

38 NICHOL ROAD, CHANDLERS FORD

BAT SURVEY REPORT

SEPTEMBER 2024

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BAT SURVEY REPORT

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1.0 INTRODUCTION

1.1 Background

Introduction

1.1.1 The site is located at 38 Nichol Road, Chandlers Ford, grid reference SU 43672 22570. The proposals are for the extension of the existing bungalow to form a two-storey house, and the demolition of an existing single storey garage and construction of a guest annex with gymnasium.

1.1.2 A bat survey is an investigation of a site for bat use, the presence, or potential for bat roosts, and any impacts to use from the proposed works.

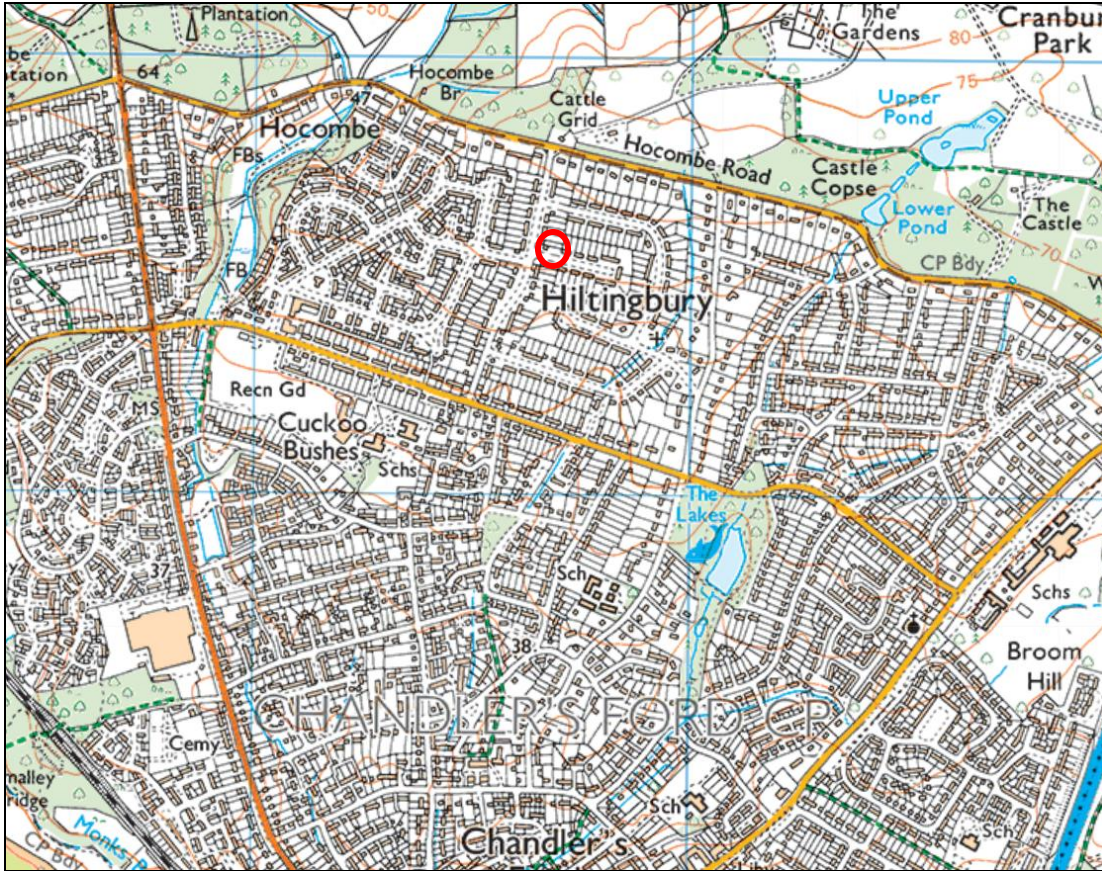
1.1.3 The site location is shown at **Figure 1** below. An initial assessment of the building was that it is of moderate potential to support a bat roost (Aluco Ecology, 2024). On this basis emergence survey has been undertaken, with the results set out below.

Survey Summary

1.1.4 Internal and external inspection recorded no evidence of bat roosts in the roof void of the dwelling or small void in the garage. Two emergence surveys undertaken monthly July-August has not recorded emergence from the buildings on site.

1.2 Development Details

1.2.1 The proposals are for the extension of the existing bungalow to form a two-storey house, and the demolition of an existing single storey garage and construction of a guest annex with gymnasium.. The proposed plan for the application are reproduced at **Figures 2** below.



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Figure 1: Location Plan

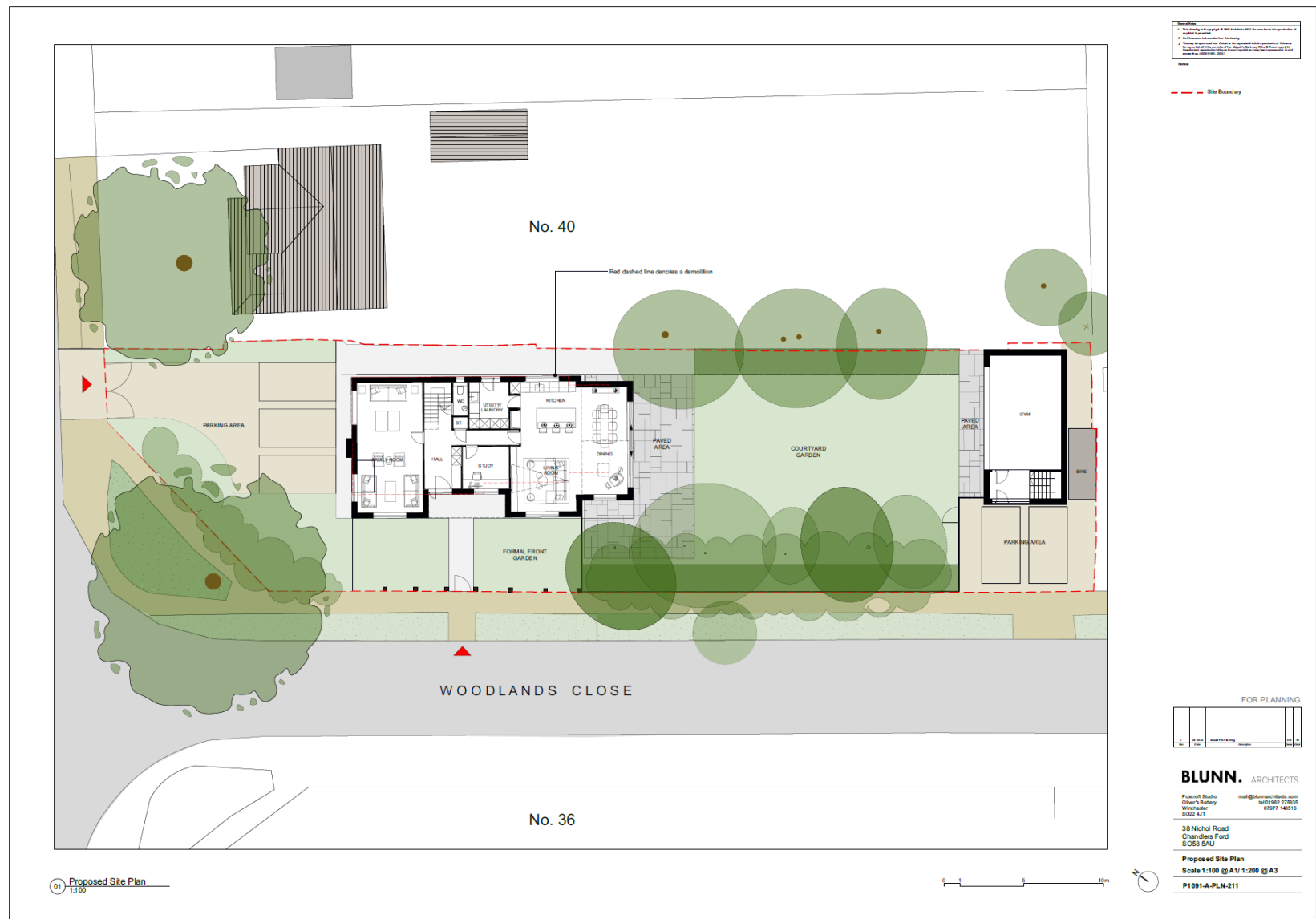


Figure 2: Development Proposals (Blunn Architects, 2024)

2.0 SURVEY METHODOLOGY

2.1 Introduction

- 2.1.1 An ecological appraisal of the site was undertaken in June 2024 (see Aluco Ecology, 2024). This assessed the building externally; and given a small number of potential access points to potential cavities or roof voids, the building was assessed as being of moderate potential to support a bat roost (Collins ed. 2023). Emergence survey and an internal inspection of the building was undertaken July - August 2024 and the results are provided below.

2.2 Legislation

- 2.2.1 All native species of bat and their roosts are afforded full legal protection in the UK. As such the outcomes of this Assessment will be tested against relevant legislation and policy; namely the Conservation of Habitats & Species Regulations 2017 (as amended) in relation to European protected species (Bats), Wildlife & Countryside Act 1981 (as amended) and Countryside & Rights of Way Act (CROW) 2000.

2.3 Bat Survey Methodology

Internal and External Inspection and Emergence Survey

- 2.3.1 The aim of this bat survey is to evaluate the potential suitability of the proposed development site in relation to bat use and bat roosts using the Bat Survey Guidelines (Collins ed, 2023), which provide guidance on assessing and evaluating development sites and features for bat roost potential. The potential for structures to support roosting or breeding bats is evaluated under the protocol for the visual internal and external inspection (with the categories; Negligible, Low, Moderate, High or Confirmed Roost).
- 2.3.2 Survey to assess the site for bats and bat roosts was carried out in June 2024, and with additional emergence survey and internal inspection in July-August 2024. This involved a survey for any roosting bats or signs that could indicate the use of the building by bats and for potential roost sites and roost access points. Anthony Blunden MCIEEM CEnv (Natural England Licence number 2015-10884-CLS-CLS) and Gareth Knass LLB (hons) MSc MCIEEM conducted the survey. Survey work included internal and external inspection and two emergence surveys, having regard to the best practice guidelines (Collins ed. 2023), and assisted by Graham Long FLS, to provide building coverage.
- 2.3.3 As part of the survey guidelines, use of night-time visual aids (NVAs) was undertaken having regard to guidance from the Bat Conservation Trust (Fawcett Williams, 2021; BCT, 2022). The survey used HIKMicro xtherm thermal imaging devices and Nightfox Whisker infrared on building aspects of survey in addition to the two survey positions.

Limitations

- 2.3.4 The survey was carried out during a window of time in June-August 2024 and therefore the survey has provided a window of time of the sites use. Since bats regularly move between

different roost sites, particularly to satisfy their varying requirements at different times of the year and weather conditions.

- 2.3.5 External building dropping evidence can be washed and blown away during periods of wet weather and during the late autumn winter period, but during warm weather in summer can remain for long periods.
- 2.3.6 Due to these survey limitations an assessment using professional judgement has been used to interpret the findings with a precautionary approach to the assessment of the bat population utilising the building and to carrying out the proposed work. Timing a survey to co-inside with the peak bats presence in the building is not always possible or practical.

3.0 SURVEY RESULTS

3.1 Data Search

- 3.1.1 A desktop data search has returned information from local European Protected Species (EPS) licence applications. These include a number of bat roosts in buildings affected by development works within 1km for the site, with day roosts of Common & Soprano Pipistrelle *Pipistrellus pipistrellus* & *P. pygmaeus*, and Brown Long-eared Bat *Plecotus auritus*. A day roost of Serotine *Epictetus serotinus* is also located just over 1km to the south west of the site.

3.2 Internal and External Building Inspection

- 3.2.1 The main dwelling is a brick bungalow with interlocking concrete tiles. The garage is also brick with a tiled roof, and the northern half of which contains a small loft cavity. External and internal inspection of the main dwelling and garage didn't record any evidence of roosting bats, but a small number of potential roost features were noted, including gaps in tiles in the roof of the main dwelling, small gaps in wall air vents, and a small gap in the apex of the rear of the garage (see also **Photos 1-11**). The buildings are considered to be of moderate potential for roosting bats according to the criteria set out in the Bat Conservation Trust best practice guidelines for bat surveys (Collins ed. 2023).
- 3.2.2 The surrounding habitats to the building provide suitable foraging habitat for bats with mature planted gardens and trees immediately adjacent to the site boundary and surrounding the property.

3.3 Emergence Survey

- 3.3.1 The results of the two emergence surveys are summarised in **Table 1** and **Figure 3** below. A total of five species of bat were recorded on the survey; Common & Soprano Pipistrelle, Noctule Bat *Nyctalus noctula*, Serotine, and Long-eared Bat *Plecotus cf. auritus*.

- 3.3.2 Foraging activity was highest with Pipistrelles with up to 2-3 Common Pipistrelles around the garden boundaries to the woodland off site. Activity by other species was low and mostly restricted to occasional passes by Noctule *Nyctalus noctula*, Serotine, Soprano Pipistrelle and Long-eared Bat.
- 3.3.3 Screengrabs of the NVA screens are provided at **Technical Appendix 1**.



Photo 1: Small gaps present in apex of building



Photo 2: Small air gaps in apex wall



Photo 3: Interlocking roof tiles, ridge tiles and soffits are generally well sealed with few gaps



Photo 4: Single storey garage with interlocking roof tiles, ridge and soffits also mostly well sealed



Photo 5: Gap in northern apex of garage may access a small roof cavity



Photo 6: Loft Void from Internal Inspection – no evidence noted



Photo 7: Loft Void



Photo 8: Loft Void from Internal Inspection – no evidence of bats recorded , upper loft void with cobwebs indicated no recent use

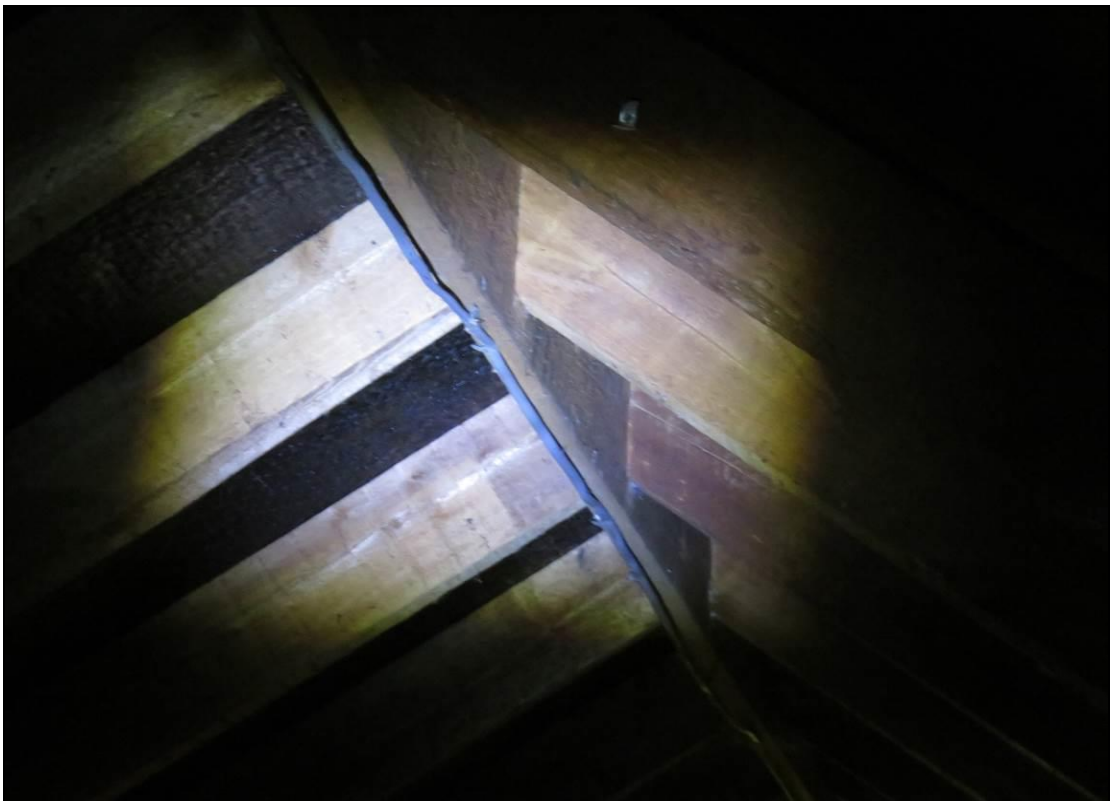


Photo 9: Loft Void from Internal Inspection – no evidence of bats recorded , upper loft void with cobwebs indicated no recent use



Photo 10: Loft Void of garage from Internal Inspection – no evidence of bats recorded , upper loft void with cobwebs indicated no recent use



Photo 11: Loft Void of garage from Internal Inspection – no evidence of bats recorded , upper loft void with cobwebs indicated no recent use

Table 1: Bat Survey Results

Survey	Weather	Results Summary
03/06/2024 & 27/08/2024 Internal and External Inspection		A small number of potential access points to voids and cavities in buildings. No evidence of bats in main roof voids of either building. No evidence of bat roosts on external inspection on either site visit.
10/06/2024 Emergence Survey	Cloud 1/8 Wind 0 Temp 26c Precip – 0	Summary: No recorded emergence, low-moderate foraging around trees PP, PS, ES Rear & Garage area: 21:03 PP HxS next door 21:13 PP from trees around garage 21:14 NN P 21:17 PP C over main building S to N 21:24 PP F garden to garage 21:28 PP F around garage 21:33 PP P 21:35 ES P from north 21:39 PP F garden 22:04 ES P 22:07 NN P Front: 21:13 PP P 21:14 PP & NN P 21:17 PP C over main building 21:22 PS P 21:28 PP F 21:32 PP P 21:40-45 PP F around trees 22:05 ES P 22:10 ES P
16/07/2024 Emergence Survey	Cloud 1/8 Wind W1 Temp 18c Precip. 0	Summary: No recorded emergence, low foraging around trees Rear& Garage area: 20:58 PP HxS trees behind garage 20:00-03 PP HxS F next door 20:06 PP P

		20:13 PP F garden 20:18 PP F 20:21 PS P by house 20:33 ES brief pass northern boundary to east of garage 20:35 ES P garden 20:43 ES P garden 20:48 ES P garden 20:57 ES P garden 21:03 PA F garden Front: 20:10 PP P 20:19-21 PP F 20:35 ES brief P HxS 20:44 ES brief P 20:29 ES P 20:54 ES P 21:04 ES P 21:15 PP P 21:21-25 PP F trees front of site
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Key:

PP = Common Pipistrelle, PS = Soprano Pipistrelle, NN – Noctule, PA – Long-eared Bat, ES - Serotine

E = Emerge, P = Pass, F = Foraging, C = Commuting, HxS = Heard not seen

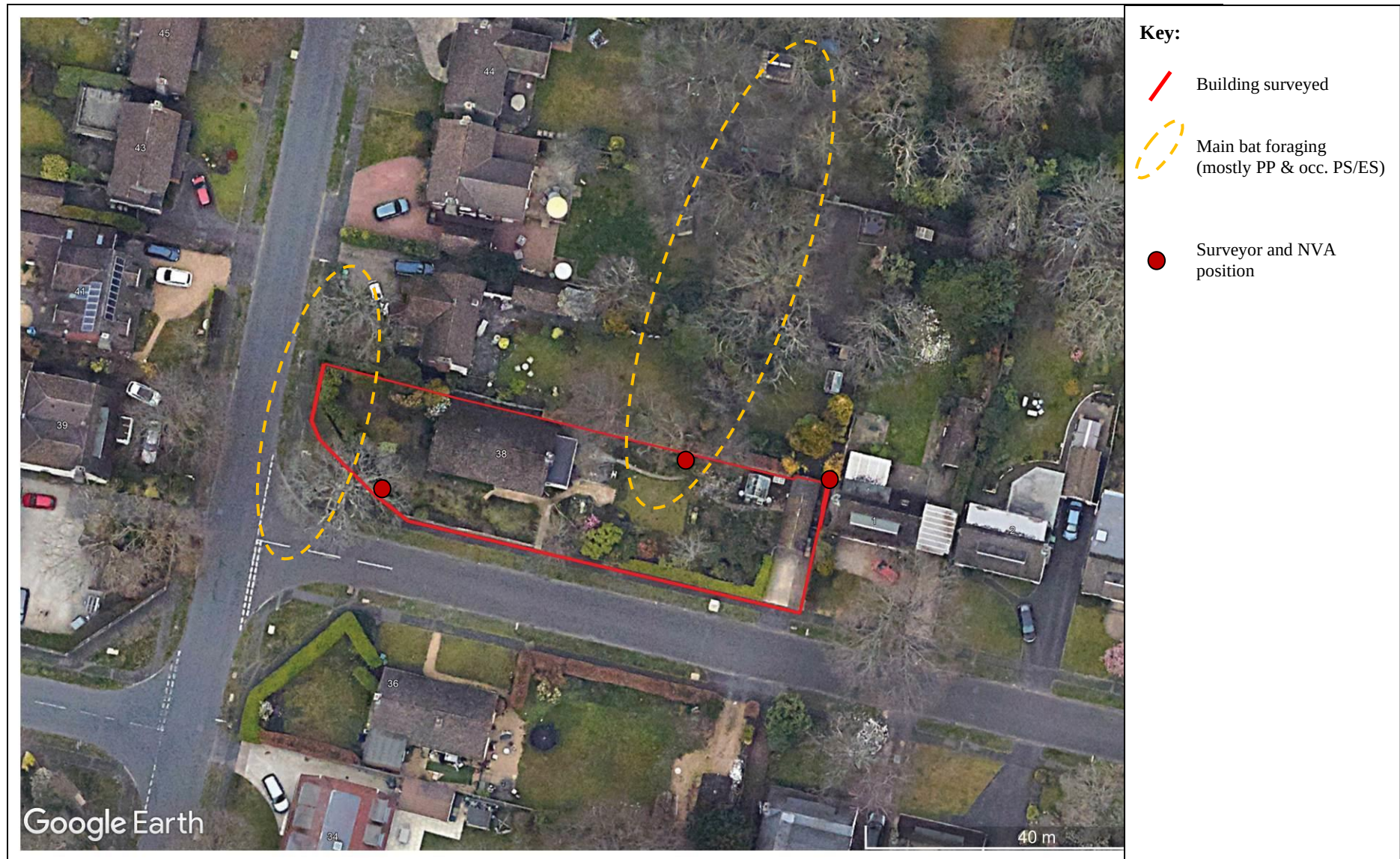


Figure 3: Bat Survey Summary

4.0 EVALUATION AND IMPACT ASSESSMENT

4.1 Evaluation

- 4.1.1 The building has been evaluated using the ‘Potential Suitability of Proposed Development Sites for Bats (including Buildings & Trees)’ methodology as per the Bat Survey Guidelines (Collins ed. 2023). It was initially evaluated as moderate potential for bat roosts. Two emergence surveys have been undertaken and no evidence of roosting bats has been recorded.

4.2 Impact Assessment & Mitigation Recommendations

- 4.2.1 It is recommended as best practice that works that impact the roof of the building, are undertaken at a time of year when bats are less sensitive to disturbance, outside the hibernation and breeding periods. This is because bats are vulnerable to disturbance during hibernation, late pregnancy, and while dependent young that are unable to fly are in the roosts. Therefore, such element of the work is recommended at a time of year when bats are more tolerant of disturbance and outside of potential breeding and hibernation periods (When average temperature above 7c, best periods are March-April and/or September-October).
- 4.2.2 Prior to starting works all contractors will be briefed to ensure that they are aware of the potential of bats, their legal protection and procedures should a bat be found at any stage of the building work, all building workers must be made aware that there is a bat roost and informed that bats may be present;
- 4.2.3 Prior to starting works a Pre-works inspection survey will be undertaken to ascertain / check levels of bat activity have not changed from that outlined in this report. Any significant change will require reassessment of the methodology.
- 3.4.4 In the unlikely event of any bats being found during demolition or construction, all work must stop immediately, and Natural England must be contacted. Additional information is available on the Bat Conservation Trust website at <https://www.bats.org.uk/advice/im-working-on-a-building-with-bats/ive-found-a-bat-during-works>.
- 3.4.5 New bat roosting features will be incorporated into the new building design, and this could include bat bricks and bat tiles, with suitable mitigation options provided in **Technical Appendix 2**. A total of two features are recommended and locations are provided in **Figure 4** below.
- 3.4.6 In addition to new roost features, it is recommended that as far as possible mature garden woody features are retained and enhanced with new diverse planting. The additional recommendations in the ecology appraisal should also be referred to in providing biodiversity value in the garden habitats. The majority of the mature trees around the site are to be retained as they are boundary trees.

4.3 External Lighting

- 4.3.1 Any proposals for external lighting of the site, and changes to this as a result of the scheme should consider potential for impacts on retained boundary woody features, and aim to keep dark corridors on these boundary features, having regard to best practice guidance on lighting and bats (ILP & BCT, 2023).

5.0 SUMMARY

- 5.1 Bat survey work has been undertaken on 38 Nichol Road, Chandlers Ford in order to determine level of use of the buildings on site by bats, and potential roosts that may be impacted by a proposed extension of the house and garage.
- 5.2 The internal and external inspection recorded no evidence of roosting bats and this was supplemented by two bat emergence surveys, which has also not recorded evidence of bat emergence from the buildings on site. Recommendations have been provided in undertaking the proposed works and potential for mitigation.

6.0 REFERENCES

Aluco Ecology (2024) 38 Nichol Road, Chandlers Ford, Ecological Appraisal, June 2024

BCT (2022) Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys

Collins Ed (2023) Bat Surveys Good Practice Guidelines. 4th Edition. Bat Conservation Trust.

Fawcett Williams (2021) Thermal Imaging: Bat Survey Guidelines, in association with BCT 2021

ILP & BCT (2023) Guidance Note GN08/23 Bats and Artificial Lighting at Night

Report Authors & Review
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Technical Appendix 1

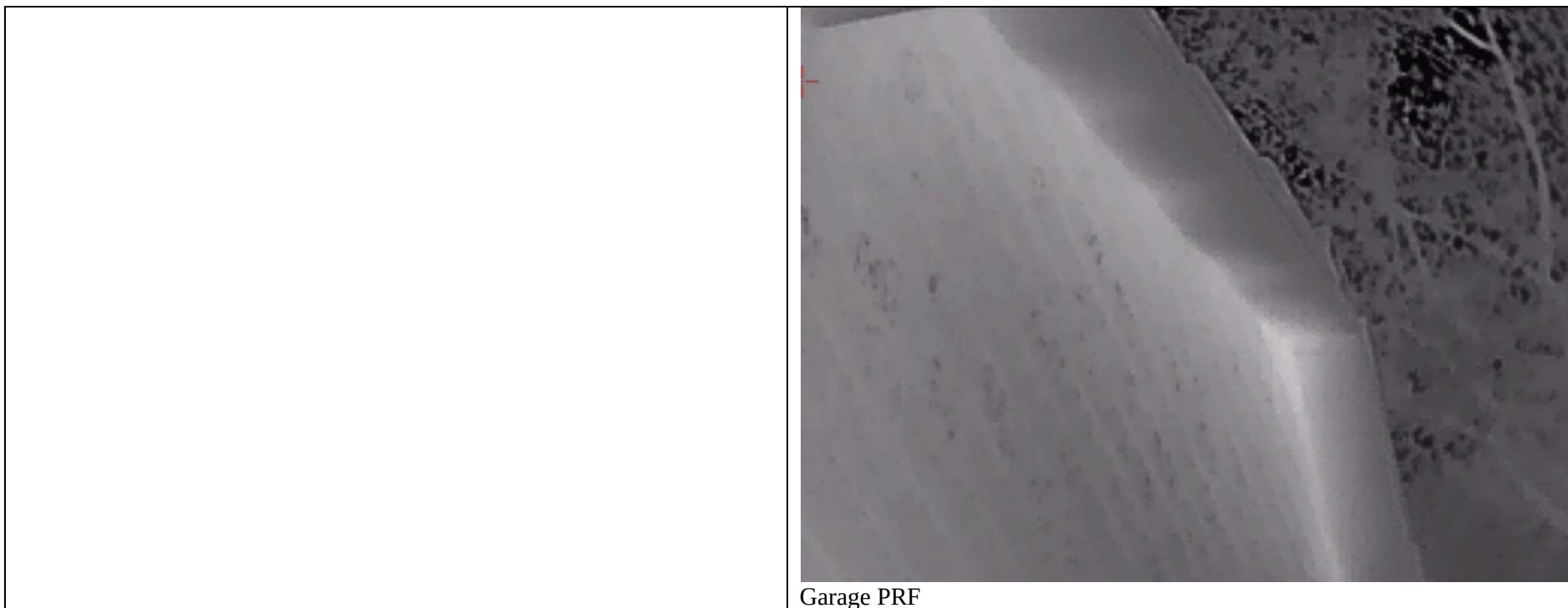
NVA Screengrabs from Emergence Survey

Rear	Front
30/07/2024	
	



Garage PRF





Technical Appendix 2

Bat Box Mitigation Examples

Examples of Bat Bricks/Mitigation for buildings

**Schwegler Bat Roost Unit
2FR**

This Tube system meets the characteristic behavioural requirements of the types of bats that inhabit buildings. Made with Schwegler wood-concrete, the design maintains excellent climatic conditions inside the roost unit allowing the animals to either hang onto the wooden rear or onto the wood-concrete front. The box, once installed is maintenance free and self cleaning.

The roost unit can be installed within any external walls (brick, block or panelling) either flush or beneath the wall surface (with suitable entrance ramp extension)

Dimensions: height 47.5 x width 20 x depth 12.5 cm,
Entrance: width 15 x height 2 cm, Weight: ca. 9,8 kg

Within Brick, can also be placed within cavity with only entrance visible



	
Birdbrickhouses: Bat boxes (also referred to as bat tubes) can be supplied in brick fronted, half bond and quarter bond brickwork or alternatively with a stainless steel mesh fitted to the front. The mesh is designed for optimum adhesion in render and stonework applications. A basic version can be fitted directly behind weatherboarding or into studwork. See: https://www.birdbrickhouses.co.uk/products/bat-brick-houses/	