



Chequers Cottage, Well
Phase 1 and Phase 2 Bat Assessment

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Executive Summary

This Phase 1 and Phase 2 Bat Appraisal Report provides an assessment of the potential for roosting bats to be impacted by the proposed works to the existing property at Chequers Cottage, Well, Long Sutton.

The proposed works entail a two storey extension on the northern elevation of the property which will tie into the existing main roof and result in the removal of two smaller pitched roof sections.

A Preliminary Roost Assessment survey was undertaken in 3 August 2023 which identified a number of features suitable for roosting bats within areas affected by the proposals, including gaps under tiles and gaps into the main loft space. Within the loft a single bat droppings was found, with the dropping characteristic of *Pipistrellus* species.

Phase 2 bat surveys were undertaken between August and September 2023. Three Common Pipistrelle bats were recorded emerging from a ridge tile at the western end of the main pitched roof. Moderate levels of bat activity were recorded during the surveys with up to five species of bats recorded.

The emergence surveys confirm that the property supports a day roost for Common Pipistrelle bats.

Measures are recommended for mitigating potential impacts and enhancing the overall biodiversity of the site, including retaining access into the ridge tile which supports the roost, and maintaining bat access into the loft which will be retained. Additional bat boxes will be installed to provide enhanced bat roosting features in the local area.

1. Introduction

1.1. Background

Broadleaf Ecology has been contracted by Mr Fry to undertake a Phase 1 Preliminary Bat Appraisal and Phase 2 roost surveys at Chequers Cottage, Well, Long Sutton, RG29 1TQ. The site is centred on National Grid Reference (NGR) SU 76045 46629.

This report presents the findings of the Phase 1 Preliminary Roost Assessment and subsequent Phase 2 bat roost emergence and re-entry surveys undertaken by Broadleaf Ecology in 2023.

1.2. Aims and Scope of Report

The aim of the Preliminary Bat Appraisal was to undertake an assessment of the potential of the house which will be impacted by the works to support roosting bats as informed by a Preliminary Roost Assessment.

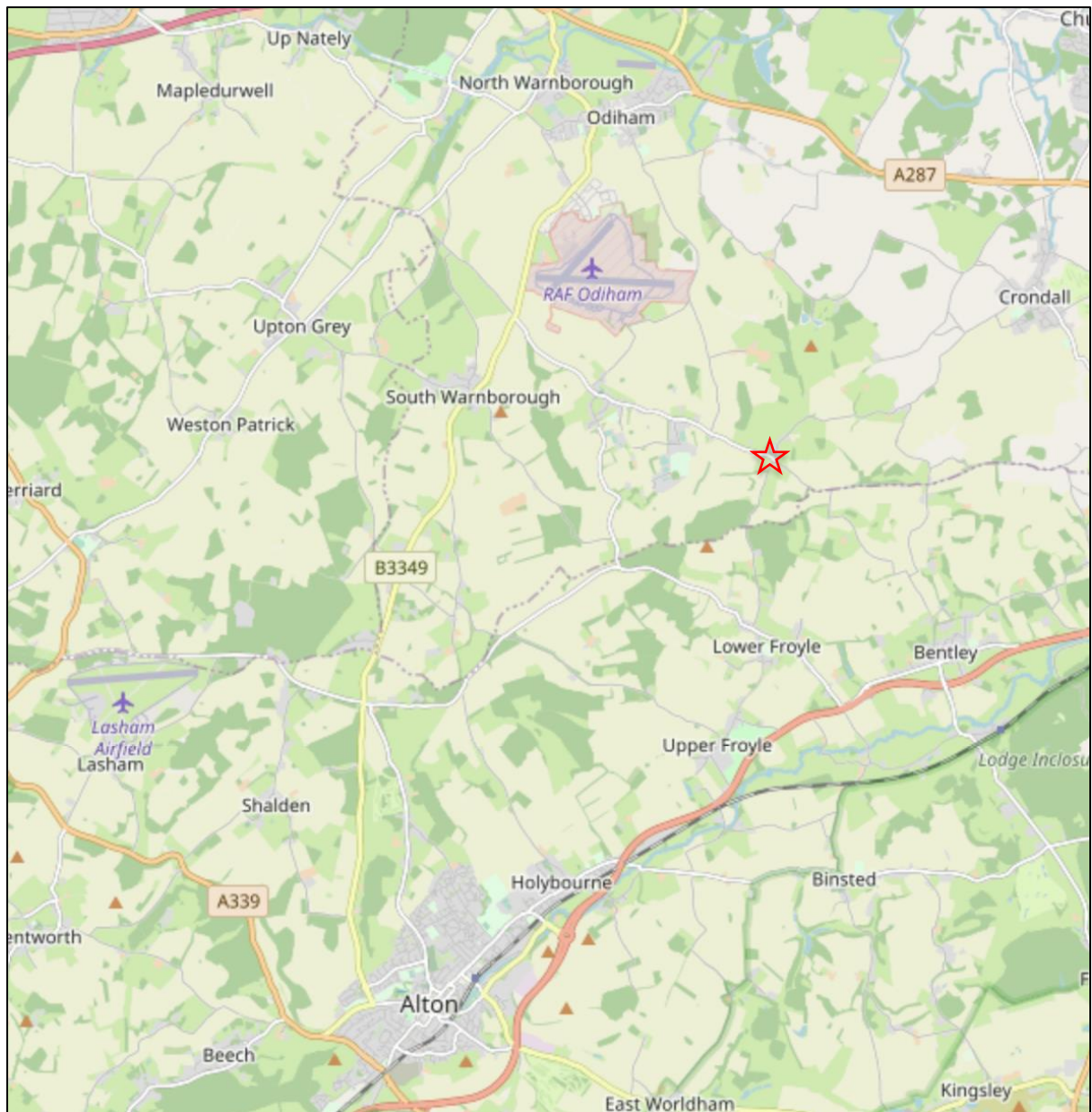
The Phase 2 bat survey was aimed at providing a detailed assessment of the status of the site for roosting bats including the number, species, status and location of bat roosts currently supported by the house and to determine any key areas of foraging and commuting activity. The report outlines the methods used for both desk study and site survey, summarises any limitations, and outlines the results.

This information allows an assessment of the value for bats of the site to be made. The data gathered during the Phase 2 survey has been used to assess the potential ecological impacts of the proposed works, and identify avoidance, mitigation and enhancement measures.

1.3. Site Setting and Description

Chequers Cottage is located in a rural location in the village of Long Sutton, approximately 7.5km north of Alton, and 4.8km south of Odiham (Figure 1). The site comprises a detached two storey house with a mature garden including lawns and borders of hedgerows and mature shrubs. The site is bordered by the Chequers Inn to the east and by arable fields to the north and west. To the south the property is bordered by White Hill lane, a minor road with mature hedgerows. The wider landscape is largely agricultural with a mix of arable and pasture fields together with blocks of broadleaved woodland, and native hedgerows.

Figure 1. Site location plan



Source – © OpenStreetMap contributors - openstreetmap.org

1.4. Site Proposals

The proposals include the construction of a two storey extension on the northern elevation of the property. This will involve the demolition of the existing single storey section on the northern elevation and modification of the existing pitched roof sections on the northern elevation. The new extension will also tie into the existing main pitched roof. Drawings of the proposals are provided in Appendix A.

2. Planning Policy

2.1. Introduction

This section provides a brief summary of current National and Local Planning Policy that is relevant to this development. The original policy documents should be referred to for the full text and most up to date policy.

2.2. National Policy

The National Planning Policy Framework (NPPF) 2023 sets out the government's requirements for the planning system in England. Section 15 of the NPPF sets out the policy for conserving and enhancing the natural environment with paragraph 174 stating that '*Planning policies and decisions should contribute to and enhance the natural and local environment by¹:*

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);

(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;

(c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

(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;

Paragraph 180 of NPPF states that '*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;

¹ only selected biodiversity sections included in list. For full text see <https://www.gov.uk/guidance/national-planning-policy-framework>

(b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features 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 63 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 developments 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.

In addition to the NPPF, Circular 06/05 provides guidance on the application of the law relating to planning and nature conservation as it applies in England. Paragraph 98 states *“the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat”* whilst paragraph 99 states *“it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted”*.

The Environment Act 2021 seeks to halt the decline of nature by 2030 and will mandate Biodiversity Net Gain for developments. Mandatory biodiversity net gain as set out in the Environment Act applies in England only by amending the Town & Country Planning Act (TCPA) and is likely to become law in 2023.

2.3. Local Policy

Local planning policy is set out in the Hart District Council Local Plan (Strategy and Sites) 2032. Relevant biodiversity policies within this plan are outlined below:

Policy NBE4 - Biodiversity

In order to conserve and enhance biodiversity, new development will be permitted provided:

- a) *It will not have an adverse effect on the integrity of an international, national or locally designated site including the Thames Basin Heaths Special Protection Area (SPA), Sites of Special Scientific Interest (SSSIs), Sites of Importance for Nature Conservation (SINCs) and National and Local Nature Reserves (NNRs and LNRs). The level of protection afforded to these sites is commensurate with their status within this hierarchy and gives appropriate weight to their importance and contribution to wider ecological networks.*
- b) *It does not result in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss;*
- c) *Opportunities to protect and enhance biodiversity and contribute to wildlife and habitat connectivity are taken where possible, including the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations. All development proposals will be expected to avoid negative impacts on existing biodiversity and provide a net gain where possible.*

If significant harm 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, or, in the case of European Protected sites does not comply with the Conservation of Habitats and Species Regulations 2017, then planning permission will be refused.

3. Methods

This section details the methods used during the Phase 1 Preliminary Roost Assessment and Phase 2 bat surveys.

3.1. Desk Study

Multi-Agency Geographic Information

The Multi-Agency Geographic Information for the Countryside (MAGIC) database was accessed on 20th September 2023 in order to establish the presence of statutory designated sites located within the vicinity of the site. This included a search for all internationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites within 1km of the site and a search for nationally designated sites including Sites of Special Scientific Interest (SSSIs), Local Nature Reserves (LNRs) and National Nature Reserves (NNRs) within 1km of the site. The MAGIC data base was also used to identify any granted bat mitigation licences within 2km of the site. It was not considered proportionate to undertake a full biological records search at this stage due to the small scale of the proposals which are restricted to the modification of the existing dwelling.

3.2. Preliminary Roost Assessment

The Preliminary Roost Assessment survey was carried out by Simon Mason (NE Bat Class Licence Level 2 2015-16600-CLS-CLS) on 3rd August 2023. The weather conditions were warm and dry with approximately 80% cloud cover, an ambient temperature of 21°C and a light northwesterly wind.

During the survey the surveyor was equipped with a ladder, 10x40 binoculars, endoscope, a high-powered torch and a digital camera.

The Preliminary Roost Assessment was undertaken in accordance with Bat Conservation Trust Guidance². The surveyor undertook a systematic inspection of the exterior and interior of the property to look for features that bats could use for entry/exit and roosting and to search for signs of bats, including but not limited to bat specimens (live or dead), droppings, staining and feeding remains.

² Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

Assessment of Bat Roosting Potential

Following the internal and external inspections, an assessment was made of the potential of structures on site to support roosting bats. The assessment is based on the potential for the site to support bats, based on the on-site habitat features and their suitability for the species considered.

The potential for the site to support bats is based on the results of the field survey assessment. The potential for on-site habitat to support bats is based upon the following criteria which are based on Bat Conservation Trust guidelines:

- **Species Present:** Evidence of bat presence confirmed during survey, which may include presence of live or dead bats, droppings, feeding remains or urine stains etc. Where possible, a provisional assessment of roost status is made. If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the status of the species present.
- **High Potential:** A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the presence/likely absence of the species.
- **Medium Potential:** A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only). If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the presence/likely absence of the species.
- **Low Potential:** A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the presence/likely absence of the species.
- **Negligible Potential:** Structures that are extremely unlikely to support roosting bats due to the absence of suitable features. Further Phase 2 surveys are unlikely to be required as species is unlikely to be present.

Preliminary Roost Assessment Limitations

Not all potential bat roosting features are accessible to the surveyor, e.g. gaps beneath roof materials, and therefore assessments are based upon the potential for these features to provide suitable roosting opportunities.

3.3. Phase 2 Bat Surveys – Emergence surveys

The Phase 2 bat surveys were carried out in accordance with the Bat Conservation Trust (BCT) guidelines. Surveys were undertaken by one experienced surveyor with infra-red night vision binoculars and two infra-red cameras, with survey positions located at previously identified vantage points around all aspects of the house with potential roost features which could be impacted by the proposals, to observe bats as they emerge from and return to their roosting locations.

The level of bat foraging and commuting activity was also recorded during the Phase 2 surveys to establish any key on-site foraging areas and commuting routes. The dusk emergence surveys commenced 15 minutes before sunset and were undertaken until at least 1.5 hours after sunset.

Surveyors recorded the time, species, location and direction of flight for each bat encountered. Particular attention was paid to establishing bat access/entry locations.

Phase 2 Bat Survey Timing, Details and Personnel

The Phase 2 bat surveys were undertaken between August and September 2023. The surveys consisted of three dusk emergence surveys. Surveys were led by Simon Mason (NE Bat Class Licence Level 2). Table 1 provides details of each Phase 2 bat survey.

Table 1. Phase 2 Bat Survey Details

Survey Date	Survey Type	Duration	Weather Conditions	Sunset/ Sunrise
15/08/23	Dusk	20:10 – 21:56	18° start 16°C end, dry, 80% cloud, light wind (F1)	20:26
31/08/23	Dusk	19:38 – 21:23	16°C start 16°C end, very light rain for around 10 minutes from 21:14, 100% cloud, light wind (F1)	19:53

18/09/23	Dusk	18:57 – 20:43	16°C start 14°C end, dry, 10% cloud, moderate wind (F1-3)	19:12
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Phase 2 Bat Survey Equipment

The surveyor was equipped with a Wildlife Acoustics Echo Meter Touch 2 Pro full spectrum bat detector and Nightfox infrared binoculars. Recordings of bat echolocations were manually analysed using Kaleidoscope software to confirm the identity of any species encountered.

The two infra-red camera positions included a professional quality Cannon XF105 HD camera and a Sony FDR-AX100 4K camera with additional infra-red illumination provided by 2 x 96 LED IR Illuminator Array Infrared Lamps and 3 x Nightfox IR torches. A Wildlife Acoustics Song Meter Mini Bat full spectrum detector or an Echo Meter Touch 2 Pro was used to record bat activity from the infra-red locations. Camera footage was reviewed using VLC Media Player. Figure 2 shows still images of the infrared cameras from the darkest point at the end of the survey.

Figure 2 – Infra red survey locations at darkest point of survey





Phase 2 Bat Survey – Emergence and Re-entry survey limitations

Some bat species, e.g. long-eared bats, generally emerge from their roosts in total darkness and do not produce strong echolocations, and therefore these bats can be difficult to observe and record during Phase 2 bat surveys, leading to under-recording. The use of infra-red cameras and binoculars provides greater confidence in the emergence of late emerging species.

There are two species of Long-Eared bats in the UK, Brown Long-Eared *Plecotus auritus* and Grey Long-eared *Plecotus austriacus*. Brown Long-Eared are widespread and common, whereas Grey Long-Eared is very rare in the UK, which is at the northern edge of its range. Whilst Grey Long-Eared bats typically have grey fur, the species can only reliably be told apart either from DNA analysis of droppings or by examination of physical characteristics. For the purposes of this report, ‘Long-Eared species’ is used unless a positive identification has been made.

Bat Conservation Trust Guidelines state that buildings with high potential should be subject to one dusk emergence survey, one dawn re-entry survey and a third survey of either dusk or dawn. No dawn re-entry surveys were undertaken at the site. Due to the relatively simple structure with good visibility of potential roost features, and the use of an infrared camera, it is considered that dusk emergence surveys provide the most reliable assessment of the presence or likely absence of roosting bats. Reviews of empirical data on bat emergence and re-entry times³ indicates that dawn re-entry surveys

³ Andrews, H. and Pearson, L. (2022) Review of empirical data in respect of emergence and return times reported for the UK’s native bat species Version 6 – 6th April 2022

are likely to miss many bats which may re-enter before dawn re-entry surveys commence and that dusk emergence surveys are more reliable for determining presence of roosting bats. The forthcoming update of the Bat Survey Guidelines will also remove the recommendation for dawn surveys. The lack of dawn surveys is not considered to be a constraint.

3.4. Other Protected Species

During the phase 1 survey an assessment was made for other protected species which may be impacted by the works. Due to the limited extent of works which are confined to minor works to an existing residential property, a full extended phase 1 habitat survey was not undertaken. However, potential for protected species which have potential to be impacted by the proposals was assessed, in particular associated with the structure impacted by the works. This included an assessment of the potential for nesting birds to use features on the affected structure, including looking for signs of nesting activity and/or potential nesting sites.

4. Results

4.1. Introduction

This section details the results of the Phase 1 Preliminary Bat Appraisal and Phase 2 bat surveys.

4.2. Desktop Study

Statutory Designated Sites

Consultation with the MAGIC website identified no statutory designated sites of nature conservation situated within a 1km radius of the site.

European Protected Species Licence Records

Consultation with the MAGIC website revealed that there are two records of a bat mitigation licenses within 2km of the site. Details of these records are summarised in Table 2 below.

Table 2. Bat mitigation licences within 2km of site

Bat licence reference	Year	Species and Roost type	Distance from site
2014-3585-EPS-MIT	2014	Brown Long-eared <i>Plecotus auritus</i> and Common Pipistrelle <i>Pipistrellus pipistrellus</i> . Non breeding.	1,780m E
EPSM2013-5687	2013	Brown Long-eared and Common Pipistrelle. Non breeding.	1,780m E

4.3. Preliminary Roost Assessment

Bats - Building Assessment

The site contains a detached residential house with associated mown lawns, shrubs and hedgerows. Works are restricted to the house and its immediate surrounds including the existing patio, driveway and mown amenity grassland. The survey therefore focused on the house.

House

Photographs of the house and potential roost features are provided within Table 3. The oldest parts of the property are understood to date back several hundred years. Externally the house is constructed from brick which is rendered and painted in the original section of the house with exposed brickwork on much of the northern elevation. There are three sections of pitched roof with traditional clay pan tiles and clay ridge tiles. On the northern elevation there is a single storey extension with a

largely flat roof with a shallow hipped section clad in clay tiles. A small section of hanging tiles is present on part of the northern elevation.

There were a number of gaps under the traditional clay tiles providing potential bat access points on the northern, western and southern elevations. A small gap was present where the roof meets the chimney breast providing potential access into the loft space on the western elevation. Eaves gaps along the eastern elevation were blocked with old foam. No droppings or other evidence of bats was recorded externally during the preliminary roost assessment.

Internally, there was a single roof void. The roof void was approximately 1.5m high and 4m wide. The roof had old timber rafters, beams and purlins and the roof was lined with traditional bitumen felt which was in largely in good condition, however a number of gaps were present where the felt was coming away, providing potential bat access into the roof void. The gable end walls were constructed from brick and there was frequent missing mortar, providing potential roosting opportunities for crevice dwelling bats. Light was visible coming through into the loft at the eaves where the roof met the chimney, corresponding with the gap identified during the external inspection. The floor was insulated with fiberglass and was largely un-boarded. There were occasional old cobwebs along the ridge board and rafters. A single old bat dropping, the shape and size of which was assessed to be characteristic of Pipistrelle bat species, was found in the roof on the fiberglass insulation.

Table 3 Preliminary roost assessment photos


Photo	Description
	<p>Western elevation showing potential roost access points under tiles and where the roof meets the chimney breast.</p>




Photo	Description
	Close up of gap where the roof meets the chimney breast on the western elevation.
	Gaps under tiles on northern elevation
	Gaps under tiles on southern elevation

Photo	Description
	Internal view of loft showing old timbers and bitumen felt.
	View of garden looking northwest showing arable fields beyond.

Overall the building is assessed as a **Confirmed Roost** due to the presence of a single bat dropping. The size and shape of the dropping is characteristic of Pipistrelle bats and the small number of droppings indicates occasional use by an individual or small number of bats.

Bats - Foraging and Commuting Habitat

The garden of the property is largely laid as lawn. The borders include a mix of mature shrubs and managed hedgerows. The site is bordered by the Chequers Inn to the east which includes a garden bordered by mature trees and by arable fields to the north and west. The Chequers Inn provides further opportunities for roosting bats, including a large area of hanging tiles on its western elevation. To the south the property is bordered by White Hill lane, a minor road with mature native hedgerows

on either side. The wider landscape is largely agricultural with a mix of arable and pasture fields together with blocks of broadleaved woodland, and native hedgerows providing good connectivity. Overall, the site is assessed as being of **moderate suitability** for foraging and commuting bats but it is unlikely to be a key component of local bat foraging habitat.

4.4. Nesting Birds

Mature shrubs and trees within the garden provide nesting opportunities for common garden bird species. Gaps under tiles provide potential nesting opportunities for birds. However, during the site survey no evidence of nesting activity on the house was identified.

4.5. Emergence and Re-entry Survey Results

The surveys recorded a total of five species of bat including in order of frequency, Common Pipistrelle *Pipistrellus pipistrellus*, Soprano pipistrelle *Pipistrellus pygmaeus*, Noctule *Nyctalus noctula*, Serotine *Eptesicus serotinus*, and Barbastelle *Barbastella barbastellus*. The vast majority of activity was related to Common Pipistrelle with occasional passes of Soprano pipistrelle, rare passes of Noctule and single passes of Serotine and Barbastelle.

Surveys confirmed the presence of roosting Common Pipistrelle beneath roof tiles on the main roof. A total of three Common Pipistrelle emerged between 20:11 and 20:14 (18-21 minutes after sunset) on 31st August 2023. Images of emerging bats from the infrared camera are provided in Appendix B.

Table 3 provides details of the species, numbers and locations of bats recorded during each survey.

Table 3. Phase 2 bat survey results

Survey Date	Recorded Bat Roosts	General Bat Activity at the Site
15/08/23	None	The first bat recorded was a Common Pipistrelle at 20:33, 7 minutes after sunset at the southern elevation. This bat was heard but not seen. Regular Common Pipistrelle passes were then recorded throughout the survey. The majority of bats were heard and not seen, however occasional foraging activity around the house and garden were recorded. Two Noctule passes were recorded and a single pass was recorded for Soprano Pipistrelle and Serotine, both towards the end of the survey.

Survey Date	Recorded Bat Roosts	General Bat Activity at the Site
31/08/23	3 x Common Pipistrelle emerged between 20:11 and 20:14 (18-21 minutes after sunset). All bats emerged from the end ridge tile at the western end of the main pitched roof.	The first bat recorded was a Common Pipistrelle at 19:52, one minute before sunset, indicating that this bat likely emerged from close by. This bat was heard but not seen at the southern elevation. A further Common Pipistrelle pass was heard at 19:59 and 20:00. Three Common Pipistrelle bats then emerged between 20:11 and 20:14. Common Pipistrelle bats were regularly recorded throughout the survey with the majority heard but not seen. Occasional foraging activity around the house and garden were recorded. Social calls from Common Pipistrelle were also recorded. Two Soprano Pipistrelle passes were also recorded along with two Noctule passes. Bat activity continued through the short period of very light rain towards the end of the survey.
18/09/23	None	The first bat recorded was a Common Pipistrelle which was heard but not seen at the southern elevation at 20:35, 23 minutes after sunset. Occasional Common Pipistrelle passes were then recorded throughout the survey including some social calls. Two Soprano Pipistrelle passes were recorded and the northern elevation survey position recorded a single Barbastelle pass.

5. Evaluation, Impacts and Recommendations

5.1. Introduction

This section presents the conclusions of the Phase 1 and Phase 2 bat assessment. It provides an assessment of the ecological constraints to the proposed works and detailed recommendations for any mitigation measures considered necessary. An outline of protected species legislation relevant to the findings of this report is provided in Appendix C.

5.2. Evaluation

Bats

The Phase 1 preliminary roost assessment identified the presence of a single bat dropping in the roof void. The size and shape of the dropping was characteristic of Pipistrelle bats and the individual dropping indicates occasional use by an individual or small number of bats. However, as Pipistrelle bats regularly roost between roofing materials there is a potential for greater accumulations of droppings to be present between the roof tiles and bitumen felt lining which were not visible to the surveyor.

Emergence and re-entry surveys undertaken during 2023 confirmed three Common Pipistrelle bats emerging from the end ridge tile at the western end of the main pitched roof.

Overall, based on an assessment of the inspection, and emergence surveys, the house is assessed as supporting the following roosts:

- **Common Pipistrelle day roost** – beneath ridge tile on main roof

Nesting birds

No evidence of nesting birds was recorded on site during the preliminary assessment or during subsequent bat surveys. There remains potential for nesting birds to use the property in the future.

5.3. Potential Impacts of Development

Roosting Bats

Based on the Bat Mitigation Guidelines⁴ the roost present at the building is of Site importance, being a day roost for a species that is widespread in all regions (Common Pipistrelle).

⁴ Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

The proposals include the construction of a two storey extension on the northern elevation of the property. This will involve the demolition of the existing single storey section on the northern elevation and modification of the existing pitched roof sections on the northern elevation. Remedial works to the existing roof will be undertaken where there are slipped or lifted tiles

The Common Pipistrelle day roost is located beneath a ridge tile at the western end of the roof. This is located away from the area directly affected by the tying in of the new extension. The dropping within the loft space indicates that bats may also roost within the loft and could therefore be impacted by the proposed works. It is likely that bats will also roost beneath other lifted tiles within the areas affected by the proposed works.

The works will potentially result in an offence under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). However, it is unlikely that the works would result in a significant adverse effect on the local bat population.

Bat Activity

The proposals will not result in a loss of bat foraging or commuting habitat. The footprint of the extension is over the existing single storey section and immediate surrounds of driveway and close mown grass lawn, and will not result in any loss of suitable bat foraging habitat.

Nesting Birds

As the building has suitability for nesting birds, there is a risk that construction works during the nesting bird season (March-September) could result in the damage or destruction of active bird nests which would result in an offence under the Wildlife and Countryside Act 1981 (as amended).

5.4. Recommendations

Due to the confirmed presence of a bat roost which will be impacted as a result of the proposals, a Natural England Bat Mitigation Licence is required to permit activities that would otherwise result in offences under the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species Regulations 2017 (as amended). This licence will set out detailed mitigation to ensure that the favorable conservation status of bats is maintained. Due to the low status of the affected roost, a low impact licence would be suitable. Licence applications are only possible once planning permission has been granted.

The mitigation strategy set out below will ensure that favorable conservation status is maintained for the affected bat population.

Mitigation

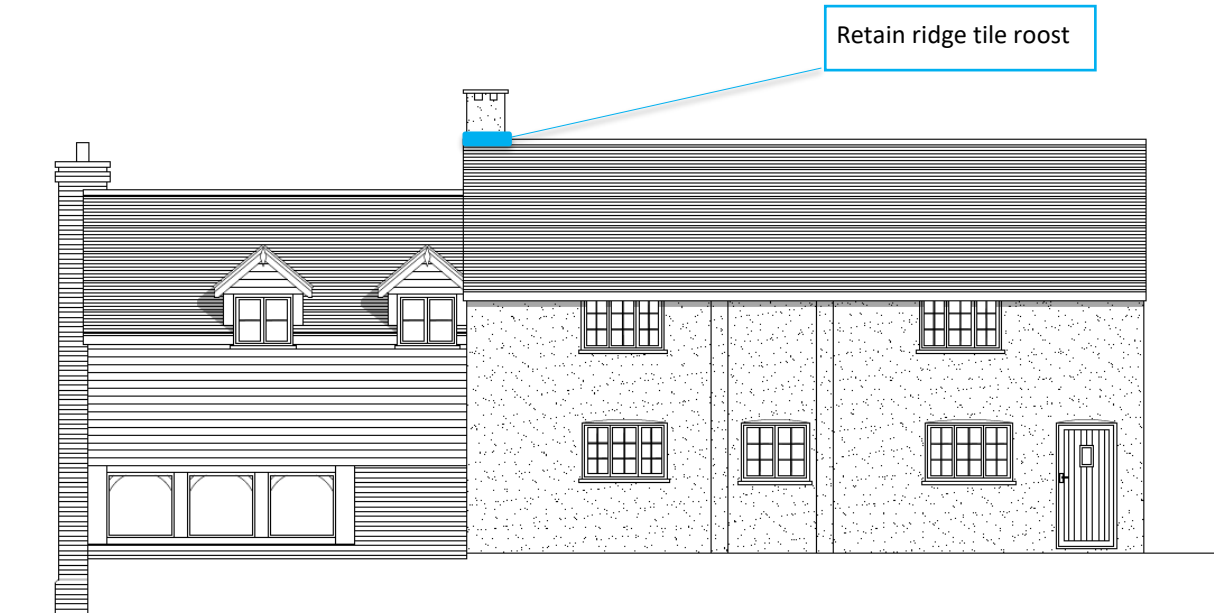
Avoidance of harm to individual bats: Prior to commencement of works, contractors will be given a toolbox talk by a supervising ecologist regarding the presence of bat roosts and the working methods required to avoid impacts. A pre-works inspection of all confirmed roost sites and other suitable roost features will be undertaken by a licensed ecologist, where necessary using an endoscope. Where possible, any bats seen will be caught by hand and transferred to a pre-erected bat box. This box will be a crevice type bat box⁵ installed on either a tree or unaffected elevation of the house. During demolition works, a licensed ecologist will undertake a destructive search of all confirmed and suitable roost sites which will be directly impacted. Roofing materials will be carefully lifted and removed by hand and crevices and cavities thoroughly inspected. Any bats found will be captured by hand and placed in a soft cotton bag. Bats will be transferred to a previously-erected bat box. Once inside the box, the entrance will be soft blocked with a rag to allow the bat to settle. The rag will be removed at the end of the day to allow the bat to emerge as normal.

Maintain roost access: Where remedial works are required to the ridge tile supporting the Common Pipistrelle roost, bat access will be maintained by leaving a gap of 15-20mm high x 20mm wide in any mortar, ensuring bat access is maintained to the ridge tile roost location. In order to maintain bat access into the existing loft, where remedial roofing works may result in the removal of the existing bat access point where the roof meets the chimney breast on the western elevation (see photo in table 3), an access gap of 15-20mm high x 20-50mm wide will be recreated in any mortar or timber repairs. Where any remedial works are required to the existing bitumen felt, traditional 1F bitumen felt will continue to be used to avoid impacts on bats associated with breathable membranes.

Timing: *The Bat* Mitigation Guidelines identify that there are no timing constraints to works affecting low status roosts such as the Pipistrelle day roosts identified at the property. However, due to the risk of nesting birds, should works be undertaken during the nesting bird season (March to September) then a nesting bird check would be required. If any active birds nests are identified, works that affect the area supporting the nest should be halted until the birds have fledged and the nest is no longer active. If nesting bird checks are required, this can be done at the same time as the destructive search for bats.

⁵ E.g. Eco Crevice Bat Box <https://www.wildcare.co.uk/eco-crevice-cavity-bat-box.html>

Figure 3. Bat mitigation



SIDE ELEVATION (south facing)



FRONT ELEVATION (west facing)

Enhancement

To provide enhanced bat roosting opportunities, two self-cleaning type bat boxes (e.g. Kent Bat Box) will be installed either on existing buildings or on mature trees in the garden of the property (Figure 5).

Figure 4 – 2 x Kent Bat Box (or similar design) will be installed (<https://www.wildcare.co.uk/wildcare-kent-bat-box-small.html>)



During the emergence surveys a Swift *Apus apus* was seen flying overhead. Additional biodiversity enhancements could be provided by placing at least one Swift nest box (e.g. Action for Swifts Sbox – Figure 6) within the brickwork of the extension. Boxes should be placed under the eaves and avoid full sun and so should not be placed on the southern aspect.

Figure 5 Action for Swifts Nest Box



Updating Survey

In accordance with CIEEM Guidelines on survey validity, the results of this survey and assessment are valid for 18 months, after which period, updating surveys will be required. This is because bats are highly mobile and the ecology of the site is likely to change over this period. Changes to the proposals may alter the level of impact on species and may alter the requirement for mitigation and require further assessment.

6. Conclusions

Surveys have confirmed the presence of a day roost for Common Pipistrelle bats underneath a ridge tile on the main roof. The ridge tile will be retained, however, demolition and construction works are likely to result in noise and vibration disturbance to this roost and remedial works to the roof may result in direct impacts to this roost, and other suitable roosting features, including the main roof void. A Natural England bat mitigation licence will be required to undertake the works. A mitigation and compensation strategy is provided which will maintain favourable conservation status of bats and ensure no loss of roosting opportunities. Additional bat boxes will provide enhanced roosting opportunities.

Appendix A: Site Proposals

Existing

FRONT ELEVATION (west facing) SIDE ELEVATION (south facing)

REAR ELEVATION (east facing) SIDE ELEVATION (north facing)

GENERAL NOTES
Drawing to be read in conjunction with all information by architect, structural engineers & services consultants. The contractor is not to scale from this drawing. All written dimensions to be checked on site before work commences. Discrepancies, where identified, must be reported to the architect immediately. This drawing is the property of Vesta Architects Ltd and must not be reproduced or disclosed to any unauthorised person either wholly or in part without written consent.

Scale Bar 1:50
0 2m 4m 6m 8m 10m

Scale Bar 1:100
0 2m 4m 6m 8m 10m

Rev.	Description	Date	Drawn	Check
-	Initial Issue	06.11.22	LF	MR

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PLANNING

Client: MR + MRS FRY

Project: CHEQUERS COTTAGE, WELL
LONG SUTTON, RG29 1TL

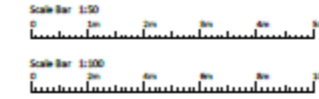
Drawing: EXISTING ELEVATIONS

Date	Scale	Drawn
DEC 22	1:50 @ A1	LF

Drawing No.	Rev.
22-4915-P-02	-

Proposed

GENERAL NOTES
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FRONT ELEVATION (west facing)

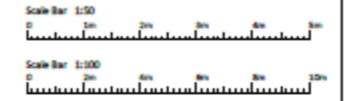
SIDE ELEVATION (south facing)

Rev.	Description	Date	Drawn	Check
-	Plot Issue	08.11.22	LF	MR


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PLANNING		
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Drawing	PROPOSED ELEVATIONS	
Date	Scale	Drawn
DEC 22	1:50 @ A1	LF
Drawing No.	Rev.	
22-4915-P-04	-	

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REAR ELEVATION (west facing)

SIDE ELEVATION (north facing)

Rev.	Description	Date	Drawn	Check
-	Plot Issue	06.01.22	LF	MR



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Project: CHEQUERS COTTAGE, WELL
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Drawing: PROPOSED ELEVATIONS

Date	Scale	Drawn
DEC 22	1:50 @ A1	LF

Drawing No.	Rev.
22-4915-P-05	-

Appendix B: Emergence survey results – stills from infrared camera

Figure 6 31.08.23 Common Pipistrelle emergence 20:11



Figure 7 31.08.23 Common Pipistrelle emergence 20:13



Figure 8 31.08.23 Common Pipistrelle emergence 20:13



Appendix C: Protected Species Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. In Summary, this legislation makes it an offence to:

- Deliberately capture, injure or kill any such animal.
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - To impair its ability to survive, breed, or rear or nurture their young.
 - To impair its ability to hibernate or migrate.
 - To affect significantly the local distribution or abundance of that species.
- Damage or destroy a breeding site or resting place of any such animal (whether occupied or not).
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection.
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are

maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.