

Homeleigh  
Sandhills  
Knowl Hill  
Reading  
Berkshire  
RG10 9XX

## Bat Emergence Survey

R2980\_BES\_a

| Report Quality Control Information |                                             |
|------------------------------------|---------------------------------------------|
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## **1 EXECUTIVE SUMMARY**

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by Jake Sanderson to undertake bat emergence survey (BES) at Homeleigh, Sandhills in Knowl Hill. The emergence survey was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for the erection of a rear, two-storey extension, and major alterations to the existing roof.
- 1.1.2** The survey was commissioned following a Preliminary Bat Roost Assessment (PRA) undertaken on the 2<sup>nd</sup> July 2025 by John Wenman Ecological Consultancy (JWEC, R2980\_PRA\_a). This PRA found two small bat droppings of size and shape typical of the crevice dwelling pipistrelle species (*Pipistrellus* sp.) on the fibreglass in the void indicating former or current bat activity. Externally, a few potential roost sites for use by crevice dwelling bat species were identified, confined to gaps between the timbers at the eaves and gaps at the base of the timbers at the eaves exposing the roofing membrane on the north east facing gable end. The chalet bungalow was therefore assigned low suitability for roosting bats.
- 1.1.3** An emergence survey was conducted on the 7<sup>th</sup> August 2025: no bats were observed emerging from the house.
- 1.1.4** The survey data shows that the proposals are unlikely to result in bat roosts being damaged or destroyed, or to bats being disturbed. As such, a European Protected Species Mitigation Licence is not required for the planned works to go ahead lawfully.
- 1.1.5** Pipistrelle bats were recorded roosting close by during the emergence survey and the earlier inspection survey findings indicate bats were likely to have formerly roosted at Homeleigh, therefore, to retain roosting opportunities suitable for pipistrelle bats, an integrated bat box will be built into the new extension's western elevation.
- 1.1.6** This report contains information regarding a mobile species so it will likely be valid for up to 12 months only (CIEEM 2019b).

## **2 INTRODUCTION**

### **2.1 Project Background**

**2.1.1** John Wenman Ecological Consultancy LLP was instructed by Jake Sanderson to undertake bat emergence survey at Homeleigh, Sandhills in Knowl Hill. The emergence survey was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for the erection of a rear, two-storey extension, and major alterations to the existing roof.

**2.1.2** The survey was commissioned following an Preliminary Bat Roost Assessment (PRA) undertaken on the 2<sup>nd</sup> July 2025 by John Wenman Ecological Consultancy (JWEC, R2980\_PRA\_a). This PRA report states the following:

*'There was no evidence within the void spaces indicating that the primarily void-dwelling species, such as long-eared bats (Plecotus spp.), are unlikely to be present. However, two small bat droppings of size and shape typical of the crevice dwelling pipistrelle species (Pipistrellus sp.) were found on the fibreglass in the void indicating former or current bat activity.'*

*Externally, the roof of the property possessed few features suitable for roost sites, provide conditions suitable for use by small crevice-dwelling bat species, such as the locally recorded common pipistrelle and soprano pipistrelle. These potential roost sites were mainly confined to gaps between the timbers at the eaves and gaps at the base of the timbers at the eaves exposing the roofing membrane on the north eastern facing gable end.*

*Due to the nature and scale of the potential roost sites, the chalet bungalow is considered to have the potential to support occasional use by individual small crevice-dwelling bats and as such, has been classified as low suitability.'*

**2.1.3** This PRA report recommends the following:

*'A minimum of one dusk emergence survey visits should be undertaken in the period of May to August (Collins 2023). The survey will determine if roosting bats are present or are likely to be absent. If bats are present, the survey will enable the roost characterisation necessary to inform an impact assessment and mitigation strategy.'*

## **2.2 Site Location and Context**

**2.2.1** The property is a detached chalet bungalow on the southern side of Sandhills, in Knowl Hill, Berkshire (central OS grid reference: SU 81988 79155).

**2.2.2** The property is in a suburban setting with small cluster of residential properties situated along Sandhills to the east and west, and along Bath Road to the south. A patch of woodland is 25m to the west, which connects to a patch of deciduous woodland 75m to the north west. A few ponds are present within the woodland approximately 50m to the northwest, 75m to the northwest and 90m west. Several patches of deciduous woodland are present in the wider area, including 40m to the east, 55m to the east. 75m to the northeast, 100m to the north, and 220m to the southwest. The greens of a golf course are situated just under 110m to the southeast, with scattered trees and ponds.

**2.2.3** Overall, the nearby habitats provide suitable commuting and high quality foraging opportunities for bats adapted to roosting in suburban environments.

## **2.3 Report Objectives**

**2.3.1** In accordance with the Bat Conservation Trust's (BCT) Good Practice Guidelines (Collins 2023), the one evening emergence survey was conducted on the 7<sup>th</sup> August 2025 to determine the presence or absence of roosting bats within the outbuilding. This report presents the findings of the bat emergence survey and provides recommendations based on those findings.

### **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 31<sup>st</sup> 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 Evening Emergence Surveys**

- 4.1.1** A dusk emergence survey was undertaken on the 7<sup>th</sup> July 2025. The survey was carried out by experienced surveyors: assistant ecologist Lauren Hayward BSc(Hons) (a qualifying member of CIEEM) and ecologist Callum Waldie BSc (Hons), MSc.
- 4.1.2** Surveyors were located at the north wester corner to the front of the property (Survey Location 1) and the paved path along the south eastern side of the bungalow in the rear garden of the property (Survey Location 2) - refer to emergence survey plan in **Appendix 2**.
- 4.1.3** The survey was undertaken with the aid of Batlogger M2 bat detectors supported by Pixfra A316 thermal cameras. A still shot of the darkest points of the surveys has been included for the night vision aids in **Appendix 1**.
- 4.1.4** The emergence survey started 15 minutes before sunset and continued until 1.5 hours after sunset.
- 4.1.5** After the survey the Batlogger recordings were analysed using the BatExplorer computer software package and the video footage was examined using the VLC Media Player.

### **4.2 Desk Study**

- 4.2.1** The Berkshire and South Buckinghamshire Bat Group (BSBBG) was commissioned to carry out a search of pre-existing records held by them for the site and land within a 1km radius. In addition, the MAGIC map software was used to look at previous licenses granted within a 2km radius.

### **4.3 Survey Constraints**

- 4.3.1** There were no significant constraints to the surveys, which were undertaken at a suitable time of year for undertaking emergence surveys, i.e. May to August (Collins 2023), and in conditions suitable for bat activity, i.e. dry with air temperatures 10°C or above at sunset (Collins 2023).
- 4.3.2** The potential roosting feature identified during the PRA at the base of the timbers at the eaves exposing the roofing membrane on the north eastern facing gable end had been blocked up with a mesh prior to the evening

emergence survey. However, there were still access points via the gaps between the timbers and brickwork along the eaves

## 5 SURVEY FINDINGS

### 5.1 Overview

5.1.1 The survey details and findings are summarised in the tables below and illustrated in a survey plan in **Appendix 2**; the raw detector data is detailed in **Appendix 3**.

### 5.2 Background Data Search

5.2.1 The data search revealed that at least two species have been recorded locally within the last 10 years: common pipistrelle (*Pipistrellus pipistrellus*) and brown long-eared (*Plecotus auritus*).

5.2.2 The nearest roost record is situated approximately 130 metres south of the property, along Bath Road, where brown long-eared (*P. auritus*) bats droppings were found within a roof void in 2015. The next closest site was located on Bath Road in Knowl Hill, approximately 140 metres from the property, where an injured brown long-eared (*P. auritus*) bat was recorded in 2015.

### 5.3 7<sup>th</sup> August 2025 – Evening Emergence Survey

5.3.1 No bats were recorded emerging from the property during the emergence survey however, the surveyor at location 1 observed several common pipistrelle bats (*Pipistrellus pipistrellus*) emerging from the neighbouring property to the west of the site. The surveyor at location 1 recorded noctule bats (*Nyctalus noctule*), with the earliest recording being 21:06, and several common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) bats were recorded during the survey by both surveyors. The first bat recorded by the surveyor at Surveyor Location 1 was a common pipistrelle (*Pipistrellus pipistrellus*) at 20:33, 7 minutes before sunset. The first bat recorded by the surveyor at Surveyor Location 2 was a soprano pipistrelle (*Pipistrellus pygmaeus*) at 20:55.

*Table 1. Weather conditions and survey timings*

|            | Wind (BF0-12) | Cloud cover (%) | Rain  | Temp start (°C) | Temp end (°C) |
|------------|---------------|-----------------|-------|-----------------|---------------|
| Weather    | 2             | 100             | None  | 21              | 19            |
| Start time | 20:25         | Sunset time     | 20:40 | Finish time     | 22:10         |

*Table 2. Surveyor recordings at Survey Location 1*

| Species                                              | Recordings* | Emergences | Time of first call after sunset |
|------------------------------------------------------|-------------|------------|---------------------------------|
| Soprano Pipistrelle ( <i>Pipistrellus pygmaeus</i> ) | 13          | 0          | 20:56 (16 minutes after sunset) |

|                                                         |    |   |                                 |
|---------------------------------------------------------|----|---|---------------------------------|
| Common Pipistrelle ( <i>Pipistrellus pipistrellus</i> ) | 16 | 0 | 20:42 (7 minutes before sunset) |
| Noctule ( <i>Nyctalus noctule</i> )                     | 7  | 0 | 21:06 (26 minutes after sunset) |

*Table 3. Surveyor recordings at Survey Location 2*

| Species                                                 | Recordings* | Emergences | Time of first call after sunset |
|---------------------------------------------------------|-------------|------------|---------------------------------|
| Soprano Pipistrelle ( <i>Pipistrellus pygmaeus</i> )    | 11          | 0          | 20:55 (15 minutes after sunset) |
| Common Pipistrelle ( <i>Pipistrellus pipistrellus</i> ) | 6           | 0          | 21:09 (29 minutes after sunset) |

**5.3.2** Both common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) species call were recorded by both surveyors with the earliest calls being between 20:33 and 20:42 respectively for the species therefore 7 minutes before sunset and 2 minutes after sunset. The calls were therefore early within the usual emergence time for these species (Collins 2023), indicating that both species are roosting nearby. The first noctule bat (*Nyctalus noctule*) recorded was at 21:06 by Surveyor at Surveyor Location 1, therefore is within the typically emergence time of this species, suggesting this species is also roosting nearby.

**5.3.3** The amount of bat activity was moderate and primarily comprised soprano pipistrelle (*P. pygmaeus*) and common pipistrelle (*P. pipistrellus*) commuting passes and foraging passes to the mature trees at the rear of the property and emergences from the front of the neighbouring property to the east.

## **5.4 Habitat Features Suitable for Bats**

**5.4.1** The habitats within the site consisted of mown garden lawn, mature bordering trees, planted shrubs and mown front garden with paved border.

**5.4.2** The local landscape comprises linked private gardens with mature trees and patches of woodland, in the leafy suburban setting surrounded by agricultural fields, resembling continuous habitat that could be used as flight paths connecting to high-quality foraging habitats, including the nearby woodlands, golf course and ponds.

## **5.5 Desk Study Findings**

**5.5.1** The MAGIC website had records of three granted licenses within 2km of the site. The closest record is approximately 1224m to the southwest of the property, a European Protected Species Bat Licence application was granted for the destruction of a soprano pipistrelle (*Pipistrellus pygmaeus*) breeding roost (Licence ref: 2020-45673-EPS-MIT-1).

## **6 DISCUSSION AND RECOMMENDATIONS**

### **6.1 Assessment of Bat Roost Status**

**6.1.1** During the emergence survey, no bats were recorded emerging from the detached chalet bungalow. However, common pipistrelle (*Pipistrellus pipistrellus*) bats were recorded 2 minutes after sunset, soprano pipistrelle (*Pipistrellus pygmaeus*) bats were recorded 7 minutes before sunset and 15 minutes after sunset respectively, and noctule bats (*Nyctalus noctule*) were recorded 26 minutes after sunset, which is within the typical emergence time period for all species so presumed to be roosting in properties nearby.

**6.1.2** The survey findings, combined with the limited of roosting evidence and limited suitable features identified during the preliminary roost assessment survey, provide sufficient confidence that roosting bats are unlikely to be roosting in the property. It is considered most likely that either a bat has opportunistically entered the void on one occasion historically from a nearby roost, or the droppings were evidence of a former roost.

### **6.2 Impact of Proposals and Recommendations**

**6.2.1** The survey data shows that the development proposals are unlikely to result in the damage or destruction of any active bat roosts, or to the disturbance of bats occupying roosts. As such, a European Protected Species Mitigation License will not be required for the planned works to go ahead lawfully.

**6.2.2** However, bats are highly mobile and common and soprano pipistrelle bats were shown to be roosting nearby during the survey, and it remains possible that bats could be present in the future, therefore if works are scheduled to start more than 12 months after this survey, and updated survey should be completed before the work begins.

**6.2.3** To provide future roosting opportunities suitable for pipistrelle bats in the future, the new extension's western elevation will incorporate an integral bat box (Vivara Pro Built-In Bat Tube or functional equivalent) as an enhancement (refer to **Appendix 4**).

**6.2.4** If bats a bat/bats is/are bats are discovered during the course of the work, work must stop immediately, and a licensed ecologist must be called to site to provide further advice and attend to the bat(s).

Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists – Good Practice Guidelines 4<sup>th</sup> Edition. Bat Conservation Trust, London.

Mathews F., Kubasiewicz L.M., Gurnell J., Harrower C.A., McDonald R.A., Shore R.F. (2018). *A Review of the Population and Conservation Status of British Mammals*. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough. ISBN 978-1-78354-494-3.

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3<sup>RD</sup> Edition)*. JNCC, Peterborough.

NatureScot (2018) Annex II - *Preventing access for bats in domestic dwelling houses*. Nature Scot, Inverness.

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.

## APPENDIX 1 – DARKEST POINT OF SURVEY FOR NIGHT VISION AIDS

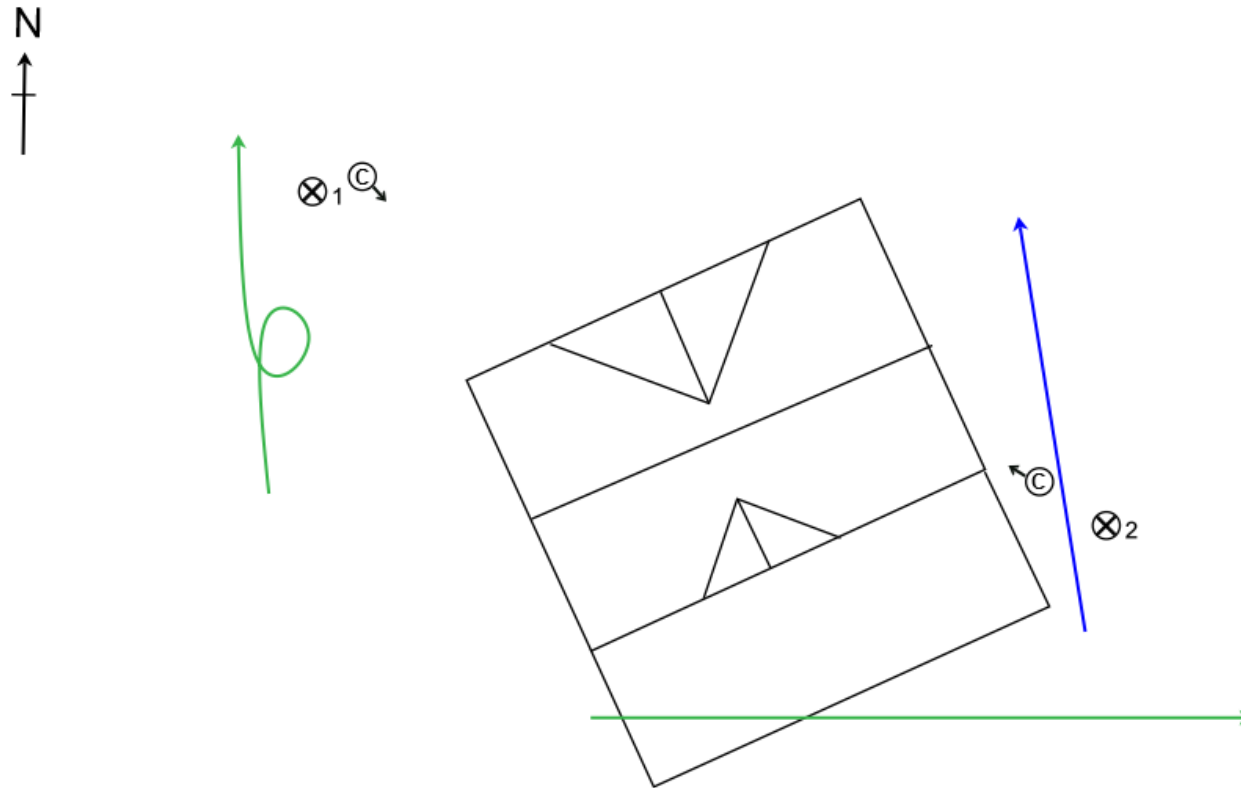


*Pixfra A136 at Survey Location 1.*



*Pixfra A136 at Survey Location 2.*

## APPENDIX 2 – BAT EMERGENCE SURVEY FLIGHT PATHS



⊗<sub>n</sub> Surveyor location    ⊙ Camera location

→ Common pipistrelle flight paths    → Soprano pipistrelle flight paths

|           |          |              |                                 |                                                                                       |
|-----------|----------|--------------|---------------------------------|---------------------------------------------------------------------------------------|
| Drawn by: | Date     | Scale:       | Homeleigh Sandhills, Knowl Hill |  |
| LH        | Aug 2025 | Not to scale | Emergence Bat Survey Findings   |                                                                                       |

## APPENDIX 3 – BAT EMERGENCE SURVEY RAW DATA TABLES

### 7<sup>th</sup> August 2025 – Surveyor at Location 1 (Batlogger M2)

| Time  | Species                          | Number of calls [#] |
|-------|----------------------------------|---------------------|
| 20:33 | <i>Pipistrellus pipistrellus</i> | 8                   |
| 20:33 | <i>Pipistrellus pipistrellus</i> | 6                   |
| 20:36 | <i>Pipistrellus pipistrellus</i> | 8                   |
| 20:37 | <i>Pipistrellus pipistrellus</i> | 7                   |
| 20:42 | <i>Pipistrellus pipistrellus</i> | 7                   |
| 20:49 | <i>Pipistrellus pipistrellus</i> | 0                   |
| 20:50 | <i>Pipistrellus pipistrellus</i> | 11                  |
| 20:53 | <i>Pipistrellus pipistrellus</i> | 7                   |
| 20:56 | <i>Pipistrellus pygmaeus</i>     | 4                   |
| 20:59 | <i>Pipistrellus pygmaeus</i>     | 5                   |
| 21:00 | <i>Pipistrellus pygmaeus</i>     | 4                   |
| 21:06 | <i>Nyctalus noctula</i>          | 5                   |
| 21:06 | <i>Nyctalus noctula</i>          | 5                   |
| 21:06 | <i>Nyctalus noctula</i>          | 4                   |
| 21:08 | <i>Nyctalus noctula</i>          | 3                   |
| 21:08 | <i>Nyctalus noctula</i>          | 2                   |
| 21:09 | <i>Pipistrellus pygmaeus</i>     | 5                   |
| 21:10 | <i>Pipistrellus pipistrellus</i> | 6                   |
| 21:18 | <i>Pipistrellus pipistrellus</i> | 15                  |
| 21:21 | <i>Pipistrellus pipistrellus</i> | 3                   |
| 21:22 | <i>Pipistrellus pygmaeus</i>     | 12                  |
| 21:26 | <i>Pipistrellus pipistrellus</i> | 7                   |
| 21:26 | <i>Pipistrellus pipistrellus</i> | 8                   |
| 21:27 | <i>Pipistrellus pygmaeus</i>     | 11                  |
| 21:30 | <i>Pipistrellus pygmaeus</i>     | 9                   |
| 21:34 | <i>Pipistrellus pygmaeus</i>     | 1                   |
| 21:37 | <i>Pipistrellus pipistrellus</i> | 15                  |
| 21:37 | <i>Nyctalus noctula</i>          | 2                   |
| 21:38 | <i>Pipistrellus pipistrellus</i> | 5                   |
| 21:40 | <i>Pipistrellus pygmaeus</i>     | 6                   |
| 21:42 | <i>Pipistrellus pygmaeus</i>     | 14                  |
| 21:43 | <i>Pipistrellus pygmaeus</i>     | 12                  |
| 21:44 | <i>Nyctalus noctula</i>          | 4                   |
| 22:00 | <i>Pipistrellus pygmaeus</i>     | 1                   |
| 22:04 | <i>Pipistrellus pygmaeus</i>     | 4                   |
| 22:05 | <i>Pipistrellus pipistrellus</i> | 19                  |

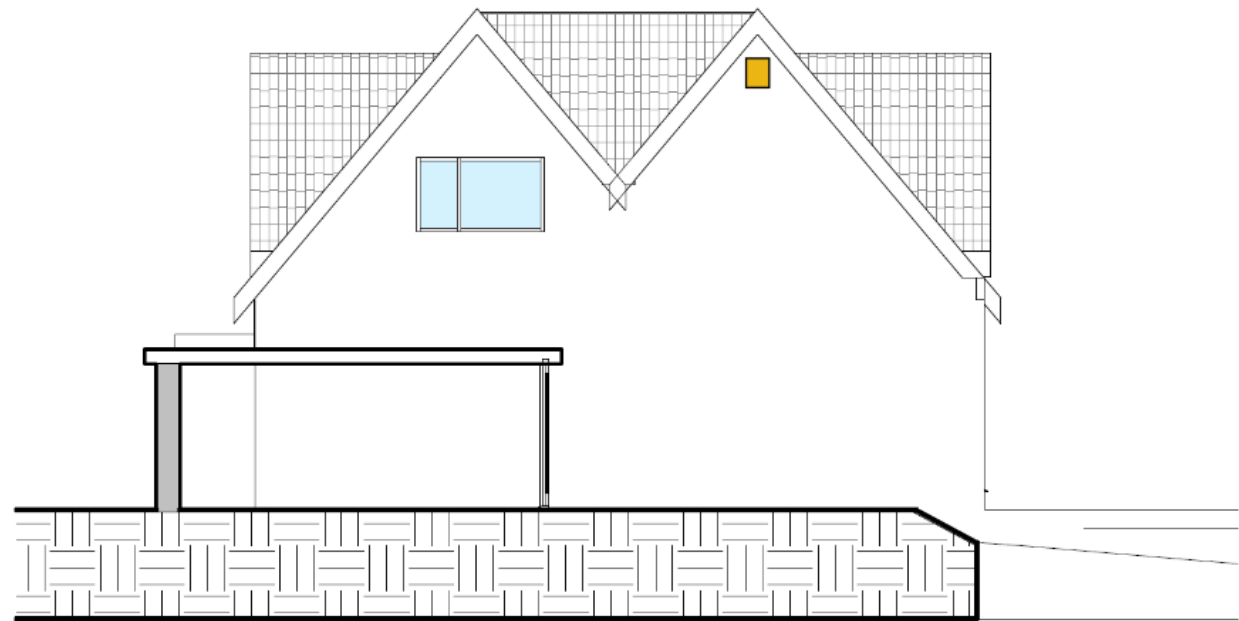
**7<sup>th</sup> August 2025 – Surveyor at Location 2 (Batlogger M2)**

| Time  | Species                          | Number of calls [#] |
|-------|----------------------------------|---------------------|
| 20:55 | <i>Pipistrellus pygmaeus</i>     | 0                   |
| 20:59 | <i>Pipistrellus pygmaeus</i>     | 2                   |
| 21:09 | <i>Pipistrellus pipistrellus</i> | 6                   |
| 21:22 | <i>Pipistrellus pygmaeus</i>     | 5                   |
| 21:26 | <i>Pipistrellus pipistrellus</i> | 3                   |
| 21:27 | <i>Pipistrellus pipistrellus</i> | 6                   |
| 21:29 | <i>Pipistrellus pygmaeus</i>     | 5                   |
| 21:33 | <i>Pipistrellus pygmaeus</i>     | 2                   |
| 21:35 | <i>Pipistrellus pygmaeus</i>     | 6                   |
| 21:36 | <i>Pipistrellus pipistrellus</i> | 3                   |
| 21:36 | <i>Pipistrellus pipistrellus</i> | 6                   |
| 21:39 | <i>Pipistrellus pygmaeus</i>     | 4                   |
| 21:42 | <i>Pipistrellus pygmaeus</i>     | 14                  |
| 21:42 | <i>Pipistrellus pygmaeus</i>     | 6                   |
| 22:00 | <i>Pipistrellus pygmaeus</i>     | 5                   |
| 22:03 | <i>Pipistrellus pygmaeus</i>     | 10                  |
| 22:05 | <i>Pipistrellus pipistrellus</i> | 9                   |

NB. The number of calls are calculated by the BatExplorer Software during analysis of the data

\* 0 calls is when the software has not been able to recognise individual calls (it being distant) and therefore cannot calculate the number of calls within the recording.

APPENDIX 4 – BAT ENHANCEMENTS (BAT BOX LOCATION PLAN)



4 Side West  
1 : 100

Integrated bat box (Vivara Pro Build-In Woodstone Bat Tube)

|           |           |              |                                          |                                                                                       |
|-----------|-----------|--------------|------------------------------------------|---------------------------------------------------------------------------------------|
| Drawn by: | Date      | Scale:       | Homeliegh, Sandhills<br>Knowl Hill       |  |
| JW        | Sept 2025 | Not to scale | Bat Enhancements (Bat Box Location Plan) |                                                                                       |