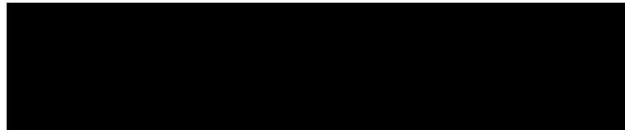




DARWIN ECOLOGY
integrating nature conservation

The Hopkiln Bury Court,
Bentley, Farnham



Ecological Impact Assessment

Barnham Court
Church Lane
Barnham
West Sussex
PO22 0BP

August 2026

Darwin Ecology Ltd
Registered Office: 8 Layton Lane, Shaftesbury, Dorset SP7 8EY
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1.	EXECUTIVE SUMMARY	5
2.	INTRODUCTION AND BACKGROUND	7
	Site Overview	7
3.	LEGISLATION & POLICY	10
	General Wildlife Legislation	10
	Bat Legislation	10
	National Planning Policy	11
	Local Planning Policy	13
4.	METHODOLOGY	18
	Desk Study	18
	Habitat Walkover Survey	18
	Building Inspection	19
	Emergence Surveys	20
	Evaluating Bat Roosts	21
	Limitations	23
5.	SURVEY RESULTS	24
	Desk Study	24
	Habitat Walkover Survey	25
	Protected Species	29
	Preliminary Roost Assessment	29
	Main House - B1	29
	Barn 1 - B2	30
	Barn 2 - B3	30
	Living Accommodation - B4	31
	Emergence Survey Results - B1	34
	Emergence Survey Results - B2	36
6.	IMPACT ASSESSMENT	42
	Designated Sites	42
	Habitats	42
	Protected Species	44
7.	ENHANCEMENT RECOMMENDATIONS	55
	Bats	55
	Birds	55
	Reptiles and Amphibians	55

Wildlife Beneficial Landscaping Scheme	55
8. REFERENCES	57
APPENDICES	59

QUALITY CONTROL		
The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.		
Prepared by	Senior Ecologist Rebecca Carter-Whitehead BSc (Hons), MCIEEM	August 2026
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This report remains valid for 2 years from date of issue. Survey data are valid for 12-18 months from the date the survey was undertaken.		

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Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on site at a later date.

The views and opinions contained within the document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to works.

1. EXECUTIVE SUMMARY

- 1.1. Darwin Ecology Ltd was commissioned by Stephen Foss to undertake an Ecological Impact Assessment (EclA) of proposals for the buildings and habitats at Barnham Court, Church Lane, Barnham, West Sussex, PO22 0BP. The assessment was required to support a planning application for renovations to the property, the addition of a tennis court, and the erection of a habitable barn, and was informed by a desk study, habitat walkover survey, internal and external building inspection, and emergence surveys for bats.
- 1.2. During the habitat walkover survey, the site was found to have buildings and hard standing, artificial unvegetated unsealed surface, modified grassland, and other standing water.
- 1.3. During the building inspection, B1 was found to have 'high' suitability for roosting bats, and B2 was found to have 'moderate' suitability for roosting bats. A single bat dropping was found on the wooden cladding outside B2.
- 1.4. During the emergence surveys, common pipistrelle bats emerged from three locations on B1, (roosts A to C on **Figure 4, Bat Results**). A peak count of one bat per roost was observed. No bats emerged from B1 on the final survey. No bats emerged from B2 on either of the two surveys.
- 1.5. The proposed plans show that the works will directly impact confirmed roosts for common pipistrelle and will cause disturbance to bats roosting within the building. An appropriate licence will be required to permit the above actions.
- 1.6. No bats were seen emerging from the original part of the house, which has been identified as requiring emergency works. Works to any features that have been identified for bats in this area, including the roof tiles and sash windows, can be completed under a Non-Licensed Method Statement (NLMS), including the supervision of a suitably qualified ecologist.
- 1.7. Mitigation and compensatory measures to ensure the Favourable Conservation Status (FCS) of bats is maintained will include:
 - Obtaining an EPS Mitigation Licence for works which will directly impact bat roosts;
 - The majority of works affecting summer bat roosts can take place between March and October, avoiding the winter hibernation season (November to February inclusive). As no maternity roost has been recorded on the site, works do not need to avoid the main maternity season (June to August inclusive);
 - Education of contractors on the protection afforded to bats through a Toolbox Talk;
 - Ecological supervision and soft stripping of features suitable for use by bats by hand and using hand tools prior to the rest of the building works;

- Provision of an NHBS General Purpose Bat Box (or similar). These are to be installed in a location determined by a licensed bat ecologist to ensure likelihood of uptake is increased;
- Compensation features will include replacing the hanging tiles/roof tiles like-for-like with tile crevice features using the original tiles from the property; and
- Any new external lighting will be fitted with downward facing baffles and will be directed to avoid light spillage.

- 1.8. Recommendations for enhancements have also been made, which include a combination of at least two CJM bat boxes, and at least two Large Multi-Chamber Bat Tree Boxes are recommended in the woodland near the pond to enhance the site for bats. A minimum of four Schwegler 1B Bird Nest Boxes are recommended to enhance the site for birds. Refugia in the form of log piles near the pond are recommended to be created from any trees felled as part of the plans, to enhance the site for reptiles and amphibians.
- 1.9. A Construction Environmental Mitigation Plan (CEMP) should be produced to fully outline and detail the mitigative actions which will be followed throughout the works process to protect the nearby priority habitats.

2. INTRODUCTION AND BACKGROUND

- 2.1. Darwin Ecology Ltd was commissioned by Stephen Foss to undertake an EclA of proposals for the buildings and habitats at Barnham Court, Church Lane, Barnham, West Sussex, PO22 0BP (hereafter referred to as ‘the site’)¹. The assessment was required to support a planning application for renovations to the property, the addition of a tennis court, and the erection of a habitable barn, and was informed by a desk study, a habitat walkover survey, an internal and external building inspection, and emergence surveys for bats.
- 2.2. The proposed drawings on which this assessment is based are provided in **Appendix 1, Proposed Plans**.
- 2.3. The internal and external building inspection and emergence surveys follow the Bat Conservation Trust (BCT) Good Practice Guidelines (2023). The habitat walkover survey followed the Chartered Institute for Ecological and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (2017).
- 2.4. The subsequent EclA follows the roost assessment methodology set out by Wray *et al.* (2010) and the CIEEM Guidelines for EclA in the UK and Ireland (2018).

Site Overview

- 2.5. The site is located in the village of Barnham, in West Sussex. It lies midway between Chichester to the west, and Bognor Regis to the south.
- 2.6. The site comprises a large 17th century country house set within landscaped gardens with ornamental planting, and multiple outbuildings of different ages. These buildings include on-site living accommodation, and two barns (see **Figure 1**).
- 2.7. The wider landscape comprises arable fields with hedgerows, with the suburban area of Barnham to the north-east (see **Figure 2**).

Scope of Assessment

- 2.8. The process of EclA aims to identify, quantify and evaluate the potential effects of development-related or other proposed actions on habitats, species and ecosystems.
- 2.9. Potential effects on the following ecologically sensitive receptors have been considered during the EclA of the site:
- Statutory and non-statutory designated sites;
 - On-site habitats of intrinsic importance (such as priority habitats); and
 - Habitats with the potential to support protected species.
- 2.10. The aim of this report is to:

¹ Ordnance Survey (OS) grid reference SU 95588 03567.

- Identify and describe ecologically sensitive receptors within the site;
- Carry out an impact assessment of the proposed works and how they will directly / indirectly affect the ecological receptors identified;
- Outline the relevant legislation and protection afforded to protected species present at the site; and
- Provide avoidance, compensation, mitigation and enhancement measures recommended to avoid harm / injury to protected species.



Figure 1: Site location within the local landscape (Copyright Google Earth Pro, Oct 2025)



Figure 2: Site location within the wider landscape (Copyright Google Earth Pro, Oct 2025)

3. LEGISLATION & POLICY

General Wildlife Legislation

- 3.1. Wildlife in the United Kingdom (UK) is protected through European and national legislation, supported by national and local policy and guidance. Development can contribute to conservation and enhancement goals outlined by these various legislation and policy by retaining and protecting the most valuable ecological features within a site and incorporating enhancements to provide biodiversity net gain.
- 3.2. This section provides a brief summary of the principle legalisation and policy that triggers the requirement for PRA and further ecological assessments in the UK. The presence of protected species within a site are a material consideration during the planning process. PRAs and any necessary further ecological assessments provide an ecological baseline for a site and evaluation of the potential impact of proposals.
- 3.3. It is the responsibility of those involved with development works to ensure that the relevant legislation is complied with at every stage of a project. Such legislation applies even in the absence of related planning conditions or projects outside the scope of the usual planning process (i.e. permitted development projects or projects requiring Listed Building Consent only).

Bat Legislation

- 3.4. In England and Wales, all bat species and their roosts are legally protected under the European *Habitats Directive (1992)*; the *Conservation of Habitats and Species Regulations (2017)*; the *Wildlife and Countryside Act (1981) (as amended)*; the *Countryside and Rights of Way Act, 2000*; and the *Natural Environment and Rural Communities Act (NERC, 2006)*.
- 3.5. Barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe *Rhinolophus hipposideros*, brown long-eared *Plecotus auritus*, soprano pipistrelle *Pipistrellus pygmaeus*, and noctule *Nyctalus noctula* bats are all species of principal importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.
- 3.6. You will be committing a criminal offence if you:
 - Deliberately capture, injure or kill a bat;
 - Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
 - Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
 - Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; or
 - Intentionally or recklessly obstruct access to a bat roost.

- 3.7. The government's statutory conservation advisory organisation, Natural England, is responsible for administering European Protected Species (EPS) licences that permit activities that would otherwise lead to an offence.
- 3.8. A licence can be obtained if the following three tests have been met:
- Regulation 53(9)(a) - there is "no satisfactory alternative" to the derogation, and;
 - Regulation 53(9)(b) - the derogation "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range" and;
 - Regulation 53(2)(e) - the derogation is for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment".

National Planning Policy

- 3.9. The *National Planning Policy Framework (2024)* aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications.
- 3.10. Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 187 a) 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);
 - 187 b) Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - 187 d) 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 incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;
 - 188) Plans should: distinguish between the hierarchy of international, national and local designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement

of natural capital at a catchment or landscape scale across local authority boundaries;

189) Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and Broads. The scale and extent of development within all these designated areas should be limited, while development within their settings should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

3.11. Specific policies regarding habitats and biodiversity comprise:

192) To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and
- b) 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.

193) When determining planning applications, local planning authorities should apply the following principles:

- a) 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;
- b) Development on land within or outside of Sites 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. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the feature of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) 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; and

d) Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

194) The following should be given the same protection as habitats sites:

a) Potential Special Protection Areas and possible Special Areas of Conservation;

b) Listed or proposed Ramsar sites; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

Local Planning Policy

3.12. The West Sussex does not contain a single Local Plan or Biodiversity Action Plan document but instead has multiple plans addressing ecology, nature conservation and development. Local Plans exist at the district council level.

West Sussex Tree Plan 2020-2025

3.13. The Plan seeks to ensure that the trees within the district are maintained, protected and improved for current and future generations. It also seeks to influence how the wider tree resource within the county is managed and improved. This plan sets out three strategic aims to maintain, protect and improve the trees within West Sussex:

- to maintain the trees and woodlands in the County Council's ownership;
- to protect trees and woodlands from new development and other threats; and
- to improve tree cover in West Sussex through natural regeneration, the planting of new trees, and the creation of new woodlands.

Pollinator Action Plan 2019-2022

3.14. This plan acknowledged the importance of pollinators and sets out to raise awareness and ensure information is provided to the council and local business and people to help protect and increase pollinator populations. West Sussex County Council will work to fulfil 5 aims:

- encourage local plans, policy and guidance to represent the needs of pollinators;

- protect and enhance the amount of pollinator habitat in West Sussex to prevent extinctions and improve the status of any locally threatened species;
 - improve our knowledge and understanding of pollinators in our local area;
 - increase awareness of pollinators and their habitat needs across local residents, businesses and other landowners;
 - increase the contribution to pollinator conservation of land under the ownership of, or managed by, the County Council.
- 3.15. The current Pollinator Action Plan is formally out of date, however should still be considered going forward whilst revision takes place.

Structure Plan 2001-2016

- 3.16. This plan sets out the strategic planning framework for West Sussex and guides the way the county will grow and develop during the years leading up to 2016 and beyond. The County Council envisions West Sussex to continue to be a county with a network of small to medium-sized towns and villages, where people feel that the countryside is never far away and where social and economic needs are met in high quality environments. Protecting the environment and using natural resources and assets wisely is a key aim of the plan and policies which reflect this aim include making the best use of the land that has to be developed; safeguarding biodiversity and geological features; minimising flood-risk and protecting the coast; protecting, managing and using soil, air, water and minerals wisely; maximising energy efficiency; and managing waste.

Policy CH2 Areas of Outstanding Natural Beauty

(a) Development should not be permitted unless the natural beauty, distinctive character and remote and tranquil nature of the Sussex Downs, High Weald, and Chichester Harbour Areas of Outstanding Natural Beauty (AONB) will be maintained and, where possible, enhanced. Development to meet proven local needs should be permitted provided that it is consistent with the purpose of AONB. Proposals for major development within AONB for any purpose should only be permitted in very exceptional circumstances and providing that they are consistent with national designation.

Policy ERA2: Nature Conservation

(a) Development should not be permitted unless the wide range of habitats, species and geological features of the County will be protected, conserved and, where possible, enhanced particularly through long-term management mechanisms and habitat creation schemes. A particularly high level of protection should be afforded to sites and features of national and international importance. Proposals for the extension or creation of new habitats should be permitted provided that they are consistent with wider environmental objectives.

The Arun Local Plan

The local plan for the site is the Arun Local Plan 2011 - 2031 which sets out a spatial vision, objectives and a sustainable strategy for delivering the needed growth of the District. The relevant policies regarding ecology, nature conservation and development comprise:

Policy ENV SP1: Natural Environment

Arun District Council will encourage and promote the preservation, restoration and enhancement of biodiversity and the natural environment through the development process and particularly through policies for the protection of both designated and non-designated sites. Where possible it shall also promote the creation of new areas for habitats and species. In relation to designated sites, development will be permitted where it protects sites listed in Tables 17.1-17.7 that are recognised for the species and habitats contained within them.

Policy ENV DM1: Designated Sites of biodiversity or geological importance

a. Proposed development likely to have an adverse effect on land with the designated features of any Site of Biodiversity or Geological Importance as listed in Tables 17.1 - 17.7 or any subsequently designated sites (either individually or in combination with other developments), will not normally be permitted. Consideration will be given to the exact designated features present on the site, their scarcity/rarity and recognition of the protection offered by their existing status. Development on wildlife sites with the highest value will only be permitted exceptionally where the following can be demonstrated:

- i. There is no alternative solution (which shall be adequately demonstrated by the developer);
- ii. There are reasons of public health or public safety or;
- iii. There are benefits of primary importance to the environment or;
- iv. There are imperative reasons of overriding public interest.

Notwithstanding the above however, the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined.

b. In determining any planning application affecting Sites of Biodiversity or Geological Importance the Council will ensure that the intrinsic natural features of particular interest are safeguarded or enhanced having regard to;

- i. The European, National or Local status and designation of the site;
- ii. The nature and quality of the site's features, including its rarity value;
- iii. The extent of any adverse impacts on the notified features of interest;
- iv. The need for compensatory measures in order to re-create remaining features of habitats on or off the site.

c. Where appropriate the Council will ensure the effective management of designated sites through the imposition of planning conditions or Section 106 agreements as appropriate.

Policy ENV DM2 Pagham Harbour

a. Within Zone A (0-400m from the boundary) as identified on the Policies Maps, development will only be permitted in exceptional circumstances where the developer is able to demonstrate there will be no detrimental effects on Pagham Harbour, including non-native

species and the water environment. Regard shall also be had to tests 1-4 as set out in Policy DM1 (Designated Sites of Biodiversity or Geological Importance).

b. Within Zone B (0-5km) for all new residential development and development which is likely to have an impact on Pagham Harbour will be required to:

- i. Make developer contributions towards the agreed strategic approach to access management at Pagham Harbour.
- ii. create easily accessible new green spaces for recreation within or adjacent to the development site.
- iii. Major developments (as defined in the GDPO 1995 as amended(61)) taking place outside Zone B and close to its boundary will be considered on a case by case basis to determine any potential effects on Pagham Harbour, and the need for any avoidance or mitigation measures.

Policy ENV DM3 Biodiversity Opportunity Areas

Development shall:

- a. Retain and sympathetically incorporate locally valued and important habitats, including wildlife corridors and stepping stones;
- b. Be designed in order to minimise disturbance to habitats;

Development proposals that do not reasonably address opportunities for enhancing these through their design, layout and landscaping or access/management shall not be permitted. Where a development scheme would result in a habitat loss, mitigation measures will be proposed as part of the proposed scheme and such measures agreed with the Local Planning Authority prior to the determination of any planning application. Within Biodiversity Opportunity Areas (BOAs) identified on the Policies Maps or where likely to have an impact on species or habitats within the BOAs, any application for planning permission shall include a properly conducted survey of the presence of that species and habitat and impact(s) that development may have on the BOA.

Policy ENV DM4 Protection of Trees

Development will be permitted where it can be demonstrated that trees protected by a Tree Preservation Order(s), (TPO) identified as Ancient Woodland, in a Conservation Area or contributing to local amenity, will not be damaged or destroyed now and as they reach maturity, unless development:

Would result in the removal of one or more trees in the interests of good arboricultural practice.

Would enhance the survival and growth prospects of other protected trees;

The benefits of the proposed development in a particular location outweigh the loss of trees or woodland, especially ancient woodland.

Where planning permission is granted in any of the above instances, conditions shall be used to ensure that, for any trees which are removed as part of a development, at least an equivalent number of a similar species and age (where practical) are planted on the proposed development site.

Where there are existing trees on or adjacent to a development site, developers shall be required to provide:

- d. Land and tree surveys;
- e. A tree constraints plan;
- f. An arboricultural impact assessment to include a tree protection plan and arboricultural method statement.

Policy ENV DM5 Development and Biodiversity

Development schemes shall, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site. They shall also however incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not). Development schemes shall also be appropriately designed to facilitate the emergence of new habitats through the creation of links between habitat areas and open spaces. Together, these provide a network of green spaces which serve to reconnect isolated sites and facilitate species movement.

Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species.

4. METHODOLOGY

Desk Study

- 4.1. A desk study was undertaken for designated sites, and protected species and habitat records within 2km of the site:
- The MagicMap website was reviewed, to obtain information on any designated sites of nature conservation interest within 2km of the site and details of any EPS licences issued within 2km;
 - The Arun District Council Planning Portal was searched for past and pending planning applications that may have associated ecological documents detailing results of bat surveys; and
 - A data search was requested from Sussex Biological Record Centre (SxBRC) for non-statutory designated sites, and protected and notable species within 2km; and
 - Google Maps and Ordnance Survey (OS) Leisure Maps was utilised to view aerial photographs and maps to assess the ecological context of the site within the wider landscape.
- 4.2. Natural England has developed a tool to help assess the potential risks to SSSIs by proposed developments. These are known as 'Impact Risk Zones' (IRZs) and they define the area around a SSSI that could be sensitive to development, considering the particular sensitivities of the feature for which the site is designated.
- 4.3. The IRZs help inform whether a development proposal may affect a SSSI and if so, whether it is necessary for the Local Planning Authority (LPA) to seek pre-application advice from Natural England. Information on the IRZs was determined from the MAGIC website to determine if the LPA is required to seek consultation for the current development.

Habitat Walkover Survey

- 4.4. Director Mike Cummings MCIEEM, Senior Ecologist Rebecca Carter-Whitehead BSc (Hons) MCIEEM, and Licenced Ecologist Ellie Kemp conducted a walkover survey at the site on 17th September 2025. The weather conditions at the time of the survey were dry with intermittent light rain, and a light breeze, and approximately 15°C. Habitats on site were broadly mapped to a minimum of 25m² in accordance with current guidance from UK Habitat Classification Version 2.0 UKHab Ltd (2023).
- 4.5. The walkover survey also assessed habitats present within the application red line boundary for their potential to support protected species, including:
- Bats;
 - Great crested newt *Triturus cristatus* and common amphibians;
 - Reptiles;

- Dormouse *Muscardinus avellanarius*;
- Other terrestrial mammals, including hedgehog *Erinaceus europaeus* and badger *Meles meles*;
- Schedule 1 birds, including but not limited to; barn owl *Tyto alba*, lapwing *Vanellus vanellus* and skylark *Alauda arvensis*
- Breeding birds; and
- Invertebrates.

- 4.6. As there is no running water within the site, in combination with their nationally sparse distribution, it is considered highly unlikely that white clawed crayfish *Austropotamobius pallipes* would be using the site and they are therefore not considered further in this report.
- 4.7. Otter *Lutra lutra* and water vole *Arvicola amphibius* are not considered further in this report due to the lack of running water on site and within the wider area. The site also does not offer any suitable habitat for these species.
- 4.8. The site was also searched for non-native, invasive plant species, with particular care to search for the most commonly occurring and problematic species, such as Japanese knotweed *Fallopia japonica*, Indian balsam *Impatiens glandulifera* and giant hogweed *Heracleum mantegazzianum*.

Building Inspection

- 4.9. Director Mike Cummings² BSc (Hons), MSc, MCIEEM, Senior Ecologist Rebecca Carter-Whitehead³ BSc (Hons), MCIEEM, and Licenced Ecologist Ellie Kemp⁴ conducted a building inspection at the site at the site on 17th September 2025. The weather conditions at the time of the survey were intermittent light rain, and a light breeze, and a temperature of approximately 15°C. The following methodology was followed:

External Survey

- 4.10. An investigation was carried out of external features with potential for use by roosting bats, such as gaps under roof and ridge tiles, gaps at soffit boxes or fascias. A search for bat droppings was made beneath each potential entry/exit point identified where accessible. The surveyor used binoculars and powerful, low-heat LED torch.

Internal Survey

- 4.11. An investigation was carried out of the roof void (including the floor and walls) for signs of bats roosting and the access potential into the roof void for bats. The surveyor looked for

² Natural England Bat Class 2 Licence 2025-86044-CL18-BAT

³ Natural England Bat Class 3 & 4 Licenses 2025-84704-CL19/20-BAT

⁴Natural England Bat Class 1 Licence 2025-84506-CL17-BAT

bats, bat droppings, likely access points, signs of feeding, dead bats, scratch marks and staining, and made a suitability assessment of the structure of the roof.

Potential to support roosting bats

- 4.12. Each building was assessed for its potential to support roosting bats as detailed in **Table 1** below which is taken from the Bat Conservation Trust 2023 guidelines Table 4.1, Table 7.1 and Table 7.2.

Table 1: Roost classification from the Bat Conservation Trust (2023) guidelines.

Category	Description of roosting habitat	Number of surveys required
None	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
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
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, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis by large numbers of bats.	Single survey between May to August
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, condition and surrounding habitat but unlikely to support a roost of high conservation status.	Two surveys with at least one survey between May to August.
High / Confirmed	A structure with one or more potential roost sites that are obviously suitable for use by a larger number 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.	Three surveys with at least two surveys between May to August.

Emergence Surveys

- 4.13. Three dusk emergence surveys were conducted during the 2026 survey season on B1, and two dusk emergence surveys were conducted on B2. Surveys were undertaken in line with BCT Good Practice Guidelines (2023), with any limitations outlined below.
- 4.14. Surveyors were positioned strategically around the buildings in order to provide adequate coverage of all elevations. Surveyors focused on any features identified during the Preliminary Roost Assessment (PRA) as having potential to be used as bat access points. The location of the surveyors and building numbers and names are shown on **Figure 3, Bat Survey Results**.
- 4.15. Dusk surveys began 15 minutes prior to sunset and lasted 1.5 hours after sunset. Surveyors recorded bat activity using hand-held Echometer Touch detectors connected to Android or iPhone devices. Analysis of recordings was undertaken after the surveys to confirm species identification. Observations recorded during surveys included bat access points, bat species, time, and type of activity (e.g. emergence, re-entry, commuting,

foraging, etc.). Incidental records of bats within the vicinity of the building (but not necessarily roosting) were also recorded.

- 4.16. Each surveyor used a night vision aid (NVA) to aid in their visibility during each survey. Equipment used consisted of Nightfox Whisker night vision binoculars, Nightfox Nova night vision binoculars, Canon XA20 video cameras, Black Sun 2 B502 infra-red illuminators, Nightfox Arc infra-red floodlights, and PixFra Thermal Camera Model: PF1-A613. These were used to film bat activity for the duration of the survey at a fixed position, see **Appendix 6**.
- 4.17. All recorded video footage was reviewed in full following the survey to identify any bat activity captured and any significant activity patterns and access points were identified and recorded.
- 4.18. A summary of the surveyors, survey dates and weather conditions are provided in **Table 2**.

Table 2: Emergence survey dates and weather conditions

Date and Building	Sunset time	Start weather conditions	End weather conditions	Surveyors
21/05/2026 B1 & B2	20:52	Rain: 0 Wind: 0 Cloud cover: 1.5 Temperature: 19.2°C	Rain: 0 Wind: 0 Cloud cover: 4 Temperature: 11.7°C	Rebecca Carter-Whitehead BSc (Hons), MCIEEM ¹ Neil Carter-Whitehead BSc (Hons), MSc ² Jordan Holman-Thatcher BSc (Hons) Lucy Moore BSc (Hons), MSc Sarah Alexander BA
11/06/2026 B1 & B2	21:15	Rain: 0 Wind: 2 Cloud cover: 8 Temperature: 16.2°C	Rain: 0 Wind: 2 Cloud cover: 8 Temperature: 15.6°C	Rebecca Carter-Whitehead BSc (Hons), MCIEEM ¹ Neil Carter-Whitehead BSc (Hons), MSc ² Lucy Moore BSc (Hons), MSc Annie Butcher Sarah Alexander BA
02/07/2026 B1	21:22	Rain: 0 Wind: 0 Cloud cover: 0 Temperature: 22°C	Rain: 0 Wind: 0 Cloud cover: 0 Temperature: 18°C	Libby Pinches BSc (Hons) ³ Jordan Holman-Thatcher BSc (Hons) Lucy Moore BSc (Hons), MSc Sarah Alexander BA Joni Alexander
Rain: a scale of 0 to 5 (e.g 0 (dry) - 5 (very heavy rain), Wind: a Beaufort scale of 0 to 12. (e.g 0 (calm) - 6 (strong breeze) - 12 (hurricane)) Cloud cover: an Okta scale of 0 to 8 (e.g 0 (no cloud) - 4 (half visible sky) - 8 (no visible sky))				
1 Natural England Bat Class 3 & 4 Licenses 2025-84704-CL19/20-BAT; 2 Natural England Bat Class 2 License 2025-80649-SCI-CL18 3 Natural England Bat Class 1 License 2025-85211-CL17-BAT				

Evaluating Bat Roosts

- 4.19. The value of the bat roosts on site was assessed in accordance with the article published in the CIEEM, In Practice Magazine - *Valuing Bats in Ecological Impact Assessment* (Wray, et al., 2010).

4.20. Roosts are assigned a relative ecological value based on the rarity of the species (**Table 3**) and categorisation of roost type (**Table 4**), informed by survey results. Once a value has been calculated, robust mitigation for any impacts identified from the proposed development can be determined.

Table 3: Categorising bat species by distribution and rarity

Rarest	Rare	Common
Greater horseshoe Bechstein's Alcathoe Greater mouse-eared Grey long-eared Barbastelle	Lesser horseshoe Whiskered Brandt's Daubenton's Natterer's Leisler's Noctule Nathusius' pipistrelle Serotine	Common pipistrelle Soprano pipistrelle Brown long-eared

Table 4: Valuing bat roosts

Geographic Frame of Reference	Roost Type
District, Local or Parish	Feeding perches (common species) Individual bats (common species) Small numbers of non-breeding bats (common species) Mating sites (common species)
County	Maternity sites (common species) Small number of hibernating bats (common and rarer species) Feeding perches (rarer/rarest species) Individual bats (rarer/rarest species) Small numbers of non-breeding bats (rarer/rarest species)
Regional	Mating sites(rarer/rarest species) including well-used swarming sites Maternity roosts (rarer species) Hibernation sites (rarest species) Significant hibernation sites for rarer/rarest species or all species assemblages
National/UK	Maternity sites (rarest species) Sites meeting Sites of Special Scientific Interest (SSSI) guidelines
International	Special Areas of conservation (SAC) sites

Limitations

- 4.21. Ecological surveys are limited by factors that affect the presence of plants and animals such as the time of the year, weather, migration patterns. The preliminary survey was undertaken in September and therefore represents a valid sample of ecological evidence present on that date/season.
- 4.22. Many species of bat in the UK are crevice-dwelling, and bats or signs of bats can be difficult to find within a building. In addition, there may be areas that are inaccessible to the surveyor.
- 4.23. It is noted that some UK bat species are easier to detect than others; for example the noctule *Nyctalus noctula* can be detected at a significantly greater distance when compared to the quieter brown long-eared. This can result in the undercounting of some bat species when compared to others.
- 4.24. The emergence surveys were undertaken in accordance with the best practice guidelines within the peak bat activity period (May to September inclusive). The results are therefore considered to be an accurate representation of the general use of the buildings by roosting bats.
- 4.25. Nevertheless, bats may use roosting features intermittently throughout the year and may be present in larger or smaller numbers depending on their breeding cycle, weather conditions and in response to disturbance. Bats may be present at other times of the year and the results in this report should therefore be viewed in the context intended.
- 4.26. A Habitat Suitability Index of the pond was not carried out, as the present condition of the pond is not representative of the prior state. It is therefore assumed for this assessment that the pond was 'excellent' habitat for great crested newts and other amphibians.
- 4.27. No other limitations were encountered, or assumptions made during either the desk study or the field survey and it is considered that with the access gained and recording undertaken an accurate assessment of the site's ecological importance has been made.

5. SURVEY RESULTS

Desk Study

- 5.1. A search of MagicMap identified that there are no statutory designated sites within 2km of the site. SxBRC returned no non-statutory sites within 2km of the site.
- 5.2. There is one record of an EPS licenses granted within 2km of the site. This is license 2016-24108-EPS-MIT is located approximately 1.4km to the north of the site curtilage. It is active from 01/07/2016, and modification to the license 2016-24108-EPS-MIT-1, active until 30/11/2021. This license allowed the destruction of a resting place for a common pipistrelle.
- 5.3. There are several areas of habitat with importance for nature conservation within 2km of the site. These are summarised in **Table 5** below.

Table 5: Habitats suitable for nature conservation within 2km of the site.

Habitat	Distance and direction to nearest example
Deciduous woodland	On site
Traditional orchard	0.04km north-west
Costal and floodplain grazing marsh	0.5km west
Ancient and semi-natural woodland	1.2km north

- 5.4. There are several three waterbodies within 250m of the site. These are summarised in **Table 6** and **Figure 3** below.

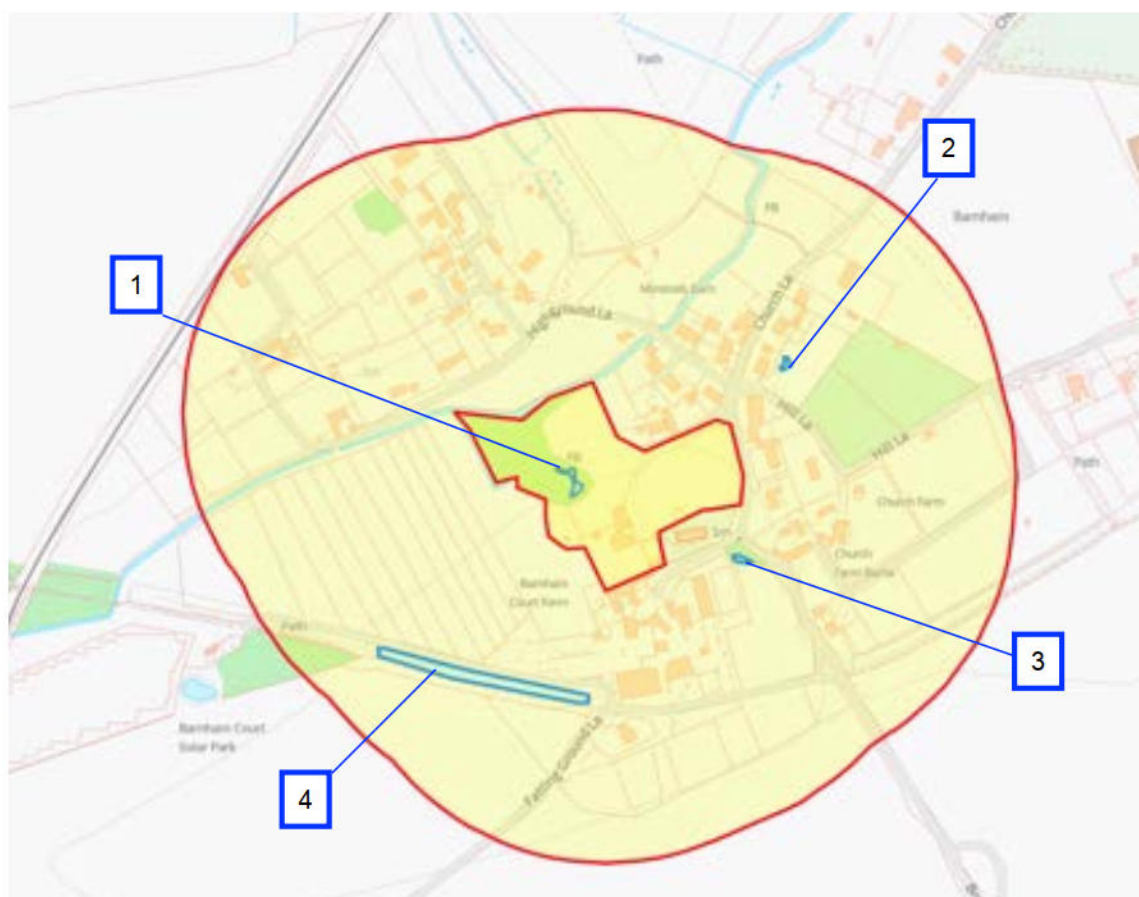


Figure 3: Waterbodies within 250m of the site (Copyright Magic Maps, Oct 2025)

Table 6: Waterbodies within 250m of the site

Number	Description	National Grid Reference	Distance from site
1	Pond	SU 9503 5360	Within the site
2	Pond	SU 9503 7371	0.07km north-east
3	Pond	SU 9503 6953	0.04km south
4	Canal	SU 9503 4542	0.09km south

Habitat Walkover Survey

5.5. This section is to be read in conjunction with **Figure 4**. **Table 7** below outlines the summary of habitats identified on site, as well as their applicable secondary codes.

Table 7: Habitat applicable codes

Primary Habitat	UK Hab Primary Code	Applicable Secondary Code(s) used	Secondary Code(s) description
Developed Land - Sealed Surface	u1b	-	-
Artificial Unvegetated, Unsealed Surface	u1c	-	-
Building	u1b5	818	Residential building
Modified Grassland	g4	32	Scattered trees
		108	Frequently mown
		828	Vegetated garden
		846	Flower Bed
		847	Introduced shrub
Other Standing Water	r1g	41	Pond (non-priority)
		49	Freshwater - Artificial
Other broadleaved woodland	w1g	-	-

Developed Land; Sealed Surface

5.6. A large area of developed land; sealed surface is present in the centre of the site in the form of paved patios and pathways.

Artificial Unvegetated, Unsealed Surface

5.7. The driveway is in good condition with no damage or encroaching vegetation recorded.

Buildings (Secondary Codes: 818)

5.8. A 17th century country house and multiple outbuildings are present on site. The main house is described further in the building inspection section below.

Modified grassland (Secondary Codes: 32, 108, 828, 846, 847)

- 5.9. This grassland habitat has a uniform short sward of approximately 5cm-10cm in height, which is regularly mown. Species present include common daisy, dandelion *Taraxacum sp.*, buttercup *Ranunculus sp.*, bird's-foot trefoil *Lotus corniculatus*, black medic *Medicago lupulina*, mouse-ear hawkweed *Pilosella officinarum*, perennial ryegrass *Lolium perenne*, and white clover *Trifolium repens*. Other species in this area include ornamental Leyland cypress *Cypress leylandii*, rhododendron *Rhododendron sp.*, clematis *Clematis sp.*
- 5.10. Scattered patches of ornamental planting and scattered ornamental trees are present throughout this habitat.

Other Standing Water (Secondary Codes: 41, 49)

- 5.11. There is a single artificial pond present on the site. The pond is unlined and is at the site of an old chalk hand-dug quarry. At the time of the survey, the pond had been scraped back, and vegetation overhanging the bank had been removed. No macrophytic vegetation is present within this waterbody.
- 5.12. There is also a swimming pool present on the site.

Other Broadleaved Woodland

- 5.13. An area of broadleaved woodland is present within the cartilage of the red line boundary. Species present comprise oak *Quercus robur*, ash *Fraxinus excelsior*, common lime *Tilia x europaea*, sycamore *Acer pseudoplatanus*, weeping willow *Salix babylonica*, field maple *Acer campestre*, beech *Fagus sylvatica*, silver birch *Betula pendula*, apple *Malus domestica* and other willow species *Salix sp.*
- 5.14. The ground flora comprises common sorrel *Rumex acetosa*, common nettle *Urtica dioica*, hemlock *Conium maculatum*, cleavers *Galium aparine*, common hogweed *Heracleum sphondylium*, creeping buttercup *Ranunculus repens*, garlic mustard *Alliaria petiolata*, annual meadow grass *Poa annua*, greater plantain *Plantago major*, perennial rye grass *Lolium perenne*, and ground ivy *Glechoma hederacea*.
- 5.15. This woodland is mapped on MagicMaps as Priority Habitat Inventory - Deciduous Woodland.



Legend

Red Line Boundary

Individual trees

- Existing Very Large Rural Tree
- Existing Large Rural Tree
- Existing Medium Rural Tree
- Existing Small Rural Tree
- Existing Tree - Incomplete details

Hedgerows

- Non-native and ornamental hedgerow
- Line of trees

Habitats

- Artificial unvegetated, unsealed surface
- Developed land; sealed surface
- Lowland mixed deciduous woodland
- Modified grassland
- Ornamental lake or pond
- Ruderal/Ephemeral
- Vegetated garden



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Project: Barnham Court, Church Lane,
Barnham, PO22 0BP

Figure 4: Habitat Map

Date: August 2026

Habitat Walkover Survey Photos (September 2025)



Image 1: Unvegetated unsealed surface gravel drive leading to the main house on the site.



Image 2: Frequently mown modified grassland kept to a short sward is present throughout the site.



Image 3: Ornamental planting.

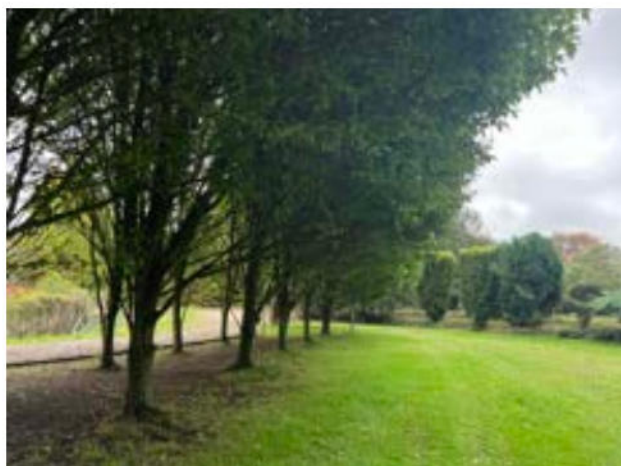


Image 4: Line of trees.



Image 5: Works already undertaken at the pond have removed trees from the bank.



Image 6: Works to the pond have scraped the earth back to reveal the chalk bed. Some water is standing.

Protected Species

Bats

- 5.16. SxBRC returned 124 records of bat within 2km of the site. These are summarised in **Table 8**.

Table 8: Amphibians within 2km of the site

Species	Number of records
Barbastelle	2
Bechstein's bat	1
Brown long-eared bat	4
Common pipistrelle	40
Daubenton's bat	1
Long-eared bat species <i>Plecotus sp.</i>	10
Myotis species <i>Myotis sp.</i>	11
Nathusius' pipistrelle	6
Natterer's bat	2
Noctule bat	9
Pipistrelle species <i>Pipistrellus sp.</i>	2
Serotine bat	12
Soprano pipistrelle	22
Unidentified bat species <i>Chiroptera sp.</i>	3

Preliminary Roost Assessment

Main House - B1

External Assessment

- 5.17. The main house is a 17th century property that has not had much renovation to the external facade beyond maintenance.
- 5.18. The roof is a complex hip-and-valley structure, clad in hand-pressed clay tiles, containing hundreds of potential gaps that could be utilised by bats on all aspects. The chimney stacks are all in excellent condition, as is most of the lead flashing. All brickwork is in excellent condition. There are no soffits present on the property.
- 5.19. A single dormer includes hand-pressed hanging tiles, which contained many potential gaps.
- 5.20. The sash windows contain some gaps around the frames, both under lead flashing or between the timber and brickwork. These gaps have potential to be utilised by roosting bats, particularly if these gaps lead to cavity walls. No bats in situ, or signs of bats such as droppings were observed.

Internal Assessment

- 5.21. There is a single void present in the building, as most of the ceiling space has been converted to living space throughout the years. The void is small, clad in modern rigid foam board insulation. All timber and brickwork is in excellent condition. No bats in situ or signs of bats such as droppings were observed.
- 5.22. The main house also contains a wine cellar, which was assessed for the potential for roosting bats with a focus on hibernation. No access to the cellar from outside the house was observed. All timber was in excellent condition, although there were some gaps in the brickwork that could support crevice-dwelling species of bats. No bats in situ or signs of bats such as droppings were observed.
- 5.23. Other than these internal spaces, the house contains vaulted ceilings and was unsuitable for roosting bats.

Overall Assessment

- 5.24. The overall assessment results in a 'high' potential for the building to support roosting bats.

Barn 1 - B2*External Assessment*

- 5.25. This timber barn has a peaked roof clad in modern tiles that do not show any lifts or potential gaps that could be used by roosting bats. Some of the timber cladding is lifted, creating gaps that could be used by roosting bats. During the inspection, a single bat dropping was observed, which appeared to be morphologically likely to be that of a *Pipistrellus* species bat.

Internal Assessment

- 5.26. This barn is used as storage and accessed regularly, and is unlikely to provide roosting areas for bats internally. No bats in situ or signs of bats such as droppings were observed internally.

Overall Assessment

- 5.27. Due to the presence suitable features and the observation of a bat dropping, it is assessed that the building is a confirmed bat roost.

Barn 2 - B3*External Assessment*

- 5.28. This barn includes a pitched roof that has recently been maintained. Some flat, modern roof tiles have been used, while the majority are older, hand-pressed clay tiles that match the character of the surrounding buildings. These include gaps that could be used by roosting bats. No bats in situ, or signs of bats such as droppings were observed.

Internal Assessment

- 5.29. There is a void in this barn, which is regularly accessed and used as storage. There are windows in the roof, which allow light ingress, although no draught was observed. All timber was in excellent condition and the roof was insulated with rigid foam board. There were no gaps, splits, or crevices that could be utilised by roosting bats. No bats in situ or signs of bats such as droppings were observed.

Overall Assessment

- 5.30. The overall assessment results in a 'low' potential for the building to support roosting bats.

Living Accommodation - B4

External Assessment

- 5.31. The living accommodation is a brick and pebble construction, with timber doors and window shutters. This building has a double-peaked roof clad in hand-pressed clay tiles, some of which are lifted and provide potential roosting features for bats. The mortar in the hip tiles, however, is well-pointed and does not show any cracks or missing pieces. No bats in situ or signs of bats such as droppings were observed.

Internal Assessment

- 5.32. The inside of the living accommodation contains no loft voids, as the space extends up to the roof. There is negligible potential for roosting bats inside this building. No bats in situ or signs of bats such as droppings were observed.

Overall Assessment

- 5.33. The overall assessment results in a 'low' potential for the building to support roosting bats.

Trees

- 5.34. The current plans (shown in **Appendix 2**) show the removal of one large tree and several small ornamental trees to facilitate the construction of Wicks Barn. The small trees had no potential roosting features (PRFs), and are unlikely to support roosting bats. The large tree also had no PRFs at the time of the survey, was unlikely to support roosting bats.
- 5.35. The current plans also show the addition of a hedge to screen the tennis court from the house. The hedge will be situated very close to a large mature tree.
- 5.36. The trees on site do provide habitat for bats to forage and commute across the site.

Building Inspection Photographs: Main House (September 2025)



Image 7: The front aspect of the property, showing brickwork in excellent condition.



Image 8: Hand-pressed clay roof tiles, presenting hundreds of potential roosting features.



Image 9: Sash windows on the rear aspect of the property, which include potential gaps.



Image 10: Hanging tiles on one dormer on the main house. Note the gaps under many of the tiles.



Image 11: The small remaining void in the main house.



Image 12: The wine cellar, which did not contain any obvious access that bats could utilise.

Building Inspection Photographs: Living Accommodation, Barns 1 & 2



Image 13: The outside of the living accommodation, with hand-pressed roof tiles.



Image 14: The double-pitched roof of the living accommodation.



Image 15: Southern aspect of Barn 1.



Image 16: Western aspect of Barn 1, where the bat dropping was found.



Image 17: Southern aspect of Barn 2.

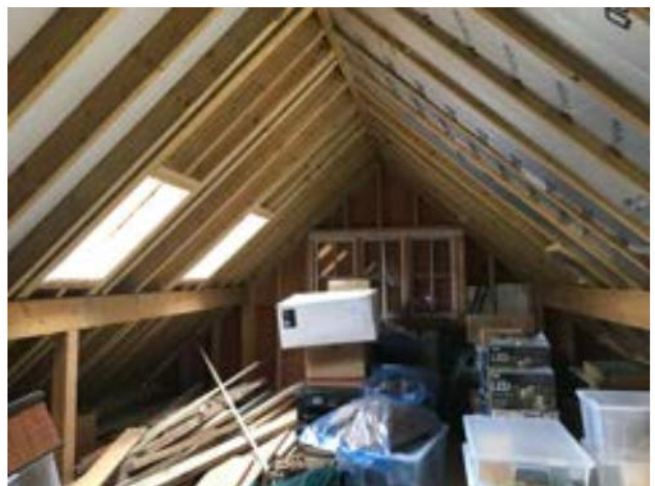


Image 18: Void of Barn 2.

Emergence Survey Results - B1

5.37. The below survey results should be read in conjunction with **Figures 5 and 6**.

Survey 1: 21st May 2026

- 5.38. Two emergences were seen from B1, both of which were common pipistrelles. The first emergence was recorded at 21:19, from a second-storey area clad in hanging tiles on a gable end on the western aspect. The second emergence was at 21:31 on the eastern aspect of the building, from a single-storey roof within the courtyard. The bat emerged from a roof tile.
- 5.39. The first bat heard was a common pipistrelle at 21:17. Other species recorded on site were a single pass from a noctule bat at 21:22, and soprano pipistrelle first heard at 21:52. General commuting and foraging were heard and observed throughout the survey, mostly from common pipistrelles.

Table 9: 21/05/2026 - Dusk emergence survey.

Timing	Species	Roost type	No. of bats	Location on structure	Roost description
Start: 20:37	Common pipistrelle	Day	1	Western aspect gable end	Hanging tiles
Sunset: 20:52					
End: 22:22	Common pipistrelle	Day	1	Eastern aspect courtyard	Roof tiles

Observations: A single bat emerged from the hanging tiles above a window on the western aspect of B1. A single bat emerged from the roof tiles within the courtyard area on the eastern aspect of the house.



Image 19: Emergence location of the common pipistrelle behind hanging tiles on the western aspect.



Image 20: Emergence location of the common pipistrelle beneath roof tiles on the eastern aspect.

Survey 2: 11th June 2026

- 5.40. Two emergences were seen from B1, both of which were common pipistrelles. The first emergence was recorded at 21:44 on the eastern aspect of the building, from a single-storey roof within the courtyard. The bat emerged from a roof tile. The second emergence was at 22:07 from a second-storey area clad in hanging tiles on a gable end on the western aspect. The first bat heard was a common pipistrelle at 21:29.
- 5.41. Other species recorded on site were a single pass from a soprano pipistrelle at 22:01. General commuting and foraging were heard and observed throughout the survey from common pipistrelles.

Table 10: 11/06/2026 - Dusk emergence survey.

Timing	Species	Roost type	No. of bats	Location on structure	Roost description	Species
Start: 20:37	Common pipistrelle	Day	1	Eastern aspect courtyard	Roof tiles	Common pipistrelle
Sunset: 20:52						
End: 22:22	Common pipistrelle	Day	1	Western aspect gable end	Hanging tiles	Common pipistrelle

Observations: A single bat emerged from the hanging tiles above a window on the western aspect of B1. A single bat emerged from the roof tiles within the courtyard area on the eastern aspect of the house.



Image 21: Emergence location of the common pipistrelle beneath roof tiles on the eastern aspect.



Image 22: Emergence location of the common pipistrelle behind hanging tiles on the western aspect.

Survey 3: 2nd July 2026

- 5.42. One emergence were recorded from the building on this survey, from the roof tiles above a dormer on the western aspect.
- 5.43. Species recorded on site were a single pass from a noctule bat at 21:48. The first common pipistrelle heard was at 21:51, and the first soprano pipistrelles recorded on the site were at

22:10. A serotine was heard foraging on the site at 22:13. A *Plecotus* species bat was heard at 22:17, and seen commuting along the yew hedge on the western aspect of the house. A barbastelle bat was heard clearly at 22:47. General commuting and foraging were heard and observed throughout the survey from common pipistrelles.

Table 11: 02/07/2026 - Dusk emergence survey.

Timing	Species	Roost type	No. of bats	Location on structure	Roost description	Species
Start: 21:09 Sunset: 21:22 End: 22:52	Common pipistrelle	Day	1	Western aspect dormer	Roof tiles	Common pipistrelle

Observations: A single bat emerged from the roof tiles above a dormer on the western aspect of B1.



Image 21: Emergence location of the common pipistrelle beneath roof tiles on the eastern aspect.

Emergence Survey Results - B2

Survey 1

- 5.44. No emergences were seen from B2, and the survey was incredibly quiet. The first bat heard was a common pipistrelle at 21:23. This was the only species identified in the proximity of B2. A total of six passes was recorded on this survey.

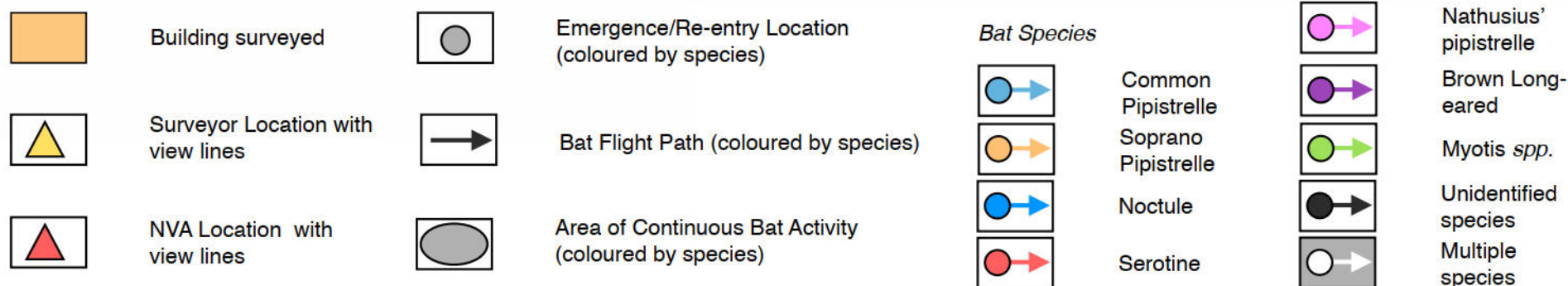
Survey 2

- 5.45. No emergences were seen from B2, and the survey was incredibly quiet. The first bat heard was a common pipistrelle at 22:19. Another three passes from a common pipistrelle were heard at 22:25. These were the only bats identified across the survey.



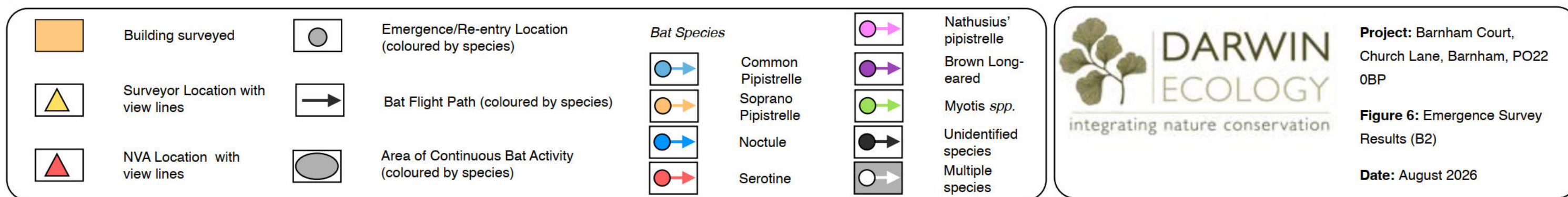
Roost	Feature	Species and peak count	Date Observed
A	Western aspect gable end hanging tiles	X1 common pipistrelle	21/05/2026 11/06/2026
B	Eastern aspect courtyard roof tiles	X1 common pipistrelle	21/05/2026 11/06/2026
C	Western aspect dormer roof tiles	X1 common pipistrelle	02/07/2026

*NOTE Areas are indicative and are not shown to exact scale.





*NOTE Areas are indicative and are not shown to exact scale. Surveyor and camera positions were swapped for the second survey.



Great Crested Newt and Common Amphibians

- 5.46. SxBRC returned one record of amphibians within 2km of the site. This is for a common toad *Bufo bufo*.
- 5.47. A search of MagicMap did not return any records of EPS licences for great crested newts within 2km of the site boundary.
- 5.48. There is a single pond on site, which had been subject to vegetation clearance and being scraped at the time of the survey. The surveyors were informed that the pond does not regularly hold water unless after heavy rain, and the works taking place are to improve water retention to create a wildlife-friendly pond.
- 5.49. A HSI was not carried out, as the present condition of the pond is not representative of the prior state.
- 5.50. MagicMap and aerial imagery revealed four waterbodies located within 250m of the site.
- 5.51. The site provides some suitable habitat to support great crested newt and other amphibians on site in the form of waterbodies. The areas of short-sward modified grassland and ornamental planting are of low value to great crested newt and common amphibians, and it is considered unlikely that individuals or populations would be present within these habitats.
- 5.52. It is anticipated that a variety of amphibian species may be present in the wider area.
- 5.53. Due to the lack of barriers between the site and wider landscape, and the presence of suitable habitat on site to support amphibians, individual great crested newt and common amphibians may access and utilise the site on occasion. It is considered likely that the presence of amphibians on site is mostly restricted to the areas of higher-value habitat present around the edges of the site, rather than the more central areas of low-value habitat.

Reptiles

- 5.54. SxBRC returned 54 records of reptiles within 2km of the site. These are summarised in **Table 12**.

Table 12: Reptiles within 2km of the site

Species	Number of records
Common lizard <i>Zootoca vivipara</i>	17
Grass snake <i>Natrix helvetica</i>	2
Slow worm <i>Anguis fragilis</i>	35

- 5.55. A search of MagicMap did not return any records of EPS licences for rare reptiles within 2km of the site boundary.

- 5.56. The areas of modified grassland and ornamental planting are of low value for reptiles, offering few foraging, commuting, and resting opportunities. It is considered unlikely that reptiles would be present within the areas of modified grassland as the short-sward of this habitat would not provide sufficient shelter for these species. It is considered unlikely that reptiles would be present within the areas of ornamental planting due to the sparse nature of this habitat and its lack of connectivity to habitats with suitability to support reptiles.
- 5.57. Due to the presence of suitable habitat to support reptiles within the wider landscape, it is anticipated that a variety of reptile species are present within the wider area. Due to the lack of barriers between the site and wider landscape, and the presence of suitable habitat on site, individual reptiles may access and utilise the site on occasion. It is anticipated that the presence of reptiles on site is mostly restricted to the habitats present around the edges of the site, rather than the more central habitats.

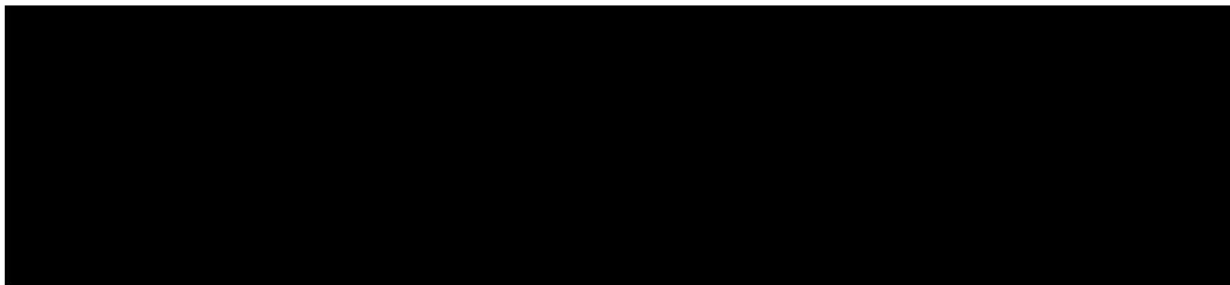
Dormouse

- 5.58. SxBRC returned no records of dormice within 2km of the site.
- 5.59. A search of MagicMap did not return any records of EPS licences for dormice within 2km of the site boundary.
- 5.60. The woodland on site is mapped on MagicMaps as Priority Habitat Inventory - Deciduous Woodland. This habitat type has potential to support hazel dormouse, however the woodland is isolated within the context of the wider landscape, with no adjoining hedgerows or tree lines creating opportunities for dormice to commute to this woodland.
- 5.61. The majority of habitats within the site curtilage do not offer suitable commuting, foraging, or resting opportunities to support dormice, with the grassland habitats, ornamental planting, and developed land, offering few opportunities for these species. It is considered unlikely that individual dormouse may access and utilise the site.
- 5.62. The works will not result in a loss of suitable habitat to support dormice on site and within the local area. Proposed vegetation clearance has the potential to injure/kill dormice if present at the time of works.
- 5.63. The proposed works to the main house will not impact the woodland, however the works to the pond are directly adjacent to this habitat. Due to the the small scale of the works and the extensive amount of suitable habitat to support dormice which will be retained on-site and within the local landscape, it is not considered that the proposals will have a significant negative impact on local dormouse populations.

Other Terrestrial Mammals

- 5.64. SxBRC do not provide records of badger for confidentiality reasons. Mammal records include brown hare *Lepus europaeus* with three records, hedgehog *Erinaceus europaeus* with seven records, and water vole *Arvicola amphibius* with six records.

5.65.



5.66. The woodland on site is mapped on MagicMaps as Priority Habitat Inventory - Deciduous Woodland. This habitat type has potential to support badger.

5.67. The site also offers suitable resources for other mammals such as rabbit *Oryctolagus cuniculus* and fox *Vulpes vulpes*.

5.68. Terrestrial mammals are considered likely to pass through the site regularly.

Breeding Birds

5.69. SxBRC returned 440 records of notable birds. These are summarised in **Table 13**.

Table 13: Birds within 2km of the site

Species	Number of records
Bewick's swan <i>Cygnus columbianus bewickii</i>	6
Black tern <i>Chlidonias niger</i>	2
Back-tailed godwit <i>Limosa limosa</i>	74
Bullfinch <i>Pyrrhula pyrrhula</i>	2
Corn bunting <i>Emberiza calandra</i>	5
Cuckoo <i>Cuculus canorus</i>	43
Curlew <i>Numenius arquata</i>	4
Dunnock <i>Prunella modularis</i>	9
Grey partridge <i>Perdix perdix</i>	24
Hawfinch <i>Coccothraustes coccothraustes</i>	3
Herring gull <i>Larus argentatus</i>	3
House sparrow <i>Passer domesticus</i>	3
Lapwing <i>Vanellus vanellus</i>	97
Linnet <i>Linaria cannabina</i>	3
Little gull <i>Hydrocoloeus minutus</i>	15
Reed bunting <i>Emberiza schoeniclus</i>	14
Ring ouzel <i>Turdus torquatus</i>	7
Skylark <i>Alauda arvensis</i>	83
Song thrush <i>Turdus philomelos</i>	13
Starling <i>Sturnus vulgaris</i>	6

Table 13: Birds within 2km of the site

Species	Number of records
Turtle dove <i>Streptopelia turtur</i>	5
Yellow hammer <i>Emberiza citrinella</i>	19

- 5.70. The individual trees and ornamental planting on site offer good nesting opportunities for a variety of bird species. Additionally, these habitats offer good foraging opportunities for birds. No nests were observed on site at the time of the survey.
- 5.71. It is likely that the site supports a variety of common woodland and garden bird species.
- 5.72. No bird nests were observed within the property, and as such house-nesting birds such as swallows *Hirundo rustica*, swifts *Apus apus*, or house sparrow *Passer domesticus* are not considered to be present in the building.
- 5.73. No evidence of features suitable to support roosting barn owls were identified on site. The woodland and neutral grassland habitats on site may offer some suitable hunting habitat for barn owls. However, the other habitats on site are of limited value for barn owls, lacking the complexity and species diversity required to attract populations of small mammal.

Invertebrates

- 5.74. SxBRC returned 12 records of stag beetle *Lucanus cervus*, and two records of Jersey tiger moth *Euplagia quadripunctaria* within 2km of the site.
- 5.75. The habitats on site provide good opportunities for foraging, commuting, and resting for a variety of invertebrate species. It is likely that the site supports a variety of common and uncommon invertebrates.
- 5.76. The site is unlikely to support roman snail *Helix pomatia* due to a lack of suitable habitat on site. The standing deadwood on site have suitability to support stag beetle.

6. IMPACT ASSESSMENT

Designated Sites

- 6.1. Due to the small-scale and localised nature of the works, and given that there are no statutory designated sites within 2km of the site, it is not anticipated that the proposed works will have any significant temporary or permanent negative impact on statutory designated sites, priority habitats or ancient woodlands through direct or incidental effects of the development.
- 6.2. Given the above, it is considered likely that there will be no residual impacts on designated sites.

Habitats

- 6.3. The main habitats on site are building, artificial unvegetated, unsealed surface, modified grassland with individual trees and ornamental planting, other broadleaved woodland, and standing open water.
- 6.4. The pond has been subject to clearance, including mechanical reshaping of the banks, and removal of surrounding vegetation including mature trees. Therefore, the pond cannot be assessed in its current form, and is assumed to have been excellent habitat for great crested newts and other amphibians.

Potential Impacts

- 6.5. The proposed works comprise renovations to the property, the addition of a tennis court, the erection of a habitable barn, and the reinstatement of the pond on site.
- 6.6. The proposed works will directly impact areas of developed land, ornamental planting, and modified grassland. The other habitats on site will not be directly impacted by the proposals, however the woodland on site is mapped on MagicMaps as Priority Habitat Inventory - Deciduous Woodland, and is directly adjacent to the proposed pond works.
- 6.7. Overall, the proposed works will have a moderate negative impact on the local level.

Recommendations for further proposed works after the internal renovations

- 6.8. Mitigative steps should be taken throughout the works process to limit any direct and indirect impacts which may occur to the neighbouring priority habitats, particularly the broadleaved woodland present on the site. Care must be taken throughout the development process to ensure that there are no negative incidental impacts to the adjacent priority habitats.
- 6.9. Best practice will be applied to prevent polluting materials from impacting on the woodland habitats.
- 6.10. An appropriate buffer of at least 2m should be retained between the development boundary and the areas of priority habitat on site. Heras fencing should be installed along the

boundary of this buffer zone. Screening barriers will be implemented on habitat protection fencing during the construction phase of the development, to prevent dust and waste from the construction site from contaminating the adjacent designated site and priority habitats. The screening barriers will comprise a hessian strip, fixed to the base of heras fencing, with 50 cm draped on the ground to catch any dust and site waste that may otherwise escape under the fencing. Monthly checks will be made by an Ecological Clerk of works (ECoW) to ensure airborne litter and dust do not have a negative impact on the adjacent habitats and designated site. Should any issues arise, appropriate remedial actions will be implemented.

- 6.11. No surface run-off from the construction site will be allowed to flow towards the adjacent priority habitat. Appropriate site drainage must be installed to avoid this and the ECoW will monitor for any potential issues and advise on any remedial actions if required. All materials and potentially hazardous substances should be stored away from the site boundary and in accordance with the appropriate legislation.
- 6.12. A Construction Environmental Mitigation Plan (CEMP) should be produced to fully outline and detail the mitigative actions which will be followed throughout the works process to protect the nearby priority habitats.
- 6.13. As a matter of best practice, a noise, lighting, air and run-off mitigation strategy will be implemented during the demolition and construction phase of the development.
- 6.14. *Storage of fuels and oils:* All oils and fuels will be stored in compliance with the Control of Pollution (Oil Storage) Regulations 2001, which include but are not limited to: Bowzers are to be double-skinned and shall be stored in a bund capable of holding 110% of the volume of the bowser. Small mobile plant shall be placed on drip trays and spill kits will be available at various points around the site and located next to bowzers and drums.
- 6.15. *Lighting:* Night working assisted by floodlights will not be permitted to reduce light overspill into nearby habitats suitable for bat or badger foraging.
- 6.16. *Tree root protection zones:* Heras fencing will encompass the root protection areas of all retained trees as they will be protected in accordance with British Standards BS 5837:2012. Root protection areas will be 12x the diameter at breast height (DBH) or the reach of the longest branch (whichever is greater), unless otherwise advised by a qualified arboriculturist. Trees located off site but with their roots on site will also be protected. No materials will be allowed to be stored within these root protection areas and no heavy machinery should run over them. Screening barriers will be implemented on habitat protection fencing during the construction phase of the development, to prevent dust and waste from the construction site from contaminating the habitat. No surface run-off from the construction site will be allowed to flow towards the woodland.
- 6.17. If trees are to be removed the landscaping proposals should aim to replace removed trees like-for-like where possible, using native species. Ash trees should be avoided due to the potential for ash dieback.

- 6.18. Any future landscaping planting should seek to enhance biodiversity, improve connectivity to the surrounding habitats and provide food and shelter for a wide range of faunal species. All amenity planting and formal landscaped areas should be created from a palette of wildlife beneficial plants (not necessarily native) chosen for nectar or fruit. Care should be taken to manage habitats in a suitable way to encourage a wide variety of insects and other wildlife to use the site. Non-invasive species should be planted. Any invasive species found to be currently on site should be removed with care during vegetation clearance and disposed of appropriately.
- 6.19. Given the above, it is considered likely that there will be no residual impacts on priority habitats.

Protected Species

Bats

Status of Bats on Site

- 6.20. B1 is confirmed to support three day roosts for common pipistrelles. A peak count of one bat per roost was recorded during the surveys.
- 6.21. See **Table 14** for value of each roost in accordance with Wrey *et al.*, 2010. Impact of works.

Table 14: Value of bat roosts at Barnham Court.

Species	Rarity	Roost Type	Value
Common pipistrelle	Common and widespread	Day	Site level

Roost Impact Assessment

- 6.22. The proposed plans at Barnham Court are yet to be finalised, however they mostly comprise renovations to the main house, the addition of a tennis court, and the erection of a habitable barn. Some roof repairs are expected, which will entail removing tiles, replacing insulation and improving breathability, and replacing the existing tiles.
- 6.23. Potential impacts to bats at B1 therefore include temporary destruction of a roosting site, with potential for disturbance, injury or killing of bats in their roosts during works.
- 6.24. In the absence of mitigation, the works would therefore result in an offence under the *Conservation of Habitats and Species Regulations (2017)*.

Mitigation

- 6.25. The following mitigation strategy provides details of the mitigation measures to minimise the risk of killing or injury of individual bats during the works process. The compensation strategy demonstrates that compensatory roosts will be provided to replace the roosting opportunities present at the existing building, which will be lost.

- 6.26. In line with the Bat Mitigation Guidelines (Reason and Wray, 2023) the roost is of **low** conservation status. Therefore the mitigation and compensation is required to replace roosts like for like, and an appropriate licence is required. Due to the number of species and roosts present, along with the long timeline expected for works on the site, a full EPS mitigation licence.
- 6.27. *EPS Mitigation Licence:* A licence application can be submitted following planning approval by the Local Planning Authority (LPA) and a licence must be granted prior to any works commencing on site with potential to impact bats or their roosts. Licences will be issued by Natural England if the three licensing tests detailed in Section 3 are met. Whilst Natural England aim to provide licensing decisions within 30 working days, current processing times have ranged between 30 and 60 working days.
- 6.28. Note that such licences will only be granted where it can be shown that there will be no detriment to the species of bat concerned, and therefore suitable mitigation measures are required. In order to ensure that the 'Favourable Conservation Test' can be met, a mitigation statement will need to be submitted as part of the licence application. This includes measures to minimise the risk of killing or injury of bats during the proposed works and to ensure that there is long term provision of roosting opportunities on site. Input from a licensed consultant will be required during licensable activities at the site (such as the removal of features with potential for roosting bats).
- 6.29. *Timing of Works:* The majority of works affecting summer bat roosts can take place between March and October, avoiding the winter hibernation season (November to February inclusive). As no maternity roost has been recorded on the site, works do not need to avoid the main maternity season (June to August inclusive).
- 6.30. *Toolbox Talk:* Before commencing any work on site, all contractors will be inducted by a licensed bat ecologist or accredited agent in a tool box talk, to ensure they are aware of the risks to wildlife on site, particularly the presence of bat roosts, their legal protection and of working practices to avoid harming bats and other species in order to ensure working practices on site follow legal requirements.
- 6.31. *Ecological Supervision:* Immediately prior to any works on site, the buildings must be subject to an internal and external survey by a suitably qualified and licensed bat ecologist to ensure as far as possible that no bats are present. In addition, hand removal / soft strip of internal features suitable for use by bats must be done very cautiously and under supervision by a bat licensed ecologist.
- 6.32. *Bat Boxes:* To provide a compensatory roosting and safe release site for bats during demolition works, at least one bat box will be installed prior to works commencing on site, comprising NHBS General purpose (or similar). This box will remain on site in perpetuity. The location will be determined by a licensed bat ecologist to ensure likelihood of repeated use is increased. The bat boxes will be installed at a height of at least 4 m, preferably on a

southern un-cluttered aspect with good connectivity to linear features such as other mature trees and hedgerows.

- 6.33. *Roofing Membrane:* It is recommended that type 1F bitumen roofing membrane is used on any part of the building which is accessible by bats. Standard breathable roofing membrane will not be permitted as it presents a lethal entanglement hazard to bats. **If breathable membrane cannot be avoided, you must provide a certificate that proves the roofing membrane has passed a 'snagging propensity test' if you're using a non-bitumen coated roofing membrane.**
- 6.34. A snagging propensity test checks that the membrane can stand the repeated snagging actions of roosting bats. To pass, a membrane must show no change in the average number of loops per cm² as rotations are increased from 0 to 1000. At the time of writing, there is only one suitable product that conforms to these standards: TLX-Batsafe membrane.
- 6.35. You do not need a certificate for bitumen 1F felt that has a non-woven, short fibre construction.
- 6.36. *Timber Treatment:* Any use of timber-treatment or pest control treatment must be selected from the approved lists for safe use in or near bat roosts which can be provided on request.
- 6.37. *Lighting:* Any new external lighting must be directed to avoid light spillage onto vegetation, particularly linear habitat features such as woodland edges or potential roosting sites within trees and buildings. Bats are sensitive to light and could potentially avoid the area if access points or the surrounding areas become lit. Appropriate lighting options will prevent a negative impact on bats potentially using the habitats on site and should be approved by a suitably qualified and licensed bat ecologist. Lighting plans should be approved and signed off by a licensed bat ecologist prior to submission, to ensure the scheme is suitable for bats. If appropriate measures are taken to reduce light spillage from the development, it is likely that there will be no negative impacts on local bat populations.
- 6.38. See **Appendix 4** for further information on designing lighting to minimise impacts on bats.
- 6.39. *Habitats:* The proposals do not result in significant loss of foraging habitat for bats, however, a wildlife friendly landscaping scheme is recommended to enhance the site for bats and other wildlife.

Compensation

- 6.40. Due to the works expected to happen in the areas of confirmed bat roosts, tiles will be removed so that insulation can be inspected/replaced, and original tiles will be replaced. Therefore, like-for-like bat roosts can be re-instated in these areas. Additional lifted tile features can be created to enhance the site for bats.

- 6.41. Wet or mortared ridges are always the preferred technique on buildings where bat access needs to be reinstated. Where discrete bat features are created, breathable roofing membrane must not be used. It is recommended that type 1F bitumen roofing membrane is used on any part of the building which is accessible by bats. Standard breathable roofing membrane will not be permitted as it presents a lethal entanglement hazard to bats.
- 6.42. Potential impacts to bats within the original section of the main house avoids damage or destruction of a roosting site. As such, the works can commence under a precautionary approach accompanied by a Non-Licensed Method Statement (NLMS), including supervision of the works by a suitable qualified ecologist. This is to facilitate emergency repair works to the roof of the property.



Figure 6: Original house within B1, that requires immediate works, highlighted in yellow. Bat roost locations highlighted with blue circles (Copyright Google Earth Pro, July 2026)

Great Crested Newt and Common Amphibians

Status on Site

- 6.43. The building does not contain any suitability for great crested newts and amphibians. Accordingly, the following recommendations relate only to works undertaken following internal renovations to the main house.
- 6.44. The site has suitable habitat to support resting, commuting and foraging amphibians, including great crested newt, and the wider landscape has a varied structure and contains a number of suitable habitats that could support a variety of amphibians in their terrestrial and aquatic phases. Therefore, it is likely that individual amphibians may access and utilise the site on occasion.
- 6.45. The pond has been subject to clearance, including mechanical reshaping of the banks, and removal of surrounding vegetation including mature trees. Therefore, the pond cannot be assessed in its current form, and is assumed to have been excellent habitat for great crested newts and other amphibians.

Potential Impacts

- 6.46. There has already been an impact to great crested newts and other amphibians due to the works to the pond, lowering the habitat suitability for these species on site.
- 6.47. Any further vegetation clearance required, construction works, and landscaping proposals all have the potential to injure/kill amphibians if present at the time of works.
- 6.48. The proposed works will not result in a significant loss of suitable habitat to support amphibians on site or within the local landscape. As such, it is not anticipated that the works will have a significant negative impact on local amphibian populations.

Recommendations

- 6.49. Due to the current state of the pond, it does not hold water, and therefore phase II surveys are not possible in this instance.
- 6.50. If any amphibians are present within the development area during the works period, it is considered that standard mitigation and reasonable avoidance measures should be sufficient to protect these species.
- 6.51. All grassland within the application boundary should be maintained at a short sward length before the works begin to prevent the habitat from becoming suitable for amphibians. Should the vegetation grow longer than 30cm, then any vegetation clearance should be done by hand and only during the reptile and amphibian key active season (March-September, inclusive). Weather should be 9 degrees or higher, and dry with no strong winds. This will allow active reptiles and amphibians to move to more suitable habitat nearby, if they are present within the working area.

- 6.52. If any vegetation removal should occur, this should be done as a two-stage cut. The initial cut should be done by hand and reduce the vegetation to a height of 15cm. This should then be left overnight to allow for the dispersal of any amphibians and reptiles present. The second cut should occur the next day in weather suitable for reptiles and amphibians.
- 6.53. In order to prevent creating suitable refuges for amphibians and reptiles during construction, all stored materials should be raised off the ground on pallets or skids. Aggregates, such as gravel or sand, must be delivered in bulk bags and stored on pallets.
- 6.54. Currently, the proposed works will not impact any potential hibernacula. If this should change, then when any potential refugia are to be removed (e.g. log, rock and brick piles), they should be dismantled by hand with a suitably licensed ecologist present to ensure that no individuals of these species are harmed.
- 6.55. All works which may impact amphibians will be undertaken during the day.
- 6.56. Any excavations or trenches on site must be covered whilst works are paused (such as overnight), or a ramp should be provided in order to prevent animals from becoming trapped within the excavations.
- 6.57. In the event an amphibian is discovered on site during the construction phase, then all works must stop and a suitably qualified ecologist contacted for advice.
- 6.58. Any future works to the pond should be done with the advice of a suitably experienced ecologist. Allowing the excavated pond to hold water in its current state prior to the recommencement of works could result in the colonisation of the pond by amphibians, increasing the risk of harm to these species during subsequent works.
- 6.59. The restoration of the pond will benefit local wildlife, particularly amphibians and waterfowl. The aim to create a 'natural' pond with gentle sloping sides and aquatic planting will restore the habitat on site that was previously used by amphibians before the old pond was drained. Works to the pond should aim to recreate a highly suitable waterbody for great crested newts, to mitigate for the premature works to the pond prior to an ecological survey. This will include planting of native plants that are beneficial to great crested newts, including (but not limited to):
- Water mint *Mentha aquatica*;
 - Common arrowhead *Sagittaria sagittifolia*;
 - Brooklime *Veronica beccabunga*;
 - Water forget-me-not *Myosotis scorpioides*;
 - Hornwort *Ceratophyllum demersum*; and
 - Marsh marigold *Caltha palustris*.

- 6.60. Fish must not be introduced to the pond, and any fish that naturally occur must be controlled.
- 6.61. Algal blooms must be managed by physical removal of filamentous algae, and/or treatment with barley straw clumps or barley straw extract.
- 6.62. Chemicals must not be added to the water for any reason.
- 6.63. The final design for the pond restoration works will be approved by a suitably licensed ecologist to ensure that great crested newts are the key species of concern for the design.

Reptiles

Status on Site

- 6.64. The building does not contain any suitability for reptiles, and therefore the following recommendations are for works after the internal renovations to the main house.
- 6.65. The site has limited suitable habitat to support resting, commuting and foraging reptiles, and the wider landscape is considered likely to support a variety of reptiles. Therefore, it is unlikely that individual reptiles may access and utilise the site on occasion.

Potential Impacts

- 6.66. Proposed vegetation clearance, construction works and landscaping proposals all have the potential to injure/kill individual reptiles if present at the time of works.
- 6.67. The works will not result in a significant loss of suitable habitat to support reptiles on site or within the local landscape. As such, it is not anticipated that the works will have a significant negative impact on local reptile populations.

Recommendations for further proposed works after the internal renovations

- 6.68. Due to the small scale and localised nature of the works, alongside the large proportion of grassland habitat being retained as part of the proposals, it is considered that phase II surveys would be disproportionate in this instance.
- 6.69. Proposed recommendations as outlined above in the amphibians section are considered to provide suitable mitigative measures to protect reptile species on site.

Dormouse

Status on Site

- 6.70. The building does not contain any suitability for dormice, and therefore the following recommendations are for works after the internal renovations to the main house.
- 6.71. The areas of broadleaved woodland within the wider site may provide suitable opportunities to support individuals and populations of dormouse. The woodland on site is mapped on MagicMaps as Priority Habitat Inventory - Deciduous Woodland. This habitat type has potential to support hazel dormouse, however the woodland is isolated within the context of

the wider landscape, with no adjoining hedgerows or tree lines creating opportunities for dormice to commute to this woodland.

- 6.72. The habitats within the centre of the site, comprising modified grassland, ornamental planting, and developed land are of limited value to dormouse, providing very few suitable foraging, commuting, or resting/nesting opportunities for this species.

Potential Impacts

- 6.73. The proposed works will not impact any areas that could potentially impact hazel dormice.
- 6.74. As the proposals will not impact any habitat with suitability to support dormouse, it is considered unlikely that the proposed works will have a significant negative impact on local dormouse populations.

Recommendations for further proposed works after the internal renovations

- 6.75. In this instance, there are no recommended working methods for this species.

Other Terrestrial Mammals

Status on Site

- 6.76. The building does not contain any suitability for terrestrial mammals, and therefore the following recommendations are for works after the internal renovations to the main house.
- 6.77. The site contains suitable habitat to support terrestrial mammals, with the grassland habitats, ornamental planting, and pond offering good foraging, commuting, and resting opportunities for these species.
- 6.78. Common mammals such as fox, rabbit and deer are assumed to be utilising the site regularly.
- 6.79. Overall, it is considered likely that terrestrial mammals regularly access and use the site, with potential for hedgehogs, rabbits and deer to inhabit the site. As no recent evidence of badgers has been noted, it is assumed that they are currently not present on site. However, they may pass through the site on occasion.

Potential Impacts

- 6.80. As no recent badger activity has been recorded on site, it is considered unlikely that a sett entrance is present within 30m of the proposed works area, and no direct impacts to badger setts are anticipated.

Recommendations

- 6.81. General mitigation measures are considered sufficient to protect terrestrial mammals during the proposed works. It is considered that the methods outlined under the amphibian section above will be sufficient to protect terrestrial should they be present on site.

- 6.82. An updated walkover of the site is recommended immediately prior to works to the pond, to ensure no recent badger activity is present in the woodland directly adjacent to the works area.

Breeding Birds

Status on Site

- 6.83. The building does not contain any suitability for breeding birds, and therefore the following recommendations are for works after the internal renovations to the main house.
- 6.84. The site provides good foraging and nesting opportunities for a variety of bird species. It is likely that the site is frequented by an assemblage of common woodland and garden birds.
- 6.85. The site is not considered to have any optimal habitat for roosting or nesting barn owl within the red line boundary. No suitable trees or structures to support roosting barn owls were identified on site or around the boundary of the site.

Potential Impacts

- 6.86. The loss of modified grassland, ornamental planting, and individual trees will result in a loss of local foraging habitats for birds. The potential loss of the individual trees will also result in the loss of suitable nesting habitat for birds.
- 6.87. Due to the high quantity of suitable foraging and nesting habitat that will be retained on site as part of the proposals, it is not anticipated that the works will result in a significant loss of suitable nesting or foraging opportunities within the local area. As such, it is considered unlikely that the proposals will result in a significant negative impact on local bird populations.
- 6.88. In the absence of mitigation, if nesting birds are on site during any vegetation removal processes, the works may have the potential to injure/kill individual nesting/breeding birds.

Recommendations

- 6.89. Should any trees require removal to facilitate the construction of the tennis court or habitable barn, the trees should be checked by a suitably experienced ecologist, and works should be undertaken outside the main breeding bird season of March to August, inclusive.
- 6.90. If small areas of suitable nesting habitat are required to be removed during the breeding season, then a suitably experienced ecologist, acting as an Ecological Clerk of Works (ECoW), should conduct surveys for nesting birds immediately prior to the commencement of any activity resulting in the removal or significant modification of breeding habitat. Should active bird nests be discovered, appropriate measures will be required to ensure that any nest or dependent young are not disturbed. This will involve placing a suitable buffer around the nest, within which no works will be undertaken until a suitably qualified ornithologist has judged the nest to no longer be in use (i.e. the nesting attempt has failed or the young have fledged). The extent of the buffer would be determined following consideration of the

species involved and the stage of the breeding attempt. Where no active nests are located, habitat clearance or modification should be completed within 24 hours of the inspection.

- 6.91. Any new planting should be done with native species, such as English oak *Quercus robur*, silver birch *Betula pendula*, field maple *Acer campestre*, hawthorn *Crataegus monogyna*, holly *Ilex aquifolium* and beech *Fagus sylvatica*. Tree planting should be completed between October and March, avoiding periods of frost and snow. Trees will be protected against grazing stock, such as deer and rabbits through fencing and / or tree guards. Due to the potential risk of spreading ash dieback *Chalara fraxinea*, no ash *Fraxinus excelsior* trees will be planted (Statutory Instrument No. 2707 - The Plant Health (Forestry) (Amendment) Order 2012 effectively prohibits the internal movement of plants or seeds of ash.

Invertebrates

Status on Site

- 6.92. The building does not contain any suitability for invertebrates, and therefore the following recommendations are for works after the internal renovations to the main house.
- 6.93. The application site has habitats suitable to support a wide range of common and uncommon invertebrate species, with the neutral grassland, individual trees, ornamental planting, and mixed woodland all providing suitable foraging, commuting, and nesting/ resting habitats for these species. Additionally, the woodland habitats on site have potential to support stag beetle due to the presence of high quantities of dead wood.
- 6.94. The site does not have suitability to support Roman Snail.

Potential Impacts

- 6.95. The proposed works will result in a small loss of suitable foraging, resting, nesting, and commuting habitat for invertebrates on site. Due to the high quantity of suitable habitat which will be retained as part of the works, this loss is not expected to have a significant negative impact on local populations of invertebrates.
- 6.96. Habitat with suitability to support stag beetle will not be impacted by the proposals.

Recommendations

- 6.97. As it is not anticipated that the works would result in a significant negative impact on local populations of invertebrates, it is considered that further surveys for invertebrates would be disproportionate to the works.
- 6.98. Deadwood from tree removal should be piled within the woodland habitats around the edges of the site to create valuable niches for a variety of invertebrate species. No established wood piles should be dismantled unless absolutely necessary, and should be left in-situ wherever possible. Where this is not possible, decaying and old logs should be relocated to another area on site.

- 6.99. Where new planting is considered in the plan, native tree and shrub species should be used to enhance the ecological value of the site, with a focus on fruiting and flowering species.

7. ENHANCEMENT RECOMMENDATIONS

- 7.1. National planning policy states that all developments should seek to enhance onsite biodiversity whether impacts on protected species are recorded or not. Incorporating enhancement features into new or renovated buildings should be carefully considered. These features can be simple and inexpensive, please see below for specific recommendations.
- 7.2. Plans for Barnham Court include restoring the pond present, improving it's capacity to hold water and creating a more organic shape. The pond will be lined, and the current near-vertical banks will be shallowed to create a more natural and gentle slope. The total depth will be 3m in the centre. The pond will be filled with a combination of clean water collected from the roofs of Barnham Court (where possible) as well as from a shallow borehole.

Bats

- 7.3. The site can be enhanced with the addition of bat boxes, particularly within the woodland near the pond. Several trees in this area are due to be removed to facilitate the works, and therefore large, mature trees that may contain features used by bats may be removed. A combination of at least two CJM bat boxes, and at least two Large Multi-Chamber Bat Tree Boxes are recommended.

Birds

- 7.4. The restoration of the pond will benefit local wildlife, particularly amphibians and waterfowl. The site can be enhanced with the addition of bird boxes, particularly within the woodland near the pond. Several trees in this area are due to be removed to facilitate the works, and therefore large, mature trees that may contain features used by birds may be removed. A minimum of four Schwegler 1B Bird Nest Boxes are recommended.

Reptiles and Amphibians

- 7.5. The restoration of the pond will benefit local wildlife, particularly amphibians and waterfowl. The aim to create a 'natural' pond with gentle sloping sides and aquatic planting will restore the habitat on site that was previously used by amphibians before the old pond was drained.
- 7.6. Refugia in the form of log piles near the pond can be created from any trees felled as part of the plans. This will further create habitat that can be used by reptiles and amphibians.

Wildlife Beneficial Landscaping Scheme

- 7.7. Any future landscape planting should seek to enhance biodiversity, improve connectivity to the surrounding habitats and provide food and shelter for a wide range of wildlife. All amenity planting and formally landscaped areas should be designed using a variety of plant species beneficial for wildlife. These do not necessarily have to be native but should be chosen for their ability to provide nectar or fruit and should be non-invasive species. There

are a number of specialist seed mixes available specific to certain soil types, growing conditions and designed to benefit different groups of species such as bees or butterflies and moths.

- 7.8. All habitats should be managed in a suitable way to encourage a wide variety of insects and other wildlife to use the site.
- 7.9. Further information regarding habitat creation, enhancement and management can be provided on request and submitted with further survey results for the final planning application.

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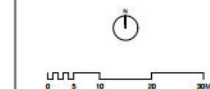
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APPENDICES

1. PROPOSED PLANS
2. BAT EMERGENCE SURVEY DARKEST POINTS
3. BATS & LIGHTING
4. ENHANCEMENTS

APPENDIX 1 - PROPOSED PLANS

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[illegible]

DRAWING TITLE:
PROPOSED
SITE PLAN

STATUS: **Stage 2 - Concept**

DRAWING NUMBER:	ISSUE:
A1.21	2A

APPENDIX 2 - NIGHT VISION AID DARKEST POINTS (B1)



Image 1: B1, survey 1.



Image 2: B1, survey 1.



Image 3: B1, survey 1.



Image 4: B1, survey 1.



Image 5: B1, survey 1.



Image 6: B1, survey 1.



Image 7: B1, survey 1.



Image 8: B1, survey 2.



Image 9: B1, survey 2.



Image 10: B1, survey 2.



Image 11: B1, survey 2.



Image 12: B1, survey 2.



Image 13: B1, survey 3.



Image 14: B1, survey 3.



Image 15: B1, survey 3.



Image 16: B1, survey 3.



Image 17: B1, survey 3.



Image 18: B1, survey 3.



Image 19: B1, survey 3.



Image 20: B1, survey 3.

NIGHT VISION AID DARKEST POINTS (B2)



Image 21: B2, survey 1.



Image 22: B2, survey 1.

APPENDIX 3 - BATS & LIGHTING



THE IMPACT OF LIGHTING ON BATS

Bats favour a dark environment for both roosting and foraging as they are adapted to low-light conditions. Artificial lighting will disturb bats if the lighting covers roost access points, flight paths or foraging habitats.

The main peak of nocturnal insect abundance occurs at dusk and a delay in emergence results in a lower foraging rate for bats.

Artificial lighting creates a 'vacuum effect' for nocturnal insects. During the night nocturnal insects use the light of the moon* to navigate. However, artificial lighting and even sky glow above cities obscures the natural moonlight as it is closer

and radiates light in multiple directions.

Some species of bats have been recorded foraging around street lights such as *Pipistrellus* species and *Nyctalus* species. However, species that are less tolerant of artificial light are at a disadvantage when foraging as insects are drawn away from these species usual foraging grounds into the zones of artificial light.

Lighting must be considered in context to any development as increased lighting may cause roost abandonment, reduced reproductive success, and reduced foraging. Mitigation to reduce the impacts of lighting for bats is therefore of great importance in bat conservation.

Table 1: Summary of predicted impact of lighting for each species/genus

Impact	High	Medium	Low
Behaviour			
Maternity roost	All species	-	-
Night roost	<i>Rhinolophus hipposideros</i> <i>Rhinolophus ferrumequinum</i> <i>Myotis</i> spp. <i>Plecotus</i> spp.	<i>Pipistrellus</i> spp. <i>Nyctalus</i> spp. <i>Eptesicus serotinus</i> <i>Barbastella barbastellus</i>	-
Emergence	All species	-	-
Foraging	<i>Rhinolophus hipposideros</i> <i>Rhinolophus ferrumequinum</i> <i>Myotis</i> spp. <i>Plecotus</i> spp.	-	<i>Pipistrellus</i> spp. <i>Nyctalus</i> spp. <i>Eptesicus serotinus</i> <i>Barbastella barbastellus</i>
Commuting	<i>Rhinolophus hipposideros</i> <i>Rhinolophus ferrumequinum</i> <i>Myotis</i> spp. <i>Plecotus</i> spp.	-	<i>Pipistrellus</i> spp. <i>Nyctalus</i> spp. <i>Eptesicus serotinus</i> <i>Barbastella barbastellus</i>
Swarming	All species	-	-
Hibernation	All species	-	-

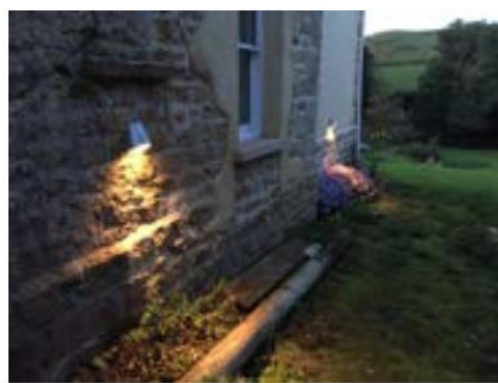
*For more information see Warrant, E., and Dacke, M. (2016) Visual Navigation in Nocturnal insects. *Physiology*, 31, 182-196.

Sources of light that can disturb bats include; light spill via windows, sport floodlighting, car headlights, roadside lighting, security lighting, aesthetic lighting of waterways, and aesthetic illumination of buildings. Glare will affect bats over greater distance than the target area directly illuminated.

Avoidance is the most effective method, but if this is not possible the following measures should be considered.

What lighting should I use?

- Low pressure sodium lights or 'warm' LEDs
- Wavelength above 540nm
- Colour temperature below 2700K
- Shielded lights that prevent light spill above a 70 degree angle
- Passive infrared (PIR) motion sensors



What to avoid:

- Lighting roost entrances, flightpaths, and foraging or commuting routes
- Reflective surfaces beneath lighting
- High level lights
- Non-directional lighting

Lighting should be considered at an early stage allowing impacts to be minimised through the design of the site.

Key Points

- Keep lighting intensity to the minimum level required
- Limit the times that lights are on to provide some dark periods (e.g. switching installations off between midnight and 5am)
- Dim lighting according to demand
- As an alternative to lighting pathways use paving materials that reflect moonlight
- Low level lighting allows darkness to be retained within higher vegetation
- Set dark habitat buffers - lighting should always be a minimum of 25m from vegetated margins and 40m from waterbodies
- Incorporate dark corridors within the site
- Compensate for the loss of dark areas by enhancing other dark areas
- Consider building design - install internal lighting away from windows

APPENDIX 4 - ENHANCEMENTS



General Mitigation for Bat Roosts

Bat Mitigation Class Licence (BMCL)

Registration for a BMCL can be submitted following planning approval. This licence permits the disturbance and/or capture of bats and/or damage/destruction of bat roosts of low conservation significance. You may apply for a BMCL in the following circumstances:

- No more than three common species of bat;
- Only individual or small numbers of bats of each species; and
- No more than three roosts in total across all structures at the site.

Natural England aim to provide licensing details in 10 working days



European Protected Species Licence (EPSL)

An application must be submitted by the local planning authority and must be granted before any works can commence on site. You must apply for an EPSL in the following circumstances:

- More than three species of bat or roosting structures are present at the site
- Rarer species are present
- Presence of a Maternity roost
- Roost present within a tree

Natural England aim to provide licensing decisions in 30 working days. Licences will only be granted where it can be shown there will be no detriment to the species of bats concerned.

Timing: If your roost is a confirmed **Hibernation** roost works cannot be carried out in **Oct-Feb**

If your roost is a confirmed **Maternity** roost works cannot be carried out in **May-Aug**



Supervision

Once you have been granted your licence, a Natural England bat-licensed ecologist will need to be on site to over see the stripping of any identified or potentially suitable roosting features. If any bats are found on site they can then be lawfully handled and placed safely into a newly provided bat box.

After the strip has taken place the provision of new roosting opportunities must be placed on site as mitigation such as bat boxes which are suitable for the roosting bat species which were found on site.

Materials

Breathable membrane (pictured on the left) should **not** be used in new loft voids as this can lead to entanglement and trapping of bats and increase the variability of the microclimate in the loft. Instead **bitumen felt** (pictured on the right) should be utilised as bats can grip onto it, helping to maintain a safe and suitable environment.





TYPES OF BAT BOXES



Schwegler 2F Double Front Panel

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for pipistrelle and Myotis species
- A second inner wooden panel is fitted adjacent to the front panel imitating a cavity wall



Schwegler 1FD Double Front Panel

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for pipistrelle and Myotis species
- A second inner wooden panel is fitted adjacent to the front panel imitating a cavity wall
- Small entrance hole discourages birds from using the box



Vincent Pro Bat Box

- Manufactured from timber and recycled plastic
- The front and the top of the box is black, which helps heat absorption
- Suitable for a range of species including pipistrelle species, Myotis species, and brown long-eared bats.
- No maintenance required



Schwegler 2FN

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for pipistrelle species, Myotis species, serotine, brown long-eared, noctule and Leisler's bats
- Dual entrance
- Birds and dormice have also been found using this box
- A newer model is now available, Schwegler 3FN, designed with smaller entrance holes which discourage birds and dormice



Schwegler 1FS Large Colony Box

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for a range of bats including pipistrelle species, Myotis species, Noctule, and brown long-eared bats
- Three grooved inner wooden panels are connected to the front panel, which are ideal for bats to cling to.
- Accommodates large summer colonies



Schwegler 1FF Colony Box

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for a range of crevice dwelling bats including pipistrelle species, barbastelle, noctule, and brown long-eared bats
- Rough wooden surface for bats to cling onto and climb



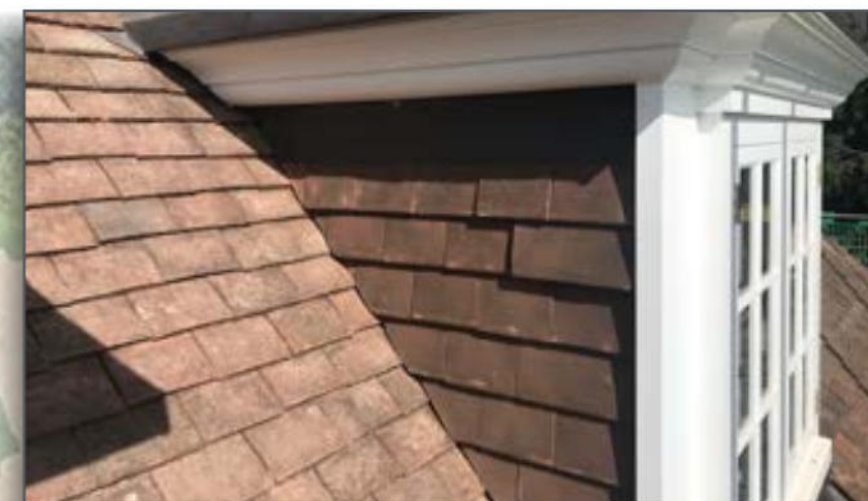
Greenwoods Ecohabitats Small Hollow Bat Box

- Manufactured from long-lasting ecostyrocete
- Lifetime - 20-25 years
- Suitable for a range of bats preferring a cavity space, including pipistrelle species, myotis species, noctule, and brown long-eared bats
- Suitable for hibernating bats



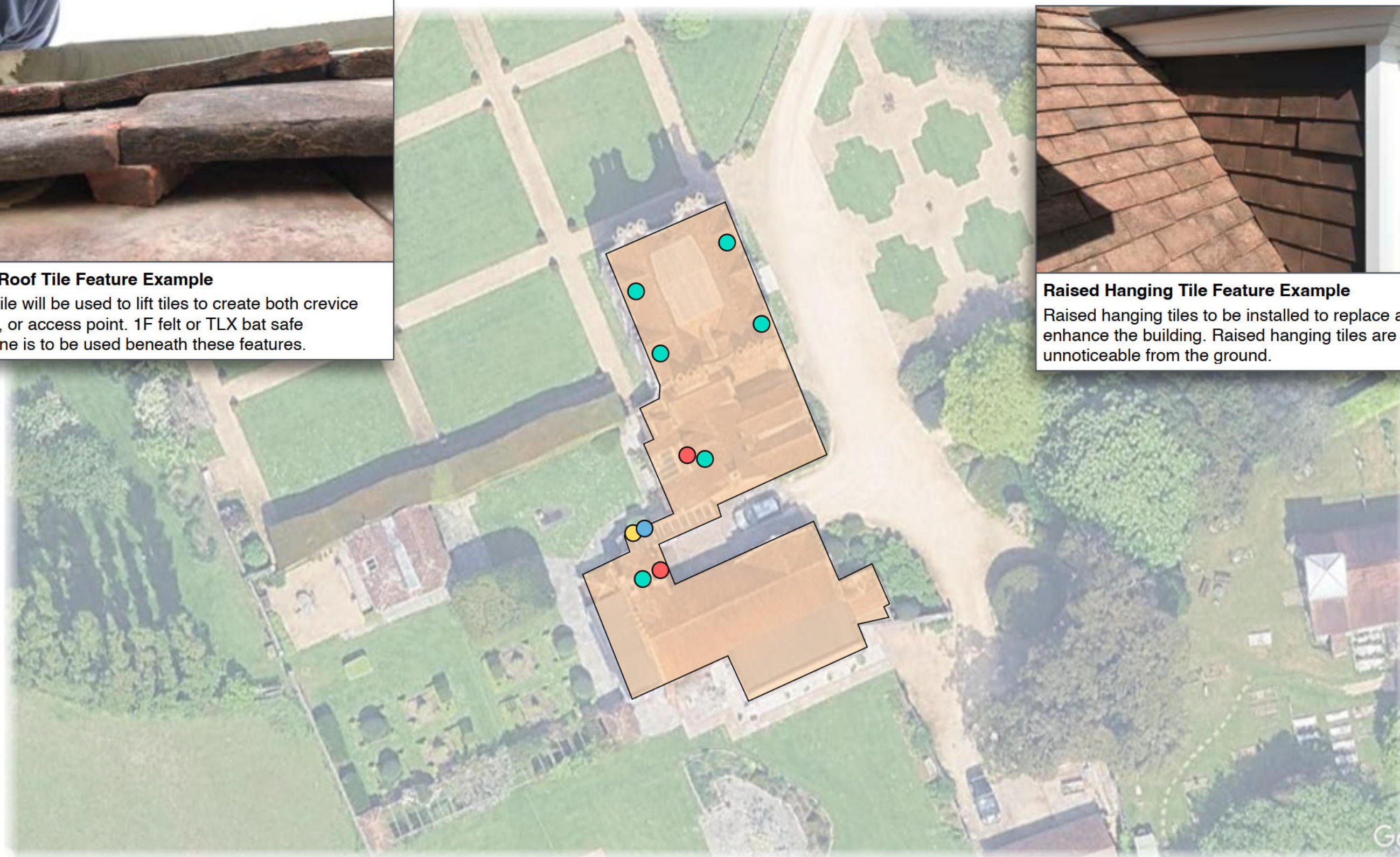
Raised Roof Tile Feature Example

Broken tile will be used to lift tiles to create both crevice features, or access point. 1F felt or TLX bat safe membrane is to be used beneath these features.



Raised Hanging Tile Feature Example

Raised hanging tiles to be installed to replace and enhance the building. Raised hanging tiles are almost unnoticeable from the ground.



*NOTE Areas are indicative and are not shown to exact scale.



Building surveyed



Original emergence point,
to be re-instated (roof)



Original emergence point,
to be re-instated (hanging)



Location of additional
lifted tiles (roof)



Location of additional
lifted tiles (hanging)



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Project: Barnham Court, Church
Lane, Barnham, PO22 0BP

Figure 7: Mitigation Compensation
Plan

Date: July 2026



Lifted tile bat access features

Lifted tiles provide a simple, discreet bat roosting opportunity which are great for replicating existing roost features on traditional tiled roofs. They can be cheaply and easily created using materials available on site to provide a bespoke mitigation solutions for bat licence projects.



Small pieces of tile, mortar, pieces of wooden batten or rolled lead tingle can be used to raise the tile and create a suitable access gap for bats.

Lifted tiles should provide a gap of approximately 15-25 mm beneath the tile to provide access to the batten space of the roof. The roof should be lined with bitumastic felt to create the perfect warm crevices suitable for roosting bats.



These features are also suitable for incorporation on areas of hanging tiles to provide bat access to the batten space.

The locations for these features should be agreed with an ecologist to provide optimal conditions for the bat species and roost types present on site.

Lifted tile features can also be used to provide access into a roof void suitable for roosting bats. To provide access into the roof space, a small gap must be cut into the roofing felt. This should be approximately 50 mm x 20 mm to provide access for bats but discourage birds from entering the roof space.



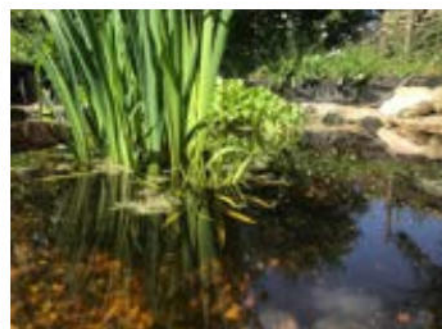
Restoring Ponds & Creating Habitat Features



BEFORE



DURING



AFTER

At Darwin Ecology we have an in-house team that specialise in habitat creation. Our operatives have experience in creating and restoring ponds, constructing habitat piles, hibernacula, dead hedges and wildlife towers. All these features increase foraging resources and sheltering / nesting opportunities for a range of species such as amphibians, reptiles, hedgehogs and invertebrates.



Bespoke deadwood piles and dead hedges create attractive habitat features for wildlife





Creation and design



Hibernacula offer sheltering opportunities for reptile and amphibian species, providing them with essential habitat in which to hibernate during the winter temporary shelter in the summer during the warmer months.

Hibernacula can be both naturally-occurring and artificial, and can be constructed of a range of materials. Our ecologists can advise on the best locations and materials for the placement of artificial hibernacula.

The optimum locations for hibernacula are on south-facing slopes within freely-draining soils. It is imperative that the hibernacula are exposed to direct sunlight for the majority of the day to ensure maximum thermal capacity.

It is also important that hibernacula are created within a mosaic of habitat types for example open areas of grassland adjacent to sheltered areas of scrub / hedgerow. This ensures excellent basking areas are available adjacent to well connected habitat and areas of shelter.



Hibernacula can range from underground chambers to sheltered areas at ground level, akin to refugia.

By digging a shallow pit and filling it with materials such as rocks and logs, a chamber can be created which contains several gaps within. Access can be enabled by placing entrance tubes at ground level that go into and out of the chamber.

When the chamber and access has been constructed, soil can be piled on top of the hibernacula to seal it. Plant wildflower seeds on top to further benefit local biodiversity!

