.1.1*), which will not be affected by the change of use of the building. Therefore, the building is classed as having negligible suitability to be used by roosting bats and the proposed works may commence without further survey or constraints regarding bats (subject to any planning constraints).
6. The *Acer campestre* (Field Maple) tree had no visible potential roost features. It appears too young to have formed crevices such as split bark that would provide potential roosting features for bats. Therefore, the tree may be felled without further survey or constraint regarding bats (subject to any planning constraints). The location of the tree is at *Target Note 1* on *Figures 3* & *4* in *Section 6* and is shown in *Photo 1* in *Section 7*. Therefore, the tree may be felled without further survey or constraint regarding bats (subject to any planning constraints).
7. The *Acer campestre* (Field Maple) on the site as well as the species-rich native hedgerows adjacent to the south and west boundaries provide suitable bat foraging habitat in the immediate vicinity of the building. The lines of trees and hedges adjacent to the boundaries and along the neighbouring agricultural fields connect to a network of hedges, tree-lines and woodland strips.

These in turn connect the site to areas of high-quality foraging habitat in the wider landscape such as nearby ancient woodland (c.380m north-east and c.475m south-east) as well as several ponds (see *Figure 5* in *Section 6*). Therefore, the site has low-moderate commuting and foraging habitat. Woodland and waterways provide high-quality foraging habitat for a number of different species of bat. These areas will be unaffected by the development and all links will be maintained. The connectivity around the edges of the site (the adjacent trees and hedges) will be retained and as such no impact to commuting and foraging bats (and hence bat populations in the local area) is anticipated.

8. Changes in lighting can affect foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto retained vegetation (particularly the trees), and security lights should operate on a timer, to avoid any negative impact on bats. Ideally any lighting installed should avoid spillage of greater than 0.1 lux (typical moonlight/ cloudy sky) onto any vegetation. The use of non-UV LED lighting (preferably using warm spectrum wavelengths) is strongly recommended to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.

9. According to aerial photographs (GoogleEarth™) and online Ordnance Survey 1:25,000 maps there are two ponds within 250m of the site and a further six ponds within 500m. The locations of these ponds are shown in *Figure 5* in *Section 6*. However, these ponds are separated from the site by Mortimers Lane and private driveways, where there is abundant suitable terrestrial habitat close to the ponds. This, combined with the fact that two months before the survey the site had been cleared, means it is unlikely that great crested newts are present on site and as such no further surveys are proposed. As a precautionary measure, the piles of debris and log piles will be cleared under ecological supervision. The piles should only be removed during suitable weather and when reptiles are active, which is March/ April to September (inclusive). The grassland should also be subject to a 2-stage cut to avoid injuring any newts in the highly unlikely event they are present. The first cut should be to c30cm above ground level before a second typical mowing cut to near ground level at least 48 hrs later. If any great crested newts are found, works will stop immediately and a licence applied for subject to the requirements of Natural England.

10. Re-growth of vegetation on provides suitable foraging habitat for widespread species of reptile. In addition, there are several piles of debris from scrub clearance in the front garden which provide suitable hibernation habitat for reptiles such as slow-worm. However, the gravelboard of the fence on the north and east boundaries, as well as Mortimers Lane to the south, separates the site from much of the suitable habitat in the wider landscape. Due to the small size of the site and its partial isolation from the wider landscape, it is likely that any reptiles present in the local area would be using the hedgerows and/ or nearby grasslands which provide higher-quality foraging and hibernation habitat compared with the site. Given the low impact of the scheme, it is unlikely that reptiles will be impacted even if they are present within the adjacent and nearby habitat and no further surveys are proposed. As a precautionary measure, the piles of debris and log piles will be cleared under ecological supervision with any reptiles found being moved to nearby suitable habitat (such as the hedgerow on the west boundary). The piles should only be removed during suitable weather and when reptiles are active, which is March/ April to

September (inclusive). The grassland should also be subject to a 2-stage cut to avoid injuring any reptiles in the unlikely event they are present. The first cut should be to c30cm above ground level before a second typical mowing cut to near ground level at least 48 hrs later.

- 11.
12. No badger setts or evidence of badger activity was found. Therefore, works are free to proceed without further regard to this species, although if a badger sett is subsequently discovered within 30m of the proposed works then it may require a licence from Natural England to proceed.
13. The *Acer campestre* (Field Maple) tree as well as the trees and shrubs adjacent to the boundaries have the potential to support nesting birds during the breeding season. The destruction of active bird nests is prohibited under the *Wildlife and Countryside Act 1981* (as amended). Therefore, any affected vegetation with the potential to support nesting birds should be cut to near ground level (approximately 30cm) outside the bird breeding season (which is late February to August inclusive). If this is not possible, and vegetation has to be removed during the nesting season, then it should be inspected (by an ecologist) for nests immediately prior to removal of the vegetation. If any active nests are found prior to or during works, a 5m buffer zone should be established around them and be temporarily fenced off to prevent plant or personnel disturbing the nest until the end of the breeding bird season (or until the nest is no longer in use *i.e.* the young have fledged and left the nest).
14. To minimise the impact on the retained trees and hedges, Heras fencing or similar should be used to protect the roots of the trees and bushes during construction. The guidance provided in BS 5837 *Trees in relation to Construction* provides further advice.
15. National Planning Policy Framework (NPPF 2021) states "*opportunities to incorporate biodiversity in and around developments should be encouraged*" as part of the consideration for "*presumption in favour of sustainable development*". Therefore, the following outline enhancements are proposed:
 - Due to the rural location of the site and good connecting foraging and commuting habitat, it is recommended that the site be enhanced for bats. At least one bat box (*e.g.* Vivara Pro WoodStone Bat Box, Beaumaris Woodstone or similar) should be attached to the exterior wall of an existing part of the building placed as high as possible (ideally 2.5m or above, facing south or south-east) with a clear exit path.
 - At least one swift box will be attached to the exterior of the house. This box is also suitable for house sparrows which are also an IUCN Red List Bird of Conservation Concern and listed on *Section 41* of the *Natural Environment & Rural Communities Act 2006*). External swift boxes can be supplied and installed by Hampshire Swifts <https://www.hampshireswifts.co.uk> and a new soffit design is also available.
16. Options for the proposed bird box and additional information is summarised in *Table 5.6.4.1* and the proposed enhancement measures are shown in *Figure 6* in *Section 6*. Additional bird boxes from *Appendix C Section 11.3* can also be installed on site.

17. This survey data is valid for a maximum of 12 months. If more than 12 months elapse after completion of all surveys, it may be advisable to conduct further survey work to obtain up-to-date information prior to commencement of construction to ensure protected species compliance.
18. According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), the site is neither designated nor immediately adjacent to any designated areas of nature conservation. However, there are designated sites nearby (see *Table 4.1.1.1* in *Section 4.1.1*). None of these will be directly affected by these small-scale works and all links will be maintained.
19. The site is within 5km of the River Itchen SAC (*c.*3830m west). According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been two bat European Protected Species (EPS) licences granted within *c.*2m of the site. Due to their location, it is unlikely that the current proposals will impact these bat populations.

INTRODUCTION

2.1 *Purpose of this report*

This report provides information from an ecological appraisal carried out by Hampshire Ecological Services Ltd for Mr & Mrs Moody in connection with a proposal to change the use of a C3 residential dwelling to a C1 guest accommodation with a first-floor rear and single-storey side and rear extensions at Sunnyside Cottage, Mortimers Lane, Fair Oak, Eastleigh, Hampshire, SO50 7EA (approximate Ordnance Survey Grid Reference SU 509 190). The location of the site is shown in *Figures 1 and 2 in Section 6*.

2.2 *Site description*

The site consists of a house as well as vegetation that has grown since clearance of the site two months prior to the survey date. There is paving along the west boundary as well as east of the house, and a mature *Acer campestre* (Field Maple) tree adjacent to the driveway at the south end of the site. There is a timber panel fence on the north and east boundaries, and a wire fence on the south and west boundaries. A UKHab Survey map showing the various habitats on site is given in *Figure 4 in Section 6*.

The site is on the north side of Mortimers Lane, on the east end of Fair Oak. The immediate surroundings consist of agricultural fields (arable and grassland) to the south and west, and an animal welfare centre adjacent to the north and east. In the wider landscape, there is a mosaic of rural housing and small villages, arable fields, grassland, ancient and semi-natural woodland and waterways to the north, east and south until towns are reached to the east (Bishop's Waltham) and south (Hedge End). In addition, there are networks of drains and streams as well as natural and balancing ponds in all directions of the site.

2.3 *Proposed activities*

This survey was carried out in connection with a proposal to change the use of a C3 residential dwelling to a C1 guest accommodation with a first-floor rear and single-storey side and rear extensions.

2.4 *Current planning status*

Planning permission has been applied for.

2.5 *Structure of this report*

This report is structured as follows:

- *Section 1* contains the executive summary;
- *Section 2* contains an introduction;
- *Section 3* describes the survey methods;
- *Section 4* describes the results;
- *Section 5* evaluates the findings;
- *Section 6* contains the figures including:
 - *Figure 1* gives aerial photographs showing the site location;
 - *Figure 2* gives an Ordnance Survey map showing the location of the site;
 - *Figure 3* gives a site plan;
 - *Figure 4* gives a map of the habitats on the site;
 - *Figure 5* gives the locations of ponds within 500m of the site boundary; and
 - *Figure 6* gives a plan of the proposed enhancement measures for the site.
- *Section 7* gives photographs of the site;
- *Section 8* lists the references;
- *Appendix A* lists key legislation and regulations; and
- *Appendix B* lists other enhancements for wildlife (for information, not part of the planning application).

METHODS

3.1 Desk study

The *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk) was used to search for designated sites on or adjacent to the site including Local Nature Reserves (LNRs), National Nature Reserves (NNRs), Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. The search area was 5km for SAC and SPA sites and 2km for LNRs, NNRs, Ramsar sites and SSSIs, as specified in Hampshire's *Biodiversity Checklist*. The search area is also 500m for Sites of Importance to Nature Conservation (SINCs) and ancient semi-natural and ancient replanted woodlands.

In addition, the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk) was used to search for granted European Protected Species (EPS) licences within 2km of the site.

A data search from the Hampshire Biodiversity Information Centre (HBIC) has not been commissioned in relation to this site.

3.2 Field survey

3.2.1 General

An ecological appraisal was carried out on this site. This type of survey is not designed to prove presence or absence of significant or protected species; it is used to highlight habitat that is suitable and to identify where further work to show presence or absence is required. However, in some circumstance's species can be ruled out because there is unsuitable habitat or barriers to inward migration.

Significant species were defined as follows:

- European Protected Species (listed on *Schedules 2 and 5 of the Conservation of Habitats & Species Regulations 2017*);
- nationally protected species under *Schedules 1, 5 and 8 of the Wildlife & Countryside Act 1981*, the *Protection of Badgers Act 1992* (as amended) and the *Deer Act 1991*;
- non-native pest species listed on *Schedule 9 of the Wildlife & Countryside Act 1981* (as amended);
- species listed as Critically Endangered, Endangered or Vulnerable on the *IUCN Red List*;
- all species listed on the *RSPB Birds of Conservation Concern 2015* as Red or Amber; and
- Nationally Rare or Nationally Scarce species.

3.2.2 Date, time and weather

An ecological appraisal was carried out during the daytime on the 14th May 2026. The weather was 11°C and damp with 90% cloud cover and a slight breeze (Beaufort scale 2).

3.2.3 *Personnel*

The survey was carried out by Finn Parker MSci (Hons) who is a qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and is experienced in carrying out ecological appraisals and surveys for protected species, including undertaking bat roost surveys. He is accredited under Bat Class Licence Registration number 2025-86835-CL18-BAT.

This report was reviewed by John Poland CEnv MCIEEM CBiol MSB, who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM), a Chartered Environmentalist (CEnv), a Chartered Biologist (CBiol) and multi-species licence holder with 25 years of experience in ecological consultancy and Victoria Russell MCIEEM who is also a full member of the CIEEM and multi-species licence holder with over 28 years of experience in ecological consultancy.

All staff adhere to the Chartered Institute of Ecology and Environmental Management's (CIEEM) *Code of Professional Conduct*.

3.2.4 *Botanical surveys*

UK Habitat Classification (UKHab)

The botanical survey in this report is based on the UK Habitat Classification (UKHab) survey methodology (UKHab, 2023) and involves the following elements: habitat mapping using a set of standard codes to indicate habitat types on a UKHab survey map; and descriptions of habitats and features of ecological or nature conservation interest relating to locations on the UKHab survey map.

3.2.5 *Animal surveys*

General

The habitat was assessed to determine whether or not it is suitable for those protected vertebrates that occur in the region. Initial surveys do not usually confirm species presence or absence, but obvious signs and incidental sightings of protected species would have been noted had they been encountered.

An assessment was made of the likelihood of protected vertebrates using the site. Taking into consideration the geographical region and habitat type, species and groups that might be encountered are:

- bats;
- great crested newts;
- badger;
- nesting birds; and
- reptiles.

According to aerial photographs (GoogleEarth™) and online Ordnance Survey 1:25,000 maps, there are no rivers on or adjacent to the site, therefore otter and water vole are not considered further.

The site has no hedgerows or scrub within the boundary, which are habitats that could support foraging and/or commuting dormice, and so this species is not considered further.

Details of initial survey methods for each of the relevant species that might have been encountered are given below and an overview of the legal protection of the species and groups is provided in *Appendix A*.

Bats

General

The survey for bats concentrated on identifying foraging opportunities and potential roost locations or hibernation sites.

Building assessment

Because bats are crevice-dwelling mammals it is often difficult to thoroughly inspect buildings for bats and evidence of bats without a destructive search, which is not generally legal, practical or acceptable. Examples are where bats roost between the roofing felt and tiles, around window frames and behind barge boards. These areas cannot be inspected, but a surveyor would know that bats might roost here because there are places where bats could gain entry. A pipistrelle bat is small enough to fit into a match box and can roost in gaps just 14-20mm wide.

The building was assessed for its **bat roost suitability** according to the following factors that influence the likelihood of bat roosting:

- Surrounding habitat: whether there are potential flight-lines and bat foraging areas nearby.
- Construction detail: the type and construction of architectural features such as voids, barge boards, soffit boxes, lead flashing, cavity walls and hanging tiles that could be used by roosting bats. Some construction details and materials are more favourable to bat occupation than others.
- Building condition: whether the building has no roof or has a sound roof without any potential bat access points.
- Internal conditions: bats favour sheltered locations with a stable temperature regime, protection from the elements and little wind/light/rain penetration.
- Potential bat access points: whether there is flight and crawl access.
- Potential roosting locations: the presence of bat-accessible voids, cracks and crevices.

The risk of bat roosts being present will be lower where structures have:

- Urban setting with little greenspace.
- Heavy disturbance.
- Small, cluttered roof void (particularly for brown long-eared).
- Modern construction with few gaps or crevices that bats can fly or crawl through (although pipistrelles may still be present).
- Prefabricated of steel or sheet materials.
- Active industrial premises.

The above list provides generic criteria and there are exceptions to consider. For example, pipistrelle roost sites are often found in modern housing estates and therefore the absence of bats from such locations should not always be assumed.

Following the internal and external inspections / visual inspections, the building are assigned a level of suitability for being used by roosting bats. This is based on the criteria in *Table 3.2.5.1* (Collins, 2023).

Table 3.2.5.1. Bat Roost Suitability.

Suitability	Description of roosting habitats	Description of commuting and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (<i>i.e.</i> a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (<i>i.e.</i> no habitats that provide continuous lines of shade/protection for flight-lines or generate/shelter insect populations available to foraging bats).
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 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.
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>i.e.</i> unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, <i>i.e.</i> not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland) or a patch of scrub.

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).	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. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Suitability	Description of roosting habitats	Description of commuting and foraging habitats
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 and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	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. 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. Site is close to and connected to known roosts.
*Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there 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).		

Tree assessment

Detailed surveys of individual trees were not carried out. However, features such as holes and crevices that could be used by roosting bats were noted and their overall bat roost suitability was assessed. If any mature trees are subsequently to be removed or if tree surgery (*e.g.* crown-lifting) is required, then a bat survey at an appropriate time of year may be required.

Following the visual inspections, the trees are assigned a level of suitability for being used by roosting bats, depending on the presence of potential roost features (PRFs). This is based on the criteria in *Table 3.1.5.2* (Collins, 2023).

Table 3.1.5.2. Suitability of trees to be used by roosting bats.

Suitability	Description
None	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF1	A tree with at least one PRF present where the PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitat
PRP2	A tree with at least one PRF present where the PRF is suitable for multiple bats and may therefore be used by a maternity colony.
PRF = potential roost feature	

Assessment of commuting and foraging habitat

Bats use a variety of habitats for foraging, in particular hedgerows, woods and water bodies, and roost in a range of structures including buildings, trees, bridges and caves. Areas that could be used for foraging were noted.

The vegetation within the site is assigned a level of suitability for being used by commuting and foraging bats. This is based on the criteria in *Table 3.2.5.3* (Collins, 2023).

Table 3.2.5.3. Bat commuting and foraging habitat.

Suitability	Description of commuting and foraging habitats
None	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).
Negligible*	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.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, <i>i.e.</i> not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland) or a patch of scrub.
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. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
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. 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. Site is close to and connected to known roosts.
*Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'.	

Great crested newt

All water bodies on the site or within 500m that could be used as breeding locations for this species were identified, and the suitability of terrestrial habitat for this species was considered. Great crested newts can travel up to 500m from pond to pond, and between ponds and terrestrial habitat. The suitability of terrestrial habitat was assessed with this in mind.

Badger

An initial assessment was carried out to identify areas that might be used by badger for commuting, foraging and sett-building within at least 30m of all areas potentially affected by the works (where access was possible). Evidence of badgers including setts, latrines, feeding signs and paths were searched for.

Birds

Habitat that might be used by nesting birds was identified. Different bird species use buildings, trees and shrubs, undergrowth or even open fields to nest. The suitability of the site for use by a range of bird species was assessed, giving consideration to factors such as cover, food, disturbance and other habitat requirements.

Widespread species of reptile

The site was assessed for widespread species of reptile, with particular attention paid to those features that could be used as basking areas (*e.g.* south-facing slopes), hibernation sites (*e.g.* banks, walls, piles of hardcore) and opportunities for foraging (rough grassland and scrub). The site was assessed for its suitability for each of the four widespread reptile species which have broadly similar habitat requirements. However, more specific requirements include the following (Beebee & Griffiths 2000):

- common lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to walls and pastures, although one of their favoured habitats is rough grassland;
- slow-worms (*Anguis fragilis*) use similar habitats to common lizards, and are often found in rank grassland, gardens and derelict land;
- grass snakes (*Natrix natrix*) have broadly similar requirements to common lizards with a greater reliance on ponds and wetlands, where they prey on common frogs; and
- adders (*Vipera berus*) use a range of fairly open habitats with some cover, but are most often found in dry heath.

Reptile activity is highly seasonal; they hibernate over the winter (October to March) and are active over the summer months. They become increasingly active as temperatures increase in spring, and in most years they are fully active by mid-April. Reproduction varies between species, but generally peaks in mid-summer when reptiles are at their most active. In late September/ October, activity begins to decrease as reptiles seek frost-free refuges for hibernation.

RESULTS

4.1 Desk study

4.1.1 Designated sites

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), the site is neither designated nor immediately adjacent to any designated areas of nature conservation. However, there are other designated sites nearby. These are listed in *Table 4.1.1.1*.

Table 4.1.1.1. Statutory designated sites; non-statutory designated sites and ancient semi-natural and ancient replanted woodlands within the designated search areas of the site.

Level of designation	Designation	Name	Distance & direction from site
International	SPA	-	-
	Ramsar	-	-
	SAC	River Itchen	c.3830m west
National	SSSI	-	-
	NNR	-	-
County	LNR	-	-
Local	SINC	Moplands Copse	c.475m south-east
	Ancient woodland	Stroud Wood	c.380m north-east
		Moplands Copse	c.475m south-east

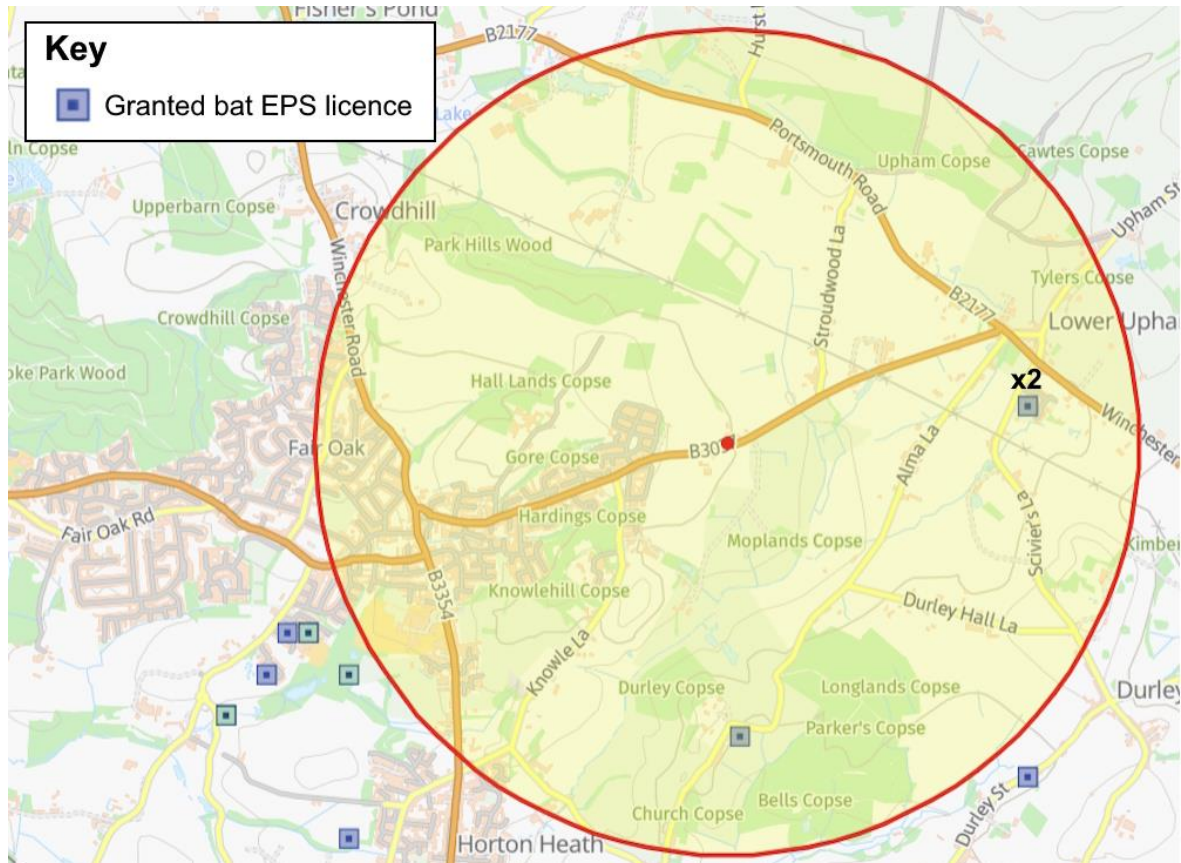
4.1.2 European Protected Species

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been three granted European Protected Species (EPS) licences within 2km of the site. These are listed in *Table 4.1.2.1*, and their locations are shown in *Figure 4.1.2.1*.

Table 4.1.2.1. Granted European Protected Species (EPS) licences within 2km of the site.

Species subject of licence	Type of habitat affected	Date licence was granted	Distance & direction from site
Common pipistrelle	Resting place	16/05/2016	c.1470m east
Great crested newt	Resting place	10/03/2016	
Common pipistrelle, soprano pipistrelle	Resting place	02/04/2015	c.1425m south

Figure 4.1.2.1. Location of sites with granted EPS licences within 2km of the site. The site location is shown by a red dot.



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4.2 Habitats and plant species

4.2.1 Habitats

The site consists of a house as well as vegetation that has grown since clearance of the site two months prior to the survey date. There is paving along the west boundary as well as east of the house and a mature *Acer campestre* (Field Maple) tree adjacent to the driveway at the south end of the site. There is a timber panel fence on the north and east boundaries, and a wire fence on the south and west boundaries.

The vegetation in the gardens consists of species common to ruderal and disturbed land and is primarily dominated by *Rumex crispus* (Curled Dock) and *Urtica dioica* (Stinging Nettle). Other species include *Alliaria petiolate* (Garlic Mustard), *Cirsium arvense* (Creeping Thistle), *Convolvulus arvensis* (Field Bindweed), *Equisetum arvense* (Field Horsetail), *Jacobaea vulgaris* (Ragwort), *Mentha* species (Mint), *Oxalis articulata* (Pink Sorrel), *Ranunculus repens* (Creeping Buttercup), *Rubus fruticosus* agg. (Bramble) and *Taraxacum* agg. (Dandelion).

There is a hedgerow with trees adjacent to the south and north boundary that is native and species-rich. Species include *Acer campestre* (Field Maple), *Carpinus betulus* (Hornbeam), *Crataegus monogyna* (Hawthorn), *Fraxinus excelsior* (Ash), *Quercus robur* (Pedunculate Oak) and *Carpinus betulus* (Hornbeam).

A UK Habitat classification (UKHab) map showing the location of the various habitats is given in *Figure 4* in *Section 6*.

4.2.2 *Plant species*

No plant species listed on *Schedules 8* or *9* of the *Wildlife and Countryside Act 1981* (as amended) were recorded on the site.

4.3 *Protected vertebrates*

4.3.1 *Bats*

Bat roost suitability of building

The construction details and photographs of the building are summarised in *Table 4.3.1.1*. Additional photographs showing the garden and adjacent habitat are given in *Section 7*.

Table 4.3.1.1. Summary of the building's construction details.

Type/Name	House
Description	A two-storey rendered building with a pitched, slate roof. Two sections are flat, felt roof.
No. of storeys	2
Roof type	Pitched and flat
Roof cladding	Slate and roofing felt
Ridge	Tile
Wall type	Rendered brick
Exterior	Lead-flashing and two chimneys (centre of ridges), bargeboards (north, east and west elevations).
Photos	North elevation 

Photos cont.	East elevation
	
	South elevation
	
	West elevation
	
Building dimensions	c.9.5m wide x c.7.5m long
Roof void description	Uncluttered and open to the first-storey of the house.
Frame	Wooden beams and ridge board
Roof lining	Bitumen roofing felt
Roof void dimensions	c.9.5m wide x c.7.5m long
Roof void height	c.1m
Potential roosting locations	Against the ridge boards.

	
Bat evidence	None
Bat suitability (not probability)	Negligible
Further surveys needed?	No

The roof of the building appears well-sealed and good condition. The roof slate is well-sealed and there are no visible gaps under the eaves (no soffits). There is one potential external roosting feature under the lead-flashing of the eastern chimney. Therefore, the building is classed as having negligible suitability to be used by roosting bats, following the criteria in *Table 3.2.4.1*. The location of the external roosting feature is illustrated in *Image 4.3.1.1*.

Image 4.3.1.1. Location of a potential external roosting feature on the south elevation of the house.



Bat roost suitability of trees

The *Acer campestre* (Field Maple) tree had no visible potential roost features. It appears too young to have formed crevices such as split bark that would provide potential roosting features for bats. The location of the tree is at *Target Note 1* on *Figures 3 & 4* in *Section 6* and is shown in *Photo 1* in *Section 7*.

Commuting and foraging habitat

The *Acer campestre* (Field Maple) on the site as well as the species-rich native hedgerows adjacent to the south and west boundaries provide suitable bat foraging habitat in the immediate vicinity of the building. The lines of trees and hedges adjacent to the boundaries and along the neighbouring agricultural fields connect to a network of hedges, tree-lines and woodland strips. These in turn connect the site to areas of high-quality foraging habitat in the wider landscape such as nearby ancient woodland (c.380m north-east and c.475m south-east) as well as several ponds (see *Figure 5* in *Section 6*). Therefore, the site has low-moderate commuting and foraging habitat, following the criteria in *Table 3.2.4.3*.

Bats follow linear landscape features such as lines of trees, hedges, buildings and waterways in order to commute from their roost sites to their feeding grounds. Likewise they use these features to navigate between feeding areas and alternative roosts.

4.3.2 Great crested newt

According to aerial photographs (GoogleEarth™) and online Ordnance Survey 1:25,000 maps there are two ponds within 250m of the site and a further six ponds within 500m. The locations of these ponds are shown in *Figure 5* in *Section 6*.

The vegetation on site has regrown to a significant height and provides suitable cover and therefore terrestrial habitat for great crested newts. In addition, the bases of the hedgerows adjacent to the south and west provide suitable terrestrial habitat.

There is one public record of great crested newts within c.2km of the site. This is c.1470m east.

4.3.3 Badger

No setts or evidence of badger was found during the survey.

4.3.4 Birds

The *Acer campestre* (Field Maple) as well as the trees and shrubs adjacent to the boundaries have the potential to support nesting birds during the breeding season.

4.3.5 Widespread species of reptile

The vegetation on site has regrown to a significant height and provides suitable cover and therefore foraging habitat for widespread species of reptile. In addition, there are several piles of debris from

scrub clearance in the front garden which provide suitable hibernation habitat for reptiles such as slow-worms. These are shown in *Photos 2-4* in *Section 7*.

5 ***INTERPRETATION AND EVALUATION***

5.1 ***Constraints on the survey***

5.1.1 *Constraints on survey data*

There were no constraints to the survey as the site visit was undertaken in May, which is an ideal time to carry out this type of assessment.

No specific surveys for *Schedule 9* species (such as *Fallopia japonica* Japanese Knotweed) were carried out. Such species may not be visible due to time or year if previously treated and removed. Only incidental records were made.

5.1.2 *Constraints on the mitigation, compensation and enhancement measures*

There is a limit to the amount of enhancement measures that are possible (and reasonable) on such a small householder site.

As the building has negligible bat roost suitability no mitigation or compensation measures are required.

5.2 ***Survey report expiry***

This survey data is valid for a maximum of 12 months. Therefore, if more than 12 months elapse it may be advisable to conduct further survey work to obtain up-to-date information to advise work, thereby ensuring protected species compliance.

Given the mobility of bats, it is recommended that a walkover of the site to update the survey information is undertaken prior to the development commencing, if this does not occur before the end of July 2027.

5.3 ***Legal context***

Habitat has been identified on site that is suitable for protected species. Different species are afforded different levels of protection; as detailed in *Appendix A*.

The site is not designated for its wildlife interest at an international, national or local scale.

5.4 ***Potential impacts of the proposed development***

5.4.1 *Desk study*

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), the site is neither designated nor immediately adjacent to any designated areas of nature conservation. However, there are designated sites nearby (see *Table 4.1.1.1* in

Section 4.1.1). None of these will be directly affected by these small-scale works and all links will be maintained.

The site is within 5km of the River Itchen SAC (c.3830m west). It is designated because it is a watercourse with *Ranunculus fluitantis* as well as the presence otter and of several protected invertebrates, fish including southern damselfly, freshwater crayfish, brook lamprey, Atlantic salmon and bullhead.

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been two bat European Protected Species (EPS) licences granted within c.2m of the site. Due to their location, it is unlikely that the current proposals will impact these bat populations.

5.4.2 *Habitats and plants*

The habitats and plant species observed on site are widespread and common and as such have no conservation importance from a botanical point of view.

No plant species listed on *Schedules 8 or 9 of the Wildlife and Countryside Act 1981* (as amended) were recorded on the site.

5.4.3 *Bats*

Bat roost suitability of buildings

No bats or evidence of bats was found and the slate roof appears well-sealed and good condition with no visible gaps under the eaves (no soffits). There is one minor potential external roosting feature under the lead-flashing of the eastern chimney, which will not be affected by the change of use of the building. Therefore, the building is classed as having negligible suitability to be used by roosting bats and the proposed works may commence without further survey or constraints regarding bats (subject to any planning constraints).

Bat roost suitability of trees

The *Acer campestre* (Field Maple) tree had no visible potential roost features. It appears too young to have formed crevices such as split bark that would provide potential roosting features for bats. Therefore, the tree may be felled without further survey or constraint regarding bats (subject to any planning constraints).

Foraging and commuting habitat

The *Acer campestre* (Field Maple) on the site as well as the species-rich native hedgerows adjacent to the south and west boundaries provide suitable bat foraging habitat in the immediate vicinity of the building. The lines of trees and hedges adjacent to the boundaries and along the neighbouring agricultural fields connect to a network of hedges, tree-lines and woodland strips. These in turn connect the site to areas of high-quality foraging habitat in the wider landscape such as nearby ancient

woodland (c.380m north-east and c.475m south-east) as well as several ponds (see *Figure 5* in *Section 6*). Therefore, the site has low-moderate commuting and foraging habitat. Woodland and waterways provide high-quality foraging habitat for a number of different species of bat. These areas will be unaffected by the development and all links will be maintained. The connectivity around the edges of the site (the adjacent trees and hedges) will be retained and as such no impact to commuting and foraging bats (and hence bat populations in the local area) is anticipated.

Changes in lighting can affect foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto retained vegetation (particularly the trees), and security lights should operate on a timer, to avoid any negative impact on bats.

Any lighting installed should avoid spillage of greater than 0.1 lux (typical moonlight/ cloudy sky) onto vegetation, particularly the boundaries. This is because bats are very sensitive to light.

The use of non-UV LED lighting (preferably using warm spectrum wavelengths) is strongly recommended to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.

5.4.4 *Great crested newt*

According to aerial photographs (GoogleEarth™) and online Ordnance Survey 1:25,000 maps there are two ponds within 250m of the site and a further six ponds within 500m. The locations of these ponds are shown in *Figure 5* in *Section 6*.

The vegetation on site has regrown to a significant height and provides suitable cover and therefore terrestrial habitat for great crested newts. In addition, the bases of the hedgerows adjacent to the south and west provide suitable terrestrial habitat. However, these ponds are separated from the site by Mortimers Lane and private driveways, where there is abundant suitable terrestrial habitat close to the ponds. This, combined with the fact that two months before the survey the site had been cleared, means it is unlikely that great crested newt are present on site and as such no further surveys are proposed.

As a precautionary measure, the piles of debris and log piles will be cleared under ecological supervision. The piles should only be removed during suitable weather between March/ April to September (inclusive). The grassland should also be subject to a 2-stage cut to avoid injuring any newts in the highly unlikely event they are present. The first cut should be to c30cm above ground level before a second typical mowing cut to near ground level at least 48 hrs later.

If any great crested newts are found, works will stop immediately and a licence applied for subject to the requirements of Natural England.

5.4.5 *Badger*

Areas within 30m of development activities are usually searched for setts (where access is possible) as former guidelines suggest badgers and their setts could be disturbed by work using heavy

machinery within 30m of a badger sett, light machinery within 20m, and light work (such as digging) within 10m.

As no badger setts or evidence of badger use were found on site, works are free to proceed without further regard to this species, although if a badger sett is subsequently discovered within 30m of the proposed works then it may require a licence from Natural England to proceed. Guidance to what may be classed as disturbance to a badger (when occupying a sett) can be found at:

<https://www.gov.uk/guidance/badgers-protection-surveys-and-licences>.

5.4.6 *Birds*

The *Acer campestre* (Field Maple) tree as well as the trees and shrubs adjacent to the boundaries have the potential to support nesting birds during the breeding season. The destruction of active bird nests is prohibited under the *Wildlife and Countryside Act 1981* (as amended). Therefore, any affected vegetation with the potential to support nesting birds should be cut to near ground level (approximately 30cm) outside the bird breeding season (which is late February to August inclusive). If this is not possible, and vegetation has to be removed during the nesting season, then it should be inspected (by an ecologist) for nests immediately prior to removal of the vegetation.

If any active nests are found prior to or during works, a 5m buffer zone should be established around them and be temporarily fenced off to prevent plant or personnel disturbing the nest until the end of the breeding bird season (or until the nest is no longer in use *i.e.* the young have fledged and left the nest).

5.4.7 *Widespread species of reptile*

The vegetation on site has regrown to a significant height and provides suitable cover and therefore suitable foraging habitat for widespread species of reptile. In addition, there are several piles of debris from scrub clearance in the front garden which provide suitable hibernation habitat for reptiles such as slow-worm. However, the gravelboard of the fence on the north and east boundaries, as well as Mortimers Lane to the south, separates the site from much of the suitable habitat in the wider landscape.

Due to the small size of the site and its partial isolation from the wider landscape, it is likely that any reptiles present in the local area would be using the hedgerows and/ or nearby grasslands which provide higher-quality foraging and hibernation habitat compared with the site. Given the low impact of the scheme, it is unlikely that reptiles will be impacted even if they are present within the adjacent and nearby habitat and no further surveys are proposed.

As a precautionary measure, the piles of debris and log piles will be cleared under ecological supervision with any reptiles found being moved to nearby suitable habitat (such as the hedgerow on the west boundary). The piles should only be removed during suitable weather and when reptiles are active, which is March/ April to September (inclusive). The grassland should also be subject to a 2-stage cut to avoid injuring any reptiles in the unlikely event they are present. The first cut should be

to c30cm above ground level before a second typical mowing cut to near ground level at least 48 hrs later.

5.5 *Further survey*

No further surveys are proposed.

5.6 *Enhancement measures*

5.6.1 *General*

Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) have to deliver at least 10% biodiversity net gain (BNG) (required since January 2024 and since April 2024 for small sites). BNG will be measured using Defra's biodiversity metric and habitats will need to be secured for at least 30 years. This sits alongside:

- a strengthened legal duty for public bodies to conserve and enhance biodiversity,
- new biodiversity reporting requirements for local authorities, and mandatory spatial strategies for nature: Local Nature Recovery Strategies or 'LNRS'.

From the December 2024, the Government published the revised National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2024). The document sets out the government's planning policies for England and how these are expected to be applied. This replaces a previous version which was published in July 2021. It states: "*at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).*"

It also states "*opportunities to incorporate biodiversity in and around developments should be encouraged*" as part of the consideration for "*presumption in favour of sustainable development*".

The updated National Planning Policy Framework (NPPF) also states (paragraph 170) that: "*Planning Policies and decisions should contribute to and enhance the natural and local environment by... minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*"

The updated Planning Policy Guidance (PPG) for the Natural Environment, updated in July 2019 states (paragraph 020) that:

"Net gain in planning describes an approach to development that leaves the natural environment in a measurably better state than it was beforehand."

The updated PPG provides examples of how biodiversity net gain can be achieved. Measures suggested include "creating new habitats" and "enhancing existing habitats".

It is proposed that the enhancements to provide biodiversity net gain will also be in the form of the following:

- new bat roost provision;
- lighting restrictions (for both bats and other wildlife); and

- new bird nesting provision.

These enhancements are detailed in the following sections.

Other enhancements for wildlife that the owners of the site may choose to employ are given in *Appendix C*. However, these are not proposed as enhancements for the purposes of the planning application, but only for information purposes.

5.6.2 Habitats

Heras fencing or similar should be used to protect the roots of the trees and hedges adjacent to the south and west boundaries during construction. The guidance provided in BS 5837 *Trees in relation to Construction* provides further advice on minimising the impact to retained trees on a development site.

5.6.3 Bats

Due to the rural location of the site and good connecting foraging and commuting habitat, it is proposed that the site be enhanced for bats. At least one bat box (*e.g.* Vivara Pro WoodStone Bat Box, Beaumaris Woodstone or similar) should be attached to the exterior wall of an existing part of the building placed as high as possible (ideally 2.5m or above, facing south or south-east) with a clear exit path.

Lighting

Changes in lighting can affect foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto the bat box exit point and retained vegetation (particularly the trees). Any lighting installed should avoid spillage of greater than 0.1 lux (typical moonlight/ cloudy sky) near to or directly onto the roost entrances and vegetation so that light disturbance is not a problem. This is because lighting can impact bat populations directly by disturbing roosts and reducing their foraging area, or indirectly by severing commuting routes from roosts. Therefore, the following (modified from *Bats and lighting in the UK* (ILP 2018)) should be undertaken:

- **Aim of light** The light should be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. This lit area must avoid being directed at, or close to, any retained vegetation. A shield or hood can be used to control or restrict the area to be lit. Avoid illuminating at a wider angle as this will be more disturbing to foraging and commuting bats, as well as people and other wildlife.

For any security lighting, the following should also apply:

- **Power** It is rarely necessary to use a lamp of greater than 2000 lumens (150W) in security lights. The use of a higher power is not as effective for the intended function and will be more disturbing for bats.
- **Movement sensors** Many security lights are fitted with movement sensors which, if well installed and aimed, will reduce the amount of time a light is on each night. This is more easily achieved in a system where the light unit and the movement sensor are able to be separately aimed.

- **Timers** If the light is fitted with a timer this should be adjusted to the minimum to reduce the amount of 'lit time'.
- **Alternatives** The requirement for security lighting in each instance should be carefully considered and only used where absolutely necessary to deter crime.

The use of non-UV LED lighting (preferably using warm spectrum wavelengths) is strongly recommended to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.

5.6.4 Birds

At least one swift box will be attached to the exterior of the house. These boxes are also suitable for house sparrows which are also an IUCN Red List Bird of Conservation Concern and listed on *Section 41* of the *Natural Environment & Rural Communities Act 2006*). External swift boxes can be supplied and installed by Hampshire Swifts <https://www.hampshireswifts.co.uk> and a new soffit design is also available. Options for the proposed bird box and additional information is summarised in *Table 5.6.4.1*. Additional bird boxes from *Appendix C Section 11.3* can also be installed on site.

Table.5.6.4.1. Bird box to be erected within the site with additional details on positioning to increase chances of occupancy.

Type (example)	Typical species	No.	Height	Additional information
Options below: Woodstone swift façade nest box  Swift boxes from Hampshire Swifts 	Swifts	1	≥ 5m	• Either incorporate into the build structure or mounted on a building. • Position out of direct sunlight (below eaves on the north elevation), away from windows and in a straight line. • Should be in an open area so that it is less accessible to predators and birds are not obstructed as they leave the nest.

5.6.5 Amphibians, reptiles and hedgehogs

Any new fencing will have 15cm x 15cm gaps beneath to allow wildlife such as reptiles, amphibians and hedgehogs to access the landscaping. This could be achieved by removing all or part of the baseboard/ gravelboard.

5.7 Requirement for Natural England licences

5.7.1 European Protected Species (EPS) licences

A bat European Protected Species (EPS) licence or Bat Earned Recognition (BER) licence or Bat Mitigation Class Licence (if qualifying) site registration from Natural England is not necessary before work commences on the house and before felling the *Acer campestre* (Field Maple). In the

unlikely event that bats are found during works, work will stop immediately and a bat licence will be applied for.

If great crested newts are subsequently found, or the scope of work increases, further survey work may be required and a licence may be necessary, or an application will be made to join Hampshire's district level licensing scheme run by NatureSpace Partnership.

A licence from Natural England permits activities that may otherwise be offences under *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. It cannot be applied for on a precautionary basis.

Survey data supporting licence applications must be up-to-date *i.e.* have been conducted within the current or most recent optimal survey season. Therefore, if licensable work is delayed until, during or after the next survey season, updated survey(s) will be required to support an application.

Natural England takes a minimum of 30-60 working days to process licence applications following receipt of all the relevant documentation. This includes an application form and a Method Statement. The latter includes a detailed mitigation strategy to eliminate or reduce impacts.

It is not possible to apply for a licence until full planning permission has been granted and any conditions relating to wildlife fulfilled, although Local Planning Authorities usually request the information prior to determining a planning application request. Additional time will be required where any revisions to a proposed mitigation strategy are necessary to obtain the licence.

5.7.2 *Protection of Badgers Act (1992) licences*

As no setts have been identified within (or close to) the site boundary, a badger licence is currently not required.

A licence permits activities that may otherwise be offences under the *Protection of Badgers Act 1992*.

Natural England takes a minimum of 30 working days to process licence applications following receipt of all the relevant documentation.

It is not possible to apply for a licence until full planning permission has been granted and any conditions relating to wildlife fulfilled, although Local Planning Authorities usually request the information prior to determining a planning application request. Additional time will be required where any revisions to a proposed mitigation strategy are necessary to obtain the licence.

Figure 1. Aerial photographs showing the location of the site.



Figure 2. Ordnance Survey map showing the location of the site (as indicated by the red arrow).



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Figure 3. Plan showing the site boundary outlined in red.

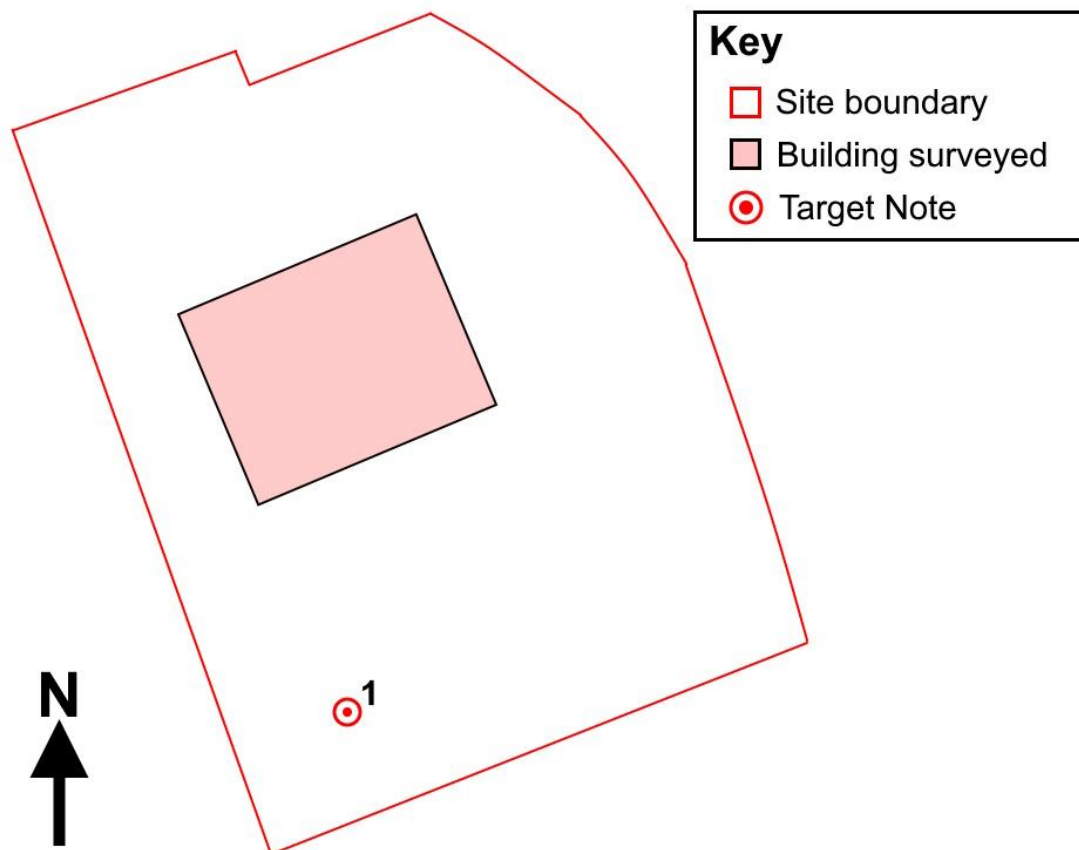


Figure 4. UK Habitat Classification (UKHab) survey map showing the habitats on site.

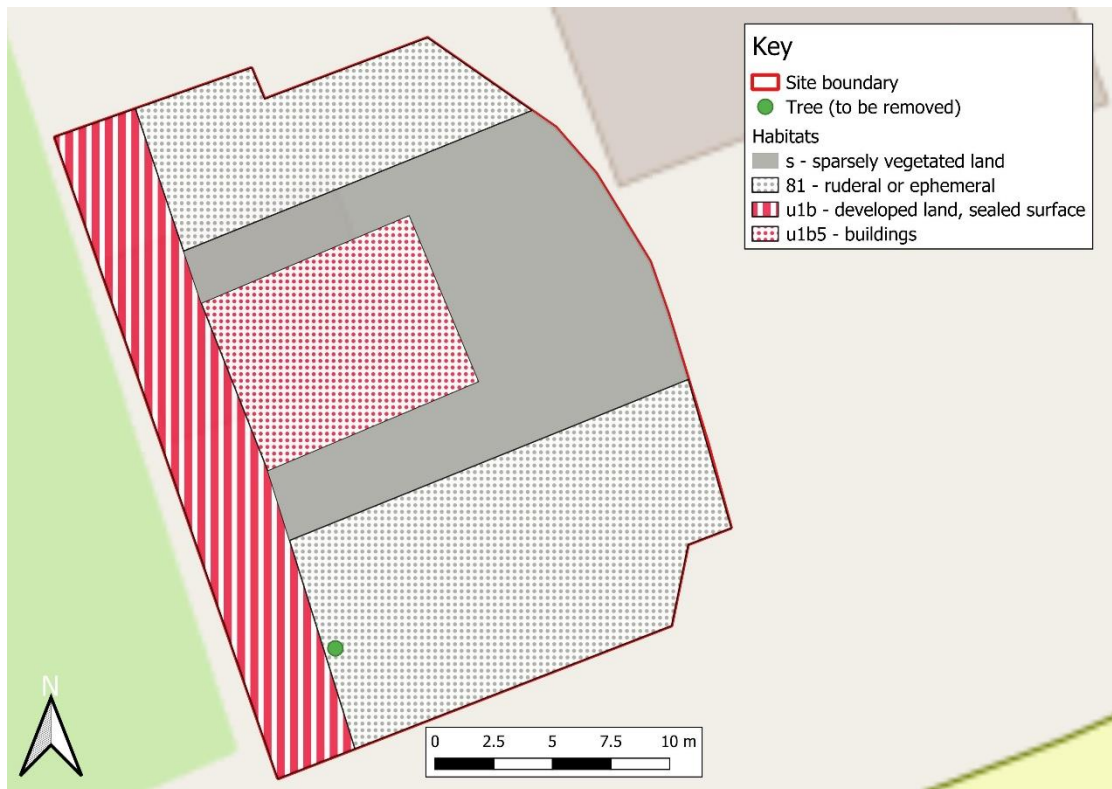
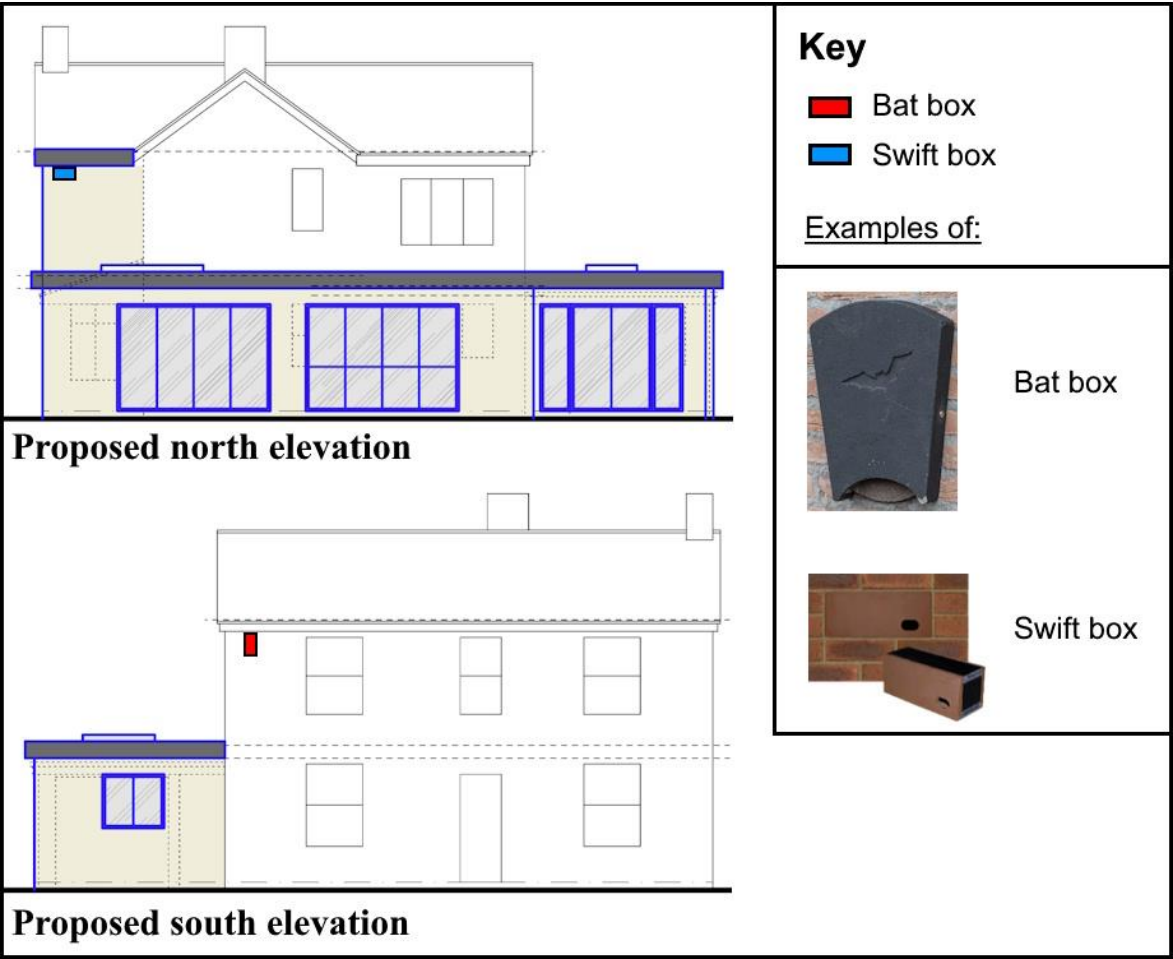


Figure 5. Aerial photograph showing the location of ponds within 250m (orange) and 500m (red) of the site boundary.



Figure 6. Plan showing the indicative locations of the proposed enhancement measures (not to scale and enhancement features much smaller than shown, just enlarged for clarity).



PHOTOGRAPHS

Photo 1. An Acer campestre (Field Maple) by the driveway at the south end of the site. This provides foraging habitat for bats and suitable nesting habitat for birds. Its location is at Target Note 1 on Figure 3 in Section 6.



Photo 2. Two small log piles in the front garden. These provide suitable habitat for hibernating reptiles.



Photo 3. A hedgerow with trees adjacent to the west boundary. This provides commuting and foraging habitat for bats and suitable nesting habitat for birds.



Photo 4. Fraxinus excelsior (Ash) and Quercus robur (Pedunculate Oak) adjacent to the south boundary. These provide good foraging habitat for bats and suitable nesting habitat for birds.

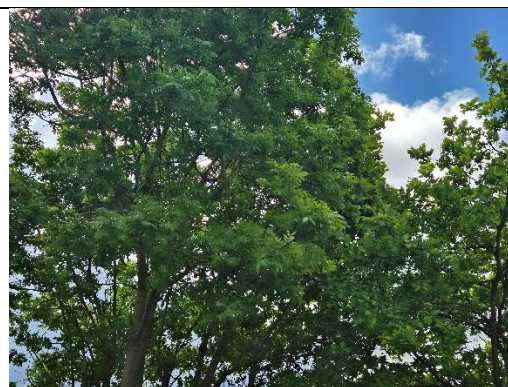
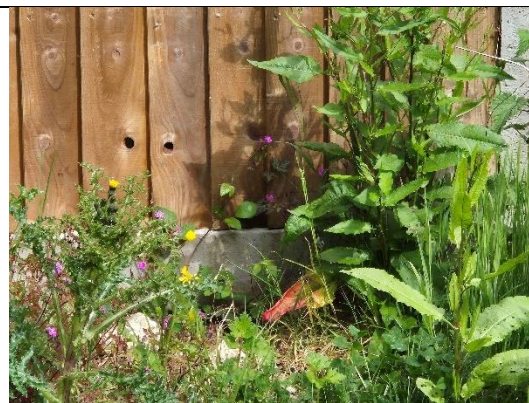


Photo 5. A hedgerow adjacent to the west boundary connects the site with grassland that provides suitable habitat for a range of protected species.



Photo 6. A solid gravelboard on the north and east boundaries that prevents animals such as reptiles, great crested newt and hedgehogs from accessing the site.



Beebee, T. and Griffiths, R. (2000). *Amphibians and Reptiles*. New Naturalist Series 87. Harper Collins, London.

Collins, J. (ed) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, 4th edition. The Bat Conservation Trust, London.

HMSO (1981). *Wildlife and Countryside Act 1981*. HMSO, London.

HMSO (1992). *The Protection of Badgers Act*. HMSO, London.

HMSO (2000). *Countryside and Rights of Way Act*. HMSO, London.

HMSO (2019). *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. HMSO, London.

Institute of Lighting Professionals (2023). *Bats and artificial lighting in the UK*. Institute of Lighting Professionals, Warwickshire.

Ministry of Housing, Communities & Local Government (2024). *National Planning Policy Framework*. Ministry of Housing, Communities & Local Government, London.

Multi-Agency Geographic Information for the Countryside (2008). www.magic.gov.uk. Accessed 13/05/2026.

UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>).

APPENDIX A: PROTECTED SPECIES LEGISLATION**9.1 General**

This section briefly describes the legal protection afforded to the protected species identified in this report. 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.

9.2 Bats

All species of British bat are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CROW Act). This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst it occupies a bat roost.

Bats are also European protected species listed on *Schedule 2* of the *Conservation of Habitats & Species Regulations 2017* which gives them full protection under *Regulation 43*. This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat (in such a way as to be likely to significantly affect: (i) the ability of a significant group of bats to survive, breed or rear/nurture their young; or (ii) the local distribution or abundance of the species concerned);
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present (bats tend to reuse the same roost).

Several species of bat are included as a Priority Species in the UK Biodiversity Action Plan (UKBAP - JNCC (2003)) and also as species of principal importance for the conservation of biological diversity in England under *Section 74* of the CROW Act.

All species of British bat are also protected under *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). This protection relates specifically to trapping and direct pursuit of the species.

9.3 Great crested newt

Great crested newt (*Triturus cristatus*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receives full protection under *Section 9*. This species is also listed as a European Protected Species on *Schedule 2* of the *Conservation of Habitats & Species Regulations*

2017, which gives it full protection under *Regulation 43*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRow Act).

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

The great crested newt is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and also as a species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRow Act.

9.4 *Badger*

Badger (*Meles meles*) is protected in Britain under the *Protection of Badgers Act 1992* (as amended) and *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended).

The legislation affords protection to badgers and badger setts, and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a badger sett; or
- to disturb a badger when it is occupying a sett.

Guidance to what may be classed as disturbance to a badger (when occupying a sett) can be found at: <https://www.gov.uk/guidance/badgers-protection-surveys-and-licences>

9.5 *Birds*

9.5.1 *Birds - general protection*

All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the CRow Act.

The legislation makes it 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.

9.5.2 *Birds - specially protected species*

Certain species of bird are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4)* and *1(5)* of the Act. The protection was

extended by the CRow Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

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

9.6 *Widespread species of reptile*

Common lizard (*Zootoca 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 CRow Act.

Under the above legislation it is an offence to:

- intentionally or deliberately kill or injure any individual of such a species; or
- sell or attempt to sell any part of the species alive or dead.

9.7 *European Protected Species Licences*

Where it is necessary to carry out an action that could result in an offence under the *Conservation of Habitats & Species Regulations 2017* it is possible to apply for a European Protected Species (EPS) licence from Natural England. Licences are only issued where Natural England are satisfied that three derogation tests are met. These are that the activity is for **imperative reasons of overriding public interest**, that there must be **no satisfactory alternative** and that **favourable conservation status of the species must be maintained**.

Consideration of these three derogation tests was previously left to Natural England as part of their deliberations on whether to grant a licence for the development activity after a planning consent has been issued. However, the regulations now require that **all** public bodies, *i.e.* **Local Planning Authorities** (LPAs), have regard to the requirements of the European Habitats Directive when carrying out their functions. As a result, LPAs **must** address the three derogation tests when considering a planning application that could impact upon any European Protected Species (EPS).

9.8 *National planning context*

9.8.1 *General*

Surveys should be completed in line with Natural England's *Standing Advice for Local Authorities* (<http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/default.aspx>), which states:

- Natural England will not comment on applications that are submitted without the relevant protected species surveys if there are no other issues (*i.e.* in relation to SSSIs or landscape).
- Natural England will not comment on scoping surveys that recommend further surveys where these have not been undertaken and submitted with the scoping reports.

In addition to the above, *Section 40* of the *Natural Environment and Rural Communities Act (2006)* imposes a new duty on all public authorities to have regard for biodiversity.

9.8.2 Biodiversity Net Gain (BNG)

Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) have to deliver at least 10% biodiversity net gain (BNG) (required since January 2024 and since April 2024 for small sites). BNG will be measured using Defra’s biodiversity metric and habitats will need to be secured for at least 30 years. This sits alongside:

- a strengthened legal duty for public bodies to conserve and enhance biodiversity,
- new biodiversity reporting requirements for local authorities, and mandatory spatial strategies for nature: Local Nature Recovery Strategies or ‘LNRS’.

From the December 2024, the Government published the revised National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2024). The document sets out the government’s planning policies for England and how these are expected to be applied. This replaces a previous version which was published in July 2021. It states: *"at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11)."*

Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

- an economic objective;
- a social objective; and
- an environmental objective.

The environmental objective is to *“contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy”*.

Planning policies and decisions should contribute to and enhance the natural and local environment by *“protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)”* and *“minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”*.

If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted.

Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

It states that "*development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity*".

It should be noted that the "*presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site*".

The NPPF also encourages "*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*" and aims to "*promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity*". This applies to non-statutory designated sites including Sites of Importance for Nature Conservation (SINCs) and equivalent county wildlife sites.

Early engagement with all necessary stakeholders, including expert bodies, is encouraged by the NPPF.

These are not proposed as enhancements for the purposes of the planning application, but only for information purposes.

10.1 *Lawn seed mix composition*

The seed mixes in *Table 10.1.1.* are from Emorsgate Seeds and are suitable for lawns. Emorsgate are only given as an example and a local supplier is preferable. The mixes contain slow growing grasses, some with a selection of wildflowers that respond well to regular short mowing. The EG9 grass mixture for hedges and woodland contains a selection of grasses that are tolerant of a degree of shade.

Table 10.1.1. Emorsgate seed mix species composition.

EL1	
Species	Common Name
Flowering Species	
<i>Galium verum</i>	Lady's Bedstraw
<i>Leontodon hispidus</i>	Rough Hawkbit
<i>Leucanthemum vulgare</i>	Oxeye Daisy
<i>Lotus corniculatus</i>	Birdsfoot Trefoil
<i>Primula veris</i>	Cowslip
<i>Prunella vulgaris</i>	Selfheal
<i>Ranunculus acris</i>	Meadow Buttercup
<i>Trifolium pratense</i>	Wild Red Clover
Grasses	
<i>Agrostis capillaris</i>	Common Bent
<i>Cynosurus cristatus</i>	Crested Dogtail
<i>Festuca rubra</i>	Slender-creeping Red-fescue
<i>Phleum bertolonii</i>	Smaller Cat's-tail
EG1	
Species	Common Name
<i>Agrostis capillaris</i>	Common Bent
<i>Cynosurus cristatus</i>	Crested Dogtail
<i>Festuca rubra</i>	Slender-creeping Red-fescue
<i>Phleum bertolonii</i>	Smaller Cat's-tail
<i>Poa pratensis</i>	Smooth-stalked Meadow-grass
EG9	
Species	Common Name
<i>Agrostis capillaris</i>	Common Bent
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass
<i>Brachypodium sylvaticum</i>	False Brome
<i>Cynosurus cristatus</i>	Crested Dogtail

<i>Deschampsia cespitosa</i>	Tufted Hair-grass
<i>Festuca rubra</i>	Red Fescue
<i>Poa nemoralis</i>	Wood Meadow-grass

10.2 Ornamental planting to attract wildlife

Plants that attract insects are generally helpful and trees, shrubs and flowering plants can provide cover for wildlife. Therefore, to enhance the ecological value of the site, any replacement landscaping in the gardens should incorporate a mixture of native and non-native species of value to wildlife. This mixture will be planted to encourage a diversity of insects, which in turn will attract different species. Flowers that bloom throughout the year, including both annuals and herbaceous perennials, are beneficial. Night-flowering blossoms attract night-flying insects, which in turn provide prey for bats. Examples of suitable plant species that could be planted to encourage wildlife include those in *Tables 10.2.1. and 10.2.2.* Approximate flowering periods are listed in the tables.

Table 10.2.1. Native and non-native species that could be incorporated into the landscaping.

Species	Common Name	Approximate flowering period
<i>Achillea millefolium</i>	Yarrow	Early summer
<i>Aubretia</i> species	Aubretia	Spring to early summer
<i>Berberis darwinii</i>	Darwin's Barberry	Spring
<i>Iberis sempervirens</i>	Candytuft	Summer to autumn
<i>Centaurea montana</i>	Cornflower	Spring to summer
<i>Centaurea scabiosa</i>	Knapweed	Summer to autumn
<i>Centranthus ruber</i>	Red valerian	Summer to autumn
<i>Cornus sanguinea</i>	Dogwood	Summer
<i>Dianthus barbatus</i>	Sweet William	Summer
<i>Echinacea</i> species	Echinacea	Summer to autumn
<i>Erysimum</i> species	Wallflowers	Spring to early summer
<i>Glebionis segetum</i>	Corn marigold	Spring to summer
<i>Hebe</i> species	Hebes	Summer to autumn
<i>Hedera helix</i>	Ivy	Autumn
<i>Hesperis matronalis</i>	Dame's-violet	Spring to summer
<i>Hyacinthoides non-scripta</i>	English Bluebell	Spring
<i>Hylotelephium spectabile</i>	Ice plant 'Pink lady'	Early autumn
<i>Hypericum</i> species	St John's wort	Spring
<i>Ilex aquifolium</i>	Holly	Spring to summer
<i>Jasminum officinale</i>	Common White Jasmine	Summer to autumn
<i>Lavandula angustifolia</i>	Garden Lavender	Summer
<i>Leucanthemum vulgare</i>	Ox-eye daisy	Summer
<i>Limnanthes douglasii</i>	Poached egg plant	Summer
<i>Lonicera caprifolium</i>	Perfoliate Honeysuckle	Summer
<i>Lonicera etrusca</i>	Italian Honeysuckle	Summer to autumn
<i>Lonicera japonica</i>	Japanese Honeysuckle	Spring

<i>Lonicera periclymenum</i>	Honeysuckle	Summer to autumn
<i>Lunaria annua</i>	Honesty	Spring
<i>Malus domestica</i>	Apple	Spring
<i>Malus sylvestris</i>	Crab Apple	Spring
<i>Malva</i> species	Mallow	Summer to autumn
<i>Matthiola longipetala</i>	Night-scented stock	Summer
<i>Myosotis sylvatica</i>	Wood forget-me-not	Spring
<i>Nicotiana</i> species	Tobacco plant	Summer
<i>Oenothera</i> species	Evening primroses	Summer to autumn
<i>Papaver rhoeas</i>	Corn poppy	Summer
<i>Phacelia</i> species	Phacelia	Summer to autumn
<i>Primula vulgaris</i>	Primrose	Spring
<i>Rosa</i> species	Rose	Summer
<i>Rubus fruticosus</i> agg.	Bramble	Spring to summer
<i>Saponaria officinalis</i>	Soapwort	Summer
<i>Saxifraga fortunei</i>	Cherry pie	Summer to autumn
<i>Scabiosa</i> species	Scabious	Summer
<i>Silene dioica</i>	Red campion	Spring
<i>Silene noctiflora</i>	Night-scented Catchfly	Summer to autumn
<i>Silene vulgaris</i>	Bladder Campion	Summer
<i>Verbena</i> species	Vervain	Summer to autumn
<i>Viburnum lantana</i>	Wayfaring-tree	Spring to summer
<i>Viburnum opulus</i>	Guelder-rose	Summer

Table 10.2.2. Examples of suitable garden herbs that could be planted in and around the site to encourage wildlife.

Species	Common Name	Approximate flowering period
<i>Angelica</i> species	Angelica	Summer to autumn
<i>Borago officinalis</i>	Borage	Spring to early autumn
<i>Calendula officinalis</i>	English marigolds	Summer to autumn
<i>Foeniculum vulgare</i>	Fennel	Summer to early autumn
<i>Hesperis matronalis</i>	Dame's-violet, often sold as Sweet Rocket	Spring to summer
<i>Hyssopus officinalis</i>	Hyssop	Summer to early autumn
<i>Matthiola bicornis</i>	Night-scented Stock	Spring to autumn
<i>Melissa officinalis</i>	Lemon balm	Summer
<i>Monarda</i> species	Bergamot	Summer to early autumn
<i>Nicotiana</i> species	Tobacco-plant	Spring to autumn
<i>Oenothera</i> species	Evening-primroses	Summer
<i>Origanum vulgare</i>	Marjoram	Summer
<i>Rosmarinus officinalis</i>	Rosemary	Spring
<i>Saponaria officinalis</i>	Soapwort	Summer to autumn
<i>Silene noctiflora</i>	Night-scented Catchfly	Summer to autumn

<i>Silene vulgaris</i>	Bladder Campion	Spring to summer
<i>Tanacetum parthenium</i>	Feverfew	Summer to early autumn
<i>Thymus</i> species	Thyme	Summer

10.3 Bird boxes

It is not advisable to place many boxes with identical dimensions, because individuals of the same species may not tolerate each other's presence, especially in built-up areas with limited food resources.

Table 10.3.1. Bird boxes with additional details on siting them to increase chances of occupancy.

Type/ example	Typical species	Height	Additional information
Vivara Pro WoodStone House Sparrow Nest Box 	House sparrows	≥ 2m	• Can either be incorporated into the build structure or mounted onto a building. • Should be fixed onto a sturdy building, not onto fences or garden sheds due to its weight. • Position away from windows. • Position out of direct sunlight (below eaves on the north elevation), especially if not built into the build structure.
Options below: Vivara Pro UK visible build-in swift box  Vivara Pro UK rendered build-in swift box  Swift box – brick facing  Ibstock Eco-habitat  Woodstone swift façade nest box	Swifts	≥ 5m	• Can either be incorporated into the build structure or mounted onto a building. • Position out of direct sunlight (below eaves on the north elevation), away from windows and in a straight line. • Should be in an open area so that it is less accessible to predators and birds are not obstructed as they leave the nest.

 Swift boxes from Hampshire Swifts			
Vivara Pro Seville 32mm Woodstone Nest Box 	Blue tits, great tits	2-4m	- Position on a building or tree, angled north-east (away from prevailing winds) and tilt forward slightly. - Chances of occupation can be increased by positioning boxes near vegetation.
Vivara Pro Barcelona WoodStone Open Nest Box 	Robins, wrens	≤ 2m	- Mount on a tree or large shrub - Conceal amongst foliage to keep well-hidden from predators.
Vivara Pro Seville 28mm Woodstone Nest Box 	Blue tits, coal tits	2-4m	- Position on a building or tree, angled north-east (away from prevailing winds) and tilt forward slightly. - Chances of occupation can be increased by positioning boxes near vegetation.
WoodStone Swallow Nest Bowl (Plywood board mounted) 	Swallows	≥ 2m	- Mount within a building with an open door or window - Leave a distance of at least 6cm between the top of the nest and the ceiling.
Vivara Pro WoodStone House Martin Nest 	House martins	≥ 5m	- Position out of direct sunlight (below eaves on the north elevation), away from windows and in a straight line. - Should be in an open area so that it is less accessible to predators and birds are not obstructed as they leave the nest.

Integrated barn owl roost/ false dormer box 	Barn Owl	$\geq 3\text{m}$	• Integrated into the sloped roof ideally as a false dormer. • The base of the internal space must be flat and at least 45cm below the entrance hole. • There must be an easy-to-grip platform outside the hole for fledglings to stand. • The box must not allow owls access into the garage/ carport inside the building to prevent disturbance by human activity. • A closed access hatch into the box from inside the building is advised, to allow essential clearance of built up nest material or waste.
Barn Owl Trust Nest Box 	Barn Owl	$\geq 5\text{m}$	• Mounted on a 'telegraph style' pole. • Best positioned facing open grassland for foraging opportunities and away from the prevailing weather.

10.4 Insects

Insect boxes (hotels or towers) and bricks should be installed in a sunny location close to vegetation. Bee-friendly and insect friendly plants should be located nearby so that the bees and insects using the boxes have food. Lavender, honeysuckle and buddleia are all pollinator-friendly plants. The boxes suggested in *Table 10.4.1* (especially the BeePot planter) have been chosen so that they form an attractive feature as part of the landscaping. Solitary bees are non-aggressive and as such are suitable for gardens with pets and children.

Table 10.4.1. Examples of insect boxes that could be erected on site.

Type	Species	Height	Additional information
	Solitary bees	>1m from the ground	The Bee Brick should be positioned in a warm sunny spot, in a south-facing wall, with no vegetation in front of the holes
	Solitary bees	>1m from the ground	The BeePot should be positioned in a warm sunny spot, preferably on a south-facing wall, with no vegetation in front of the holes
	Butterflies, solitary bees, lacewings and ladybirds	>1m from the ground	The different sections of the Insect Tower have been designed to provide a habitat for a variety of insect species. Suitable for mounting on buildings, trees or fences.
	Solitary bees and a range of other insects	Between 0.75m and 1.5m above ground	The selected canes and the holes are the optimum size for solitary bees but other insects may overwinter in the nester.
	A wide range of insects	Between 0.75m and 1.5m above ground	Adding natural materials such as drilled canes, hollow stems or bark in the triangular spaces will encourage more insects to the hotel.
	A wide range of insects	>1m from the ground	Best placed near vegetation. Provides plenty of nooks and crannies for insects such as ladybirds, earwigs and lacewings.