

**40 Paddock Heights
Twyford
Reading
Berkshire
RG10 0AR**

Preliminary Roost Assessment

Report ref.: S3092_PRA_a

Report Quality Control Information	
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1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed Mr and Mrs Constantinou to undertake a Preliminary Roost Assessment (PRA) for bats at 40 Paddock Heights in Twyford, Reading. The PRA was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for a rear extension to replace the existing conservatory (see **Appendix 4**).
- 1.1.2** The aim of the PRA is to ascertain if there is evidence of the presence of bats and/or potential for roosting bats to be present, and therefore whether further survey and/or mitigation would be required for the proposed development activities.
- 1.1.3** Whilst no evidence of void-dwelling bat species was observed within the roof void of the bungalow, external features considered suitable for use by typically crevice-dwelling bat species were identified across the front and southeast elevations, including lifted interlocking roof tiles, crumbling verge mortar and gaps around the chimney. An endoscopic check of the lifted tiles behind the chimney confirmed a lack of use by roosting bats, however, the feature is of a suitable size and condition for roosting bats and so may be utilised in the future. The property has been assigned low potential suitability for bats (see **Appendix 1** for potential suitability categories).
- 1.1.4** The development proposals will involve temporarily opening the void. No evidence was observed and so it is considered highly unlikely a bat roost is present in the void. The proposals will not directly impact potential external roosting features identified on the front (western) and northern elevations. However, the gaps behind the chimney will be impacted, which at the time of the survey showed no evidence of use by bats.
- 1.1.5** Under a precautionary method of working (see **Section 7.2**), the levels of disturbance are considered highly unlikely to result in the death, injury or disturbance of bats; the damage or destruction of a bat roost; or the obstruction of access to a bat roost. As such, a European Protected Species (EPS) mitigation licence would not be required for the planned works to go ahead lawfully.
- 1.1.6** In the unlikely event that bats are encountered during the course of the work, the work will stop immediately and a licensed ecologist will advise how works should proceed; this may require a EPSML to permit the work to continue lawfully. This report contains information regarding a mobile species so it will likely be valid for less than 12 months (CIEEM 2019b).

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was instructed Mr and Mrs Constantinou to undertake a Preliminary Roost Assessment (PRA) for bats at 40 Paddock Heights in Twyford, Reading.

2.1.2 The PRA was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for a rear extension to replace the existing conservatory. The works also include the removal of the chimney on the south eastern side elevation (see **Appendix 4**).

2.2 Site Location and Context

2.2.1 The semi-detached bungalow is located on the eastern side of a cul-de-sac off Paddock Heights in Twyford, Reading, Berkshire (central OS Grid Reference: SU 79276 75622).

2.2.2 The property is situated within a suburban area with further neighbouring properties and their associated gardens along Paddock heights. Stanlake Meadow Recreation Ground is situated approximately 120 metres to the east with allotments approximately 210 metres to the west. The closest parcels of priority woodland are situated approximately 200 metres to the north, 410 metres to the southeast and 440 metres to the northwest. In addition, the River Loddon is approximately 510 metres to the west, bordered by further waterbodies, open parkland and woodland, and a railway bisects the land from southwest to northeast 220 metres to the northwest. Further surroundings are primarily suburban to the north and south, arable to the east, and parcels of mixed woodland, parkland and waterbodies to the west.

2.3 Report Objectives

2.3.1 The aim of the PRA is to ascertain if there is evidence of the presence of bats and/or potential for roosting bats to be present, and therefore whether further survey and/or mitigation would be required for the proposed development activities.

3 LEGISLATIVE AND POLICY BACKGROUND

3.1 Relevant Legislation

3.1.1 In England and Wales, all bat species found in the wild are fully protected under the Wildlife & Countryside Act 1981 (as amended) (WCA) and Conservation of Habitats and Species Regulations 2017 (as amended); the regulations are commonly referred to as the Habitat Regulations and hereafter referred to as such. The Habitat Regulations refer to European Protected Species (EPS) and all species of bats in the United Kingdom (UK) are EPS. Although the UK left the European Union on the 31st January 2020 and is therefore no longer tied to European legislation, the Habitat Regulations have been retained in their current format.

3.1.2 The legal framework underpinned by the WCA and Habitat Regulations makes these specific actions an offence as follows:

- Deliberately kill, injure, capture or take a wild bat;
- Deliberately, intentionally or recklessly disturb bats; in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate, or to significantly affect local distribution or abundance;
- Damage or destroy a place used by a bat for breeding or resting; and
- Intentionally or recklessly obstruct access to any place used by a bat for shelter or protection.

3.2 Planning Policy

3.2.1 The biodiversity duty imposed through the Environment Act 2021 states that Local Planning Authorities (LPAs) must consider what action they can take to conserve and enhance biodiversity in England. Government planning policy, such as the ODPM Circular 06/2005, requires LPAs to account for the conservation of protected species when considering and determining planning applications.

3.2.2 The ODPM Circular 06/2005 states that ‘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.’ This policy means that in instances where there is a reasonable likelihood of bats being present and affected by a development, surveys must be undertaken to inform a mitigation strategy to be agreed prior to granting planning permission.

3.3 Mitigation Licensing

3.3.1 The government's statutory nature conservation body, Natural England, is responsible for issuing European Protected Species (EPS) mitigation licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. An EPS mitigation licence can be issued if the following three tests derived from Regulation 55 have been satisfied:

- (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.*'
- (9)(a) – there is '*no satisfactory alternative*' to the derogation; and
- (9)(b) – '*the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.*'

3.3.2 LPAs have a statutory duty under Regulation 7(3)(e) of the Habitat Regulations to consider and determine whether these three tests are likely to be satisfied by planning proposals affecting EPS before granting planning permission. If an EPS mitigation licence is necessary, a licence can be sought once all the necessary planning consents have been granted. Natural England aims to issue a decision on licence applications within 30 working days of submission.

3.3.3 The Bat Mitigation Class Licence (BMCL) scheme allows ecologists to apply to become Registered Consultants to use this licence for low conservation status roosts, i.e. roosts comprising small numbers of seven commonly occurring species. A site registration form must be completed as a condition of the licence and submitted to Natural England at least three weeks before the licensable activities are due to start; Natural England aims to register sites within two weeks of submission.

3.3.4 Baseline survey information supporting EPS mitigation licence applications or BMCL site registrations must be up-to-date and have been completed within the current or most recent optimal season. A suitably experienced ecologist will be required to undertake a site walkover/check within three months prior to application/registration submission to confirm that conditions have not changed since the most recent survey.

4 SURVEY METHODOLOGY

4.1 Desk Study

4.1.1 A desk-based study for bats was undertaken to collate and review existing information about the site and the surrounding land. The study utilised the following open access resources:

- OS maps and Google Earth – maps and satellite imagery were used to identify potential flight paths and foraging habitats for bats;
- MAGIC – examined to locate granted European Protected Species licences; and
- Pre-existing bat survey reports – any available reports were obtained from the client or relevant planning portal to provide background information for the site.

4.2 Building Inspection

Survey Details

4.2.1 A detailed inspection of the exterior and interior of the property was undertaken on the 25th November 2025 by senior ecologist Vicky Potts MCIEEM - registered under Natural England Bat Survey Class Licence CL18 (Registration no.: 2016-27162-CLS-CLS) - and ecologist Jake Morgan - a qualifying member of CIEEM registered under Natural England Bat Survey Class Licence CL17 (Registration no.: 2025-85343-CL17-BAT) - in accordance with good practice guidance (Collins 2023). The equipment used during the inspection comprised binoculars, a high-power (1 million candlepower) LED torch, a headtorch, ladder and PPE (facemask, gloves etc.). The inspection involved a systematic search of the exterior and interior of the structure during daylight hours to compile information on potential and actual bat access points; potential and actual bat roost sites; and any evidence of bat presence.

4.2.2 The survey included an endoscopic check completed Vicky Potts and assisted by Jake Morgan. This comprised an endoscopic inspection of the low-risk features associated with the lifted interlocking roof tiles behind the chimney along the southeastern elevation of the building. The survey was undertaken using a Teslong NTS500 endoscope with a video camera to check the features for suitability for bats and for any evidence of the presence of bats i.e. bat droppings.

External Survey

4.2.3 Frequently used bat access points and/or roost sites include (but are not limited to)

spaces:

- behind hanging tiles, weatherboarding, soffit boxes and barge boards;
- under lead flashing (particularly around chimneys) and roof tiles/slates; and
- in existing bat boxes.

4.2.4 It is important to note that the two most abundant and widespread bat species, common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*), typically only require gaps measuring 15mm by 20mm to gain access to a roost inside a building.

4.2.5 The external survey involved a systematic search for evidence of bats including:

- live or dead specimens;
- droppings;
- urine marks;
- fur-oil staining; and
- squeaking noises.

4.2.6 It should be noted that bats can be present in a building while leaving no visible signs externally and wet weather has the potential to wash any evidence away. The search for evidence was focused on (but was not limited to) the ground, windowsills, windowpanes and walls (including cladding and hanging tiles); particularly in places near to potential bat access points and/or roost sites.

Internal Survey

4.2.7 The internal survey comprised a systematic search for evidence of bats on the upper floors of the building (i.e. checking the exterior from windows) and inside the roof and eave spaces. Evidence of bats found during an internal inspection can include:

- live or dead specimens;
- droppings;
- urine marks;
- fur-oil staining;
- feeding remains (i.e. moth wings);

- squeaking noises;
- bat-fly (Nycteribiid) pupal cases; and
- odour.

4.2.8 It should be noted that only specimens or droppings can be relied upon in isolation to confirm the presence of a bat roost.

4.2.9 Frequently used roosting locations within the roof include (but are not limited to):

- the apex of the gable end or dividing walls;
- the top of chimney breasts;
- ridge and hip beams;
- mortise and tenon joints;
- behind purlins; and
- between tiles and roof lining.

Survey Limitations and Validity

4.2.10 There were no significant survey limitations because PRAs can be carried out at any time of year under any weather conditions and the building was fully accessible.

4.2.11 It should be noted that it is not always possible to inspect all potential roost sites during a survey, particularly for bat species which typically roost in hidden crevices. Therefore, an absence of bat evidence found during a survey does not necessarily equate to evidence of bat absence in a building.

4.2.12 This report contains information regarding a mobile species so it will likely be valid for less than 12 months (CIEEM 2019b).

5 SURVEY RESULTS

5.1 Desk Study

5.1.1 Neighbouring gardens along Paddock Heights and within the immediate suburban area contain hedgerows, scattered trees and tree lines that provide continuous habitat that could be used as a flight-path connecting to high-quality foraging habitat for any bat(s) roosting in the property such as the nearby recreational ground to the east, surrounding mixed priority woodland, the River Loddon and further water bodies to the west, or a railway corridor to the north.

5.1.2 Bat mitigation licences that have been granted inside a 2-kilometre radius of the property are detailed in **Table 1** below.

Table 1. Bat mitigation licences granted within a 2km radius of the property (Source: MAGIC).

Case Reference of Granted Licence	Species on the Licence	Licensable Period	Licensable Works	Distance (m)
2020-49294-EPS-MIT	Common pipistrelle & soprano pipistrelle	14/10/2020 – 31/08/2025	Destruction of a resting place	610 NE
2020-44644-EPS-MIT	Brown long-eared & common pipistrelle	05/02/2020 – 31/08/2020	Destruction of a resting place	1220 N
2019-43241-EPS-MIT	Brown long-eared, common pipistrelle & soprano pipistrelle	20/11/2019 – 30/04/2025	Destruction of a resting place	1680 W
2016-25277-EPS-MIT	Soprano pipistrelle	14/09/2016 – 13/09/2021	Destruction of a breeding site	1810 S
2019-43858-EPS-MIT	Soprano pipistrelle	01/02/2020 – 28/02/2025	Destruction of a resting place	1980 S

5.1.3 The client had no existing bat survey reports in their possession and none had been published on the Local Planning Authority's (LPA) online planning portal.

5.2 Building Inspection

Overview

5.2.1 The findings from the external and internal inspections carried out for the bungalow are described with photographs and annotated in a plan, as follows:

External Survey

5.2.2 The bungalow was a semi-detached residential dwelling of brickwork construction with

a conservatory attached to rear eastern side. The hipped roof had a front gable and a garage with a sloped roof and brick walls was situated at the rear (**Photographs 1 & 2**).



Photograph 1. Front elevation viewed from the southwest.



Photograph 2. Rear elevation of bungalow viewed from the northeast.

- 5.2.3** The hipped roof was covered by interlocking concrete tiles that were mostly sealed and intact, other than a lifted tile on the front elevation and behind the chimney on the south eastern elevation (**Photographs 3 & 4; Target notes 1 & 2**). The lifted tiles at the chimney were closely inspected with an endoscope, which confirmed the feature to be of a suitable size and condition for roosting bats, but no evidence was observed (**Photographs 5 & 6**).



Photograph 3. Sealed interlocking roof tiles (rear elevation).



Photograph 4. Lifted interlocking roof tiles by chimney (southeast elevation).



Photograph 5. Gap under tiles behind the chimney.



Photograph 6. Gap under tiles behind the chimney.

- 5.2.4** The hip mortar was fully intact and whilst the verge mortar across the front gable was intact, a slight gap was situated between the mortar and under cloaking, however, close inspection with a high-powered torch confirmed the feature to be superficial (**Photographs 7 & 8; Target note 3**). Whilst mostly intact, the ridge mortar was partially crumbling along the front gable with direct internal access to the roof void (**Photograph 9; Target note 4**).



Photograph 7. Fully intact hip mortar (southeastern elevation).



Photograph 8. Superficial crevice between mortar and under cloaking (front elevation).



Photograph 9. Crumbling ridge mortar (southeastern elevation).

- 5.2.5** The lead flashing at the base of the brickwork chimneys was mostly sealed to the concrete roof tiles and brickwork (**Photographs 10 & 11**). The vented uPVC soffit was sealed to the brickwork walls across all elevations (**Photograph 12**).



Photograph 10. Lead flashing sealed to chimney and roof tiles (rear elevation).



Photograph 11. Lead flashing sealed to chimney and roof tiles (southeast elevation).



Photograph 12. Vented uPVC soffit sealed to the brickwork (southeast elevations).

Internal Survey

- 5.2.6** The property had one roof void that covered its footprint. The void was accessible via a ground floor loft hatch, was of 'cut and pitch' construction, cobwebbed throughout, and had an approximate floor-to-ridge height of 2 metres (**Photograph 13**).



Photograph 13. Roof void.

- 5.2.7** The roof was lined by hessian reinforced bitumen felt that was fully intact throughout (**Photograph 14**). The timbers around the chimney were also sealed to the brickwork and bitumen felt (**Photograph 15**). The chimney was cobwebbed.



Photograph 14. Fully intact bitumen felt roof lining.



Photograph 15. Timbers sealed to the brickwork chimney.

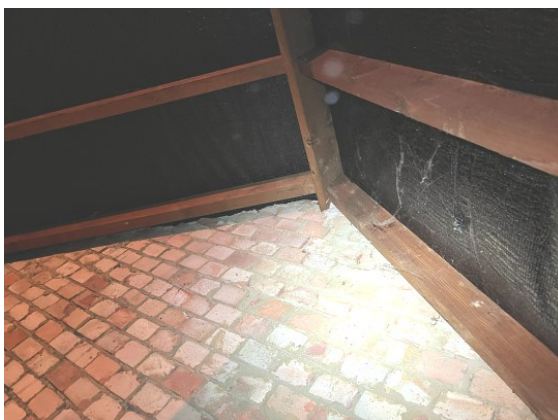
5.2.8 The floor was partially boarded over fibreglass insulation that did not fill all the eaves, allowing access to sections of the vented uPVC soffit where daylight was visible (**Photograph 16; Target note 5**). The party wall had large gaps within it, providing direct access to the neighbouring void (**Photograph 17; Target note 6**). Furthermore, gaps were situated along the edge of the party wall (**Photograph 18; Target note 7**).



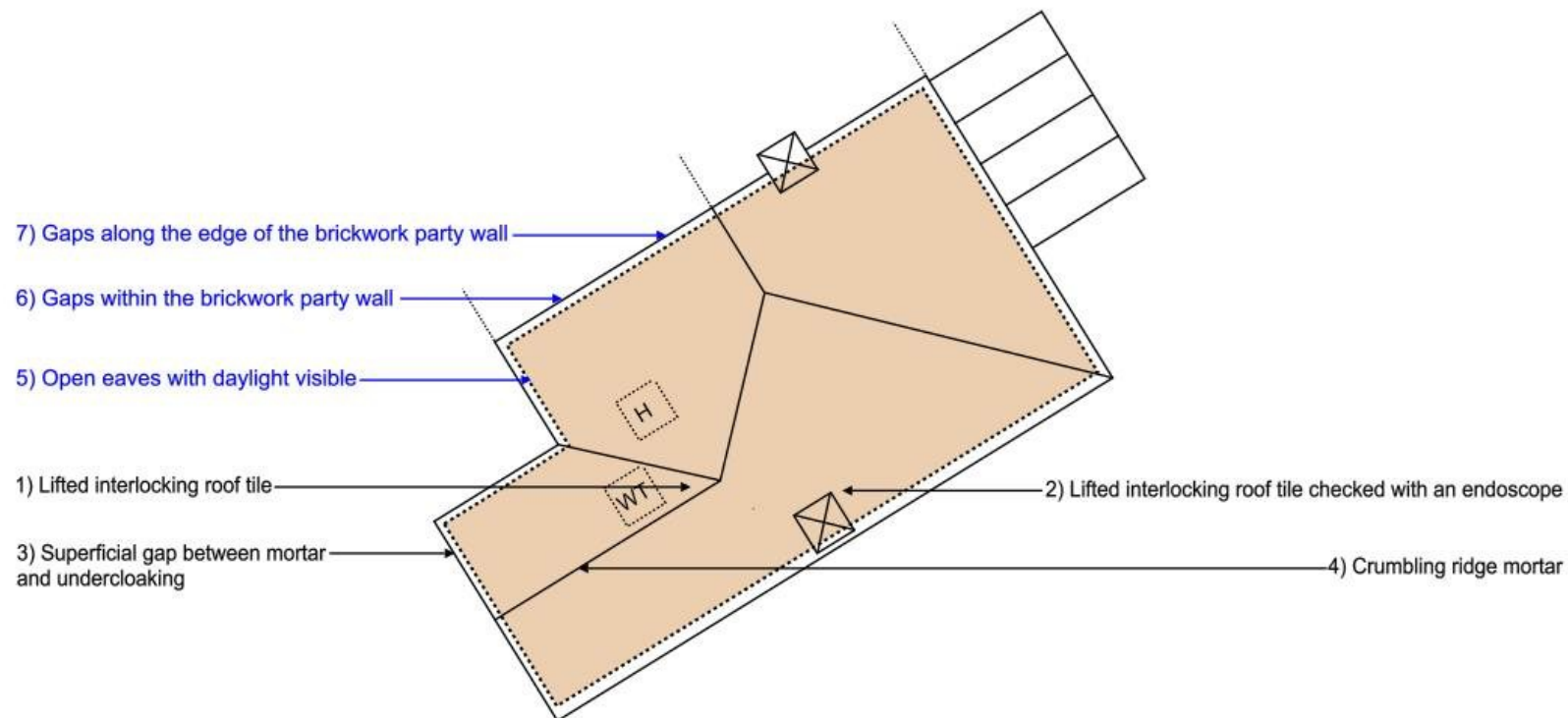
Photograph 16. Open eaves with access to the vented uPVC soffit.



Photograph 17. Gap within party wall.



Photograph 18. Gaps along the edge of the party wall.



n. External target note **n.** Internal target note  Chimney  Roof void  Loft hatch  Water tank

Drawn by:	Date:	Scale:	40 Paddock Heights, Twyford	
JM	November 2025	Not to scale	Preliminary Roost Assessment Plan	

Figure 1. Preliminary Roost Assessment Findings Plan.

6 DISCUSSION

6.1 Assessment of Potential Roost Suitability

6.1.1 The surrounding area includes hedgerows, scattered trees and tree lines that provide continuous habitat that could be used as feeding habitat and flight-paths connecting to high-quality foraging habitat, such as the nearby recreational grounds, woodland parcels, water bodies, River Loddon and railway corridor for any bat(s) roosting in the near vicinity. Furthermore, the search of granted bat mitigation licences identified three species known to be roosting within a 2km radius of the house: soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*Pipistrellus pipistrellus*) and brown long-eared bat (*Plecotus auritus*) with a breeding *P. pygmaeus* site situated approximately 1810 metres to the south.

6.1.2 The bungalow had the following suitable/potential bat access points:

- Lifted interlocking concrete roof tiles on the front and southeastern elevations (**Photographs 5 & 6; Target notes 1 & 2**);
- Crumbling ridge mortar (**Photograph 9; Target note 4**);
- Gaps within the party wall with direct access to the neighbouring roof void (**Photograph 17; Target note 6**); and
- Gaps along the edge of the party wall (**Photograph 18; Target note 7**).

6.1.3 Whilst a slight gap was situated between the under cloaking and verge mortar across the front gable, close inspection with a high-powered torch confirmed this feature to be superficial with no suitable crevice (**Photograph 8; Target note 3**).

6.1.4 The lifted tiles and crumbling ridge mortar may lead into the roof void, which had sufficient space for internal flight and suitable conditions for regular use by individual or small non-breeding groups of void-dwelling bats, such as the locally recorded brown long-eared bat (*Plecotus auritus*). However, no droppings were observed within the roof void and so it is unlikely to support principally void dwelling species, such as the locally recorded brown long-eared (*Plecotus auritus*).

6.1.5 These access features may also lead to potential crevice roost sites for crevice-dwelling bats, such as the locally recorded common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*). Evidence of crevice-roosting species is typically hidden from view in areas such as gaps between tiles and internal

linings/insulation. Whilst the endoscopic check of the lifted tiles across the southeastern elevation showed no evidence of the presence of roosting bats; the feature is of a suitable size and condition for roosting bats and so may be utilised in the future.

- 6.1.6** Common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) are the most abundant and widespread bats in Great Britain. These species occur in almost any habitat type and are well adapted to the built environments; they are the species most regularly reported roosting in houses and churches (Mathews *et al.* 2018). Brandt's / whiskered bat (*M. brandtii* / *mystacinus*) are small *Myotis* species that are widespread and will roost in the same buildings as the much more abundant pipistrelle species (Mathews *et al.* 2018). Roosts supporting these species hold site to county level conservation importance subject to the roost type, i.e. non-breeding roosts supporting individual bat or small groups through to maternity roosts supporting large numbers of female bats (Reason & Wray 2025).
- 6.1.7** The bungalow has been assigned low potential suitability for bats (see **Appendix 1** for potential suitability categories).

7 IMPACT ASSESSMENT

7.1 Potential Impacts of Development Proposals

Overview

- 7.1.1** The development proposals are for the construction of a rear extension and the removal of the chimney on the southern elevation (refer to planning drawing in **Appendix 4**). The impacts of the proposals, during construction and post development, have been assessed in accordance with the mitigation hierarchy as follows:

Construction Phase

- 7.1.2** The development proposals will not have an impact on any features that have evidence of roosting bats. The proposals will not directly impact the potential external roosting features identified which were restricted to the front and northern elevations. The proposals do include the removal of the chimney stack on the south eastern elevation, which at the time of the survey was confirmed not to support roosting bats, however it does have the capacity to offer a roosting feature that could be utilised in the future.
- 7.1.3** Due to lack of observation of bats or activity by bats, it is considered highly unlikely the proposals will result in the death, injury or disturbance of bats; the damage or destruction of a bat roost; or the obstruction of access to a bat roost.

Post Development

- 7.1.4** The proposed roof works do not result in the loss of any confirmed roost sites identified in the property. As such, it is considered highly unlikely that the proposals will result in the permanent damage/loss of a bat roost or affect significantly the local distribution or abundance of bats.

7.2 Conclusions

- 7.2.1** The proposals are unlikely to affect bats or their roosts based on these findings; however, the tiles around the chimney stack, which were features of low bat roost potential, which showed no signs of roosting bats currently, could be used in the future and therefore a precautionary pre-commencement survey is recommended (refer to Recommendations in **Section 8**).

8 RECOMMENDATIONS

8.1 Precautionary Method of Working

8.1.1 Before the commencement of construction activities impacting the bungalow at the roof level, i.e. removal of roof tiles, a suitably licensed ecologist will provide a toolbox talk to all contractors working on site detailing how bats use buildings, legal protection, working methods, actual and potential roost sites, actions to be taken if a bat roost is found and personal safety procedures. The ecologist will carry out an updated inspection of the gaps in the roof tiles behind the chimney stack on the south eastern elevation to confirm that the assessment of the bat roost status in this report remains accurate.

8.1.2 A soft strip approach to the roof works, i.e. careful removal of the roof tiles around the chimney by gloved hands and handheld tools, will be adopted by the contractors and carried out under the direct supervision of a suitably licensed ecologist. In the unlikely event that a bat roost is found during the soft strip, by either uncovering bat droppings or encountering a bat, the work must stop immediately and must not continue until further written advice has been received. At this stage, a European Protected Species (EPS) mitigation licence may be required to permit the works to recommence lawfully.

9 REFERENCES

CIEEM (2019b). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM, Winchester.

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

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Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3rd edition)*. JNCC, Peterborough.

Reason, P.F. and Wray, S. (2025) Version 1.2. UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. CIEEM, Ampfield.

APPENDIX 1 – POTENTIAL SUITABILITY CATEGORIES FOR ROOSTING BATS

The categories detailed in **Table 2** below are derived from the '*Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*' (Collins 2023) and provide guidance for assessing the potential suitability of buildings (and other structures) for roosting bats. These categories are applied using professional judgement and irrespective of whether the presence of a bat roost has been confirmed during a survey, as additional bat roosts could be present which have not yet been discovered.

Table 2. Categories for potential suitability of buildings (and other structures) for roosting bats.

Potential Suitability	Category Justification
None	A building (or structure) that has no features likely to be used by any roosting bats at any time of the year (i.e. a complete absence of cracks, crevices or voids that could provide suitable shelter).
Negligible	A building (or structure) that has no obvious features likely to be used by roosting bats, but in this case a small element of uncertainty remains as bats will occasionally use small and apparently unsuitable features. This category may also be used where a bat could potentially roost due to one attribute, but it is considered unlikely due to another attribute (e.g. a feature that is subject to constant illumination from artificial lighting).
Low	A building (or structure) that has one or more potential roost sites suitable for opportunistic use by individual bats at any time of the year. However, these potential roost sites for bats do not provide sufficient space, shelter, protection, conditions and/or surrounding suitable habitat to be used regularly or by large numbers (i.e. unlikely to be suitable for a maternity colony and not a classic hibernation site).
Moderate	A building (or structure) that has one or more potential roost sites suitable for regular use by individual bats, or small non-breeding groups, due to sufficient space, shelter, protection, conditions and surrounding habitat. However, these potential roost sites for bats are unlikely to support a roost of high conservation status with regards to the type of roost only (i.e. maternity colonies and classic hibernation sites).
High	A building (or structure) that has one or more potential roost sites suitable for use by large numbers of bats more regularly and for longer periods of time due to sufficient space, shelter, protection, conditions and surrounding habitat. These potential roost sites for bats are capable of supporting high conservation status roosts (i.e. maternity colonies and classic hibernation sites).

APPENDIX 2 – DEFINITION OF BAT ROOST TYPES

The potential suitability of a building in conjunction with any evidence of bat presence is used to provide an initial assessment of likely roost type and importance. The types of roost considered are based on the following Natural England definitions:

- Day roost – a summer resting place used by individual bats, or small non-breeding groups, during the day;
- Night roost – a resting place used by individual bats on occasion, or by a whole colony regularly, during the night;
- Feeding perch – a resting place used by individual bats, or a few individuals, primarily for short periods of feeding during the night;
- Transitional roost – a place used by a few individual bats, or occasionally small groups, for a short period of time upon waking from hibernation or in the period prior to hibernation;
- Maternity roost – a place used by small to large groups of female bats to give birth and raise their young to independence;
- Hibernation roost – a place used by individual bats, or in groups, during winter where there is a constant cool temperature and high humidity; and
- Satellite roost – a place used by a few individuals to small groups of breeding female bats found in close proximity to the main nursery colony throughout the breeding season.

The importance of a bat roost is underpinned by the conservation status of the suspected species (i.e. the distribution/rarity of a species in a specific geographic location) and the type of roost (i.e. not all roosts have the same level of importance in supporting the local bat population). Further roost characterisation surveys may be required to fully determine the importance of a confirmed roost to allow for a robust impact assessment.

APPENDIX 3 – FURTHER SURVEY RATIONALE

In cases where no evidence of use by bats is found during a building inspection but the possibility of their presence cannot be ruled out, further presence/likely absence survey is likely to be required if the development proposals will impact potential roost sites.

Emergence surveys are carried out to establish the presence or likely absence of roosting bats in buildings (and other structures) and these are designed in accordance with the '*Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*' (Collins 2023) detailed in **Table 3** below.

Table 3. Recommended further survey for establishing presence/likely absence of roosting bats in buildings (and other structures).

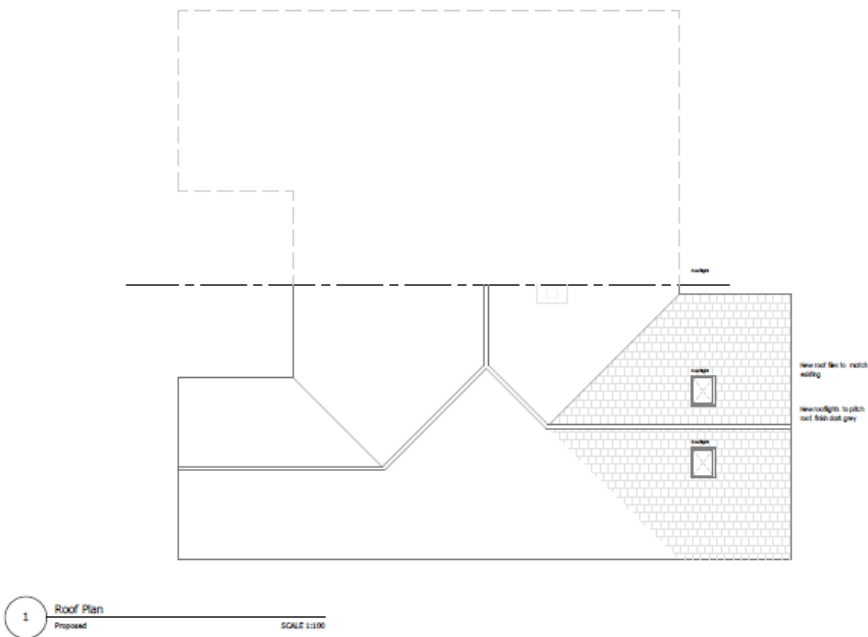
Potential Suitability	Further Survey
None	No further surveys are required.
Negligible	No further surveys are required.
Low	A minimum of one dusk emergence survey visit should be undertaken in the period of May to August. However, if all areas (including cracks, crevices and voids) can be thoroughly inspected and no evidence of use by bats is found, then emergence surveys may not be required. In cases where a complete inspection cannot be carried out, professional judgement and proportionality should be applied when assessing the impacts of the development proposals.
Moderate	A minimum of two dusk emergence survey visits should be undertaken in the period of May to September, with at least one of the surveys between May and August; the survey visits should be spaced at least three weeks apart.
High	A minimum of three separate dusk emergence survey visits should be undertaken in the period of May to September (inclusive), with at least two of the surveys between May and August; the survey visits should be spaced at least three weeks apart.

In cases where the PRA and/or further survey establishes the presence of roosting bats in a building (or structure), this will likely trigger the need for roost characterisation to collect sufficient information to inform the impact assessment and mitigation strategy. The roost characterisation comprises information collected during the PRA, emergence surveys and by other methods, such as DNA analysis of bat droppings, and ultimately aims to determine the bat species roosting; the number of bats the roosts support; the roost access points; the locations of the roosts and the types of roost present. This information is crucial when applying for planning permission and/or a European Protected Species mitigation licence.

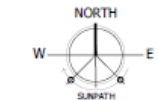
APPENDIX 4 – PROPOSED ROOF PLAN

The scaling of this drawing cannot be assured

Revision	Date	Initial
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This drawing has been prepared without the benefit of a measured building survey or topographic information.



PLANNING

Project
40 Paddock Heights, Twyford,
Reading RG10 0AR
Drawing Title
Proposed Roof Plan

Date 17.10.2025	Scale As noted @A3	Drawn by SJ
Project No 205	Drawing No 007	Revision -



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A3