

ROSEBANK

BAT SURVEY & MITIGATION

FEBRUARY 2024

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1.0 INTRODUCTION

Background

Aluco Ecology Ltd was commissioned to carry out a Bat Survey of the property 'Rosebank', Webbs Lane, Abbots Ann SP11 7DD Hampshire Grid Reference SU328434 / SU3281643459, By Luke Rose Architects on behalf of the property Owner. A Bat Survey is an investigation of a site for Bat use, presence or potential for Bat roosts and any impacts to use from a proposed development

In this case, further bat emergence survey was recommended and ongoing as 'potential for roosting' was recorded.

In this case, further bat emergence survey was completed as 'potential for roosting' was recorded. Given the findings from the survey to date, it is therefore not considered likely that old roosting / exploration location will be affected by the proposals to replace the dwelling property house.

Mitigation and scheme enhancement for the historic roost will be through 2x2fr concealed Roost units will be built into the new walls of the replacement building. A new clay tile roof will also provide a range of roosting opportunity. All activities with potential to disturb bats will be under the supervision of a licensed bat worker following the method statement agreed and (EPS) European Protected Species Licence as required.

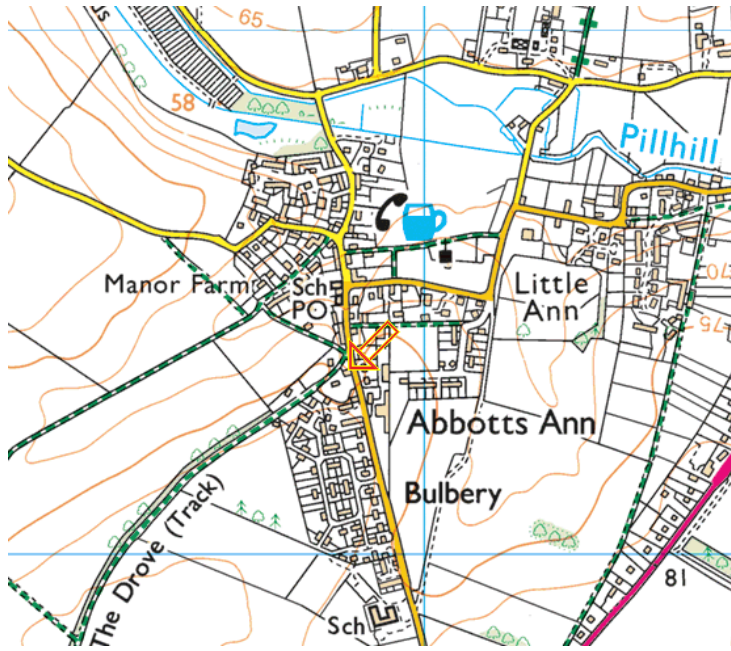
This reporting follows updates to scheme plans in July 2023/ February 2024. The mitigation proposals are similar to previous scheme.

Legislation and Policy

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.

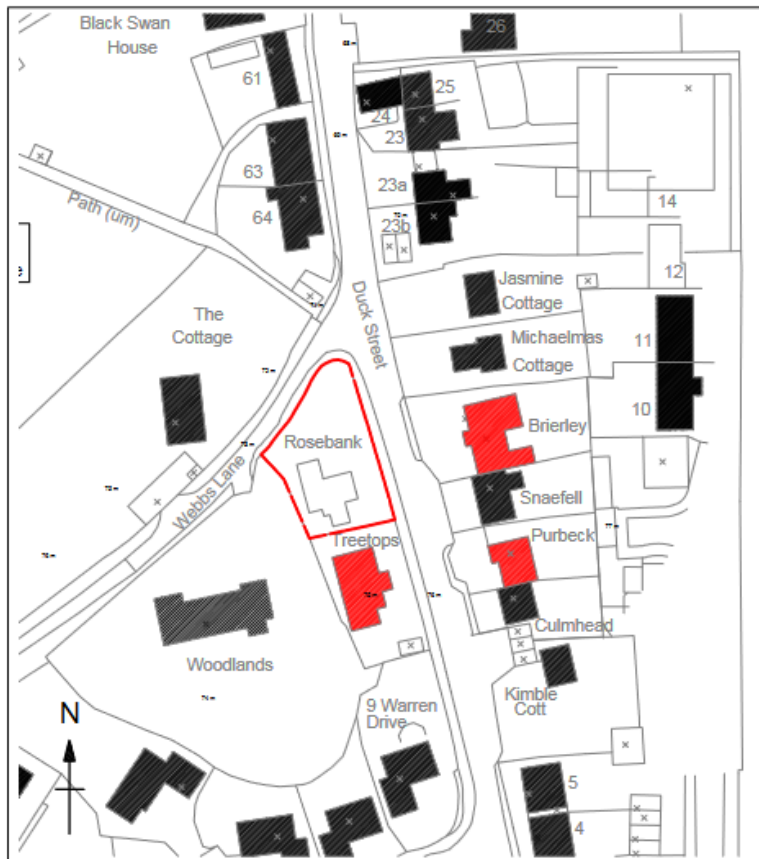
Outline of the Scheme and Site Location

It is proposed to demolish and replace the existing residential building with new residential property (see **Figures 1-5**).



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Figure 1 Location Plan



Site location plan 1:1250

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Figure 2 Location Plan

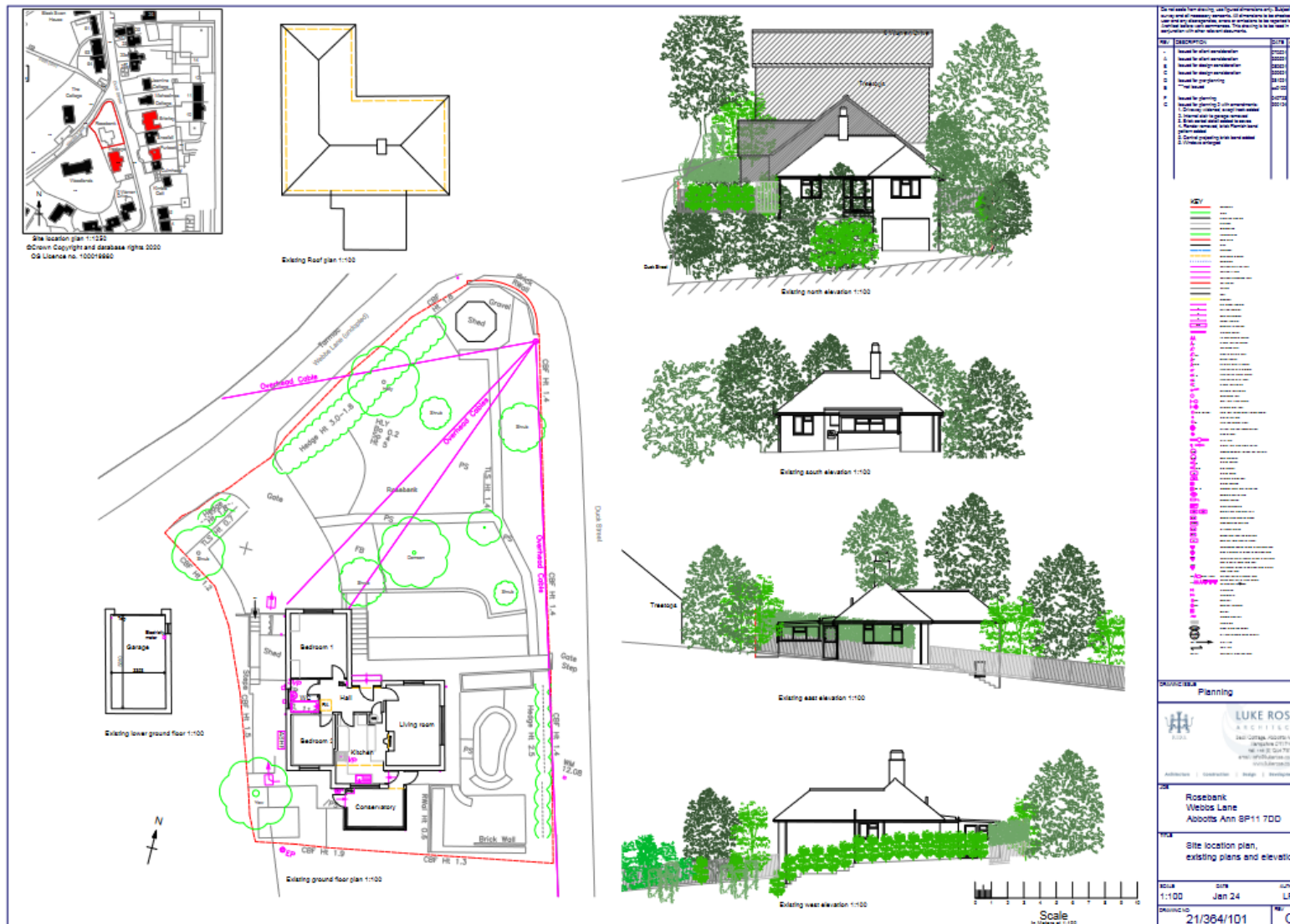


Figure 3 Existing site Plan / Elevations

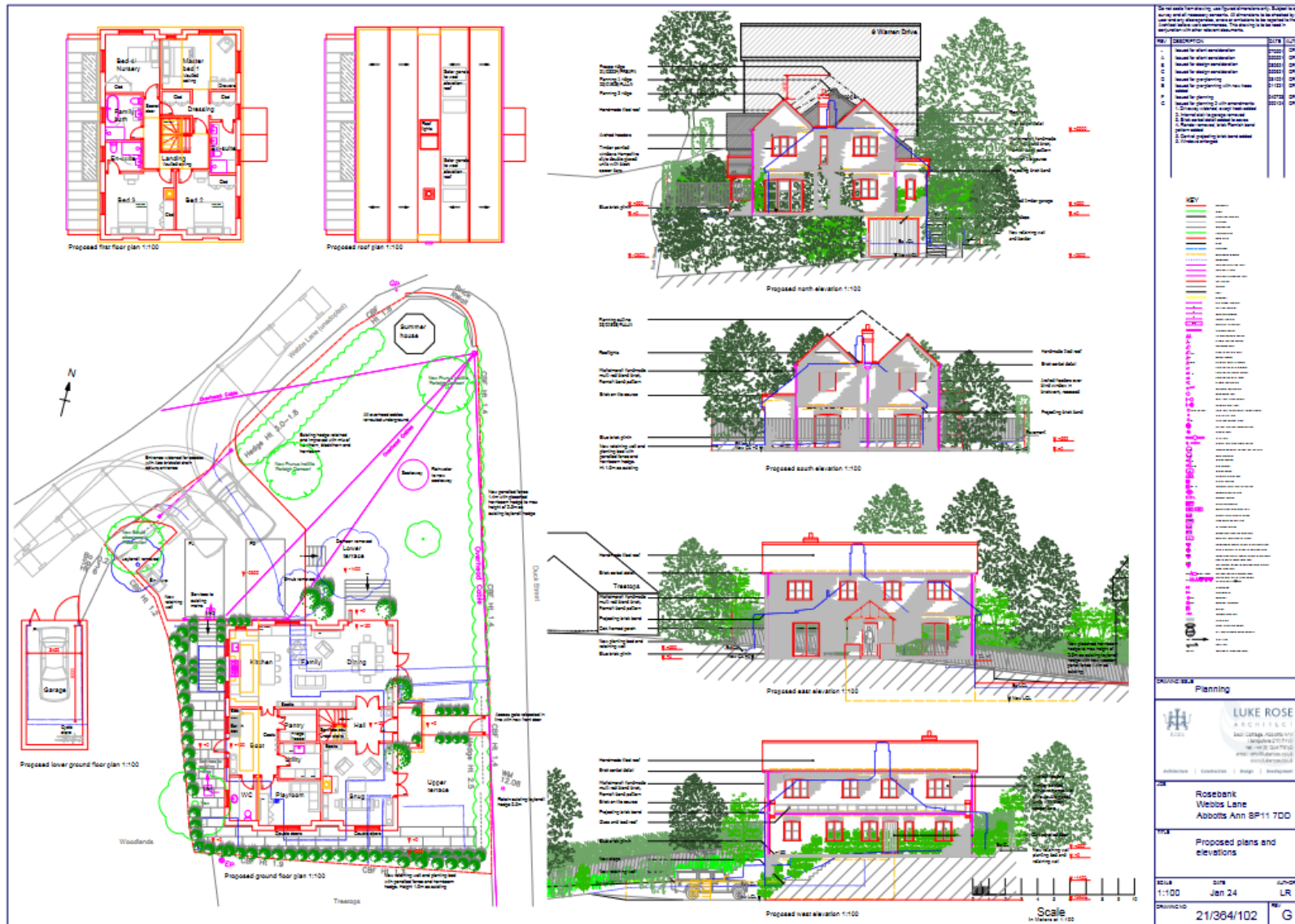


Figure 4 Proposed site elevations

2.0 SURVEY METHODOLOGY

Methodology

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 (Bat Conservation Trust, 2016), 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).

Survey to assess the site for bats and bat roosts was carried out in October 2021 with a walkover site survey in May 2023 to confirm site conditions remain the same as previous survey. This involved a survey for any roosting bats or signs which could indicate 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), principal ecologist of Aluco Ecology with over fifteen years survey experience, conducted the survey and reporting. As Roosting Bats were recorded, the daytime bat survey was updated and supplemented by three emergence survey during May-June 2022 applying the methodology described by the Bat Conservation Trust survey guidelines (BCT, 2016). Gareth Knass LLb (Hons) MSc MCIEEM, Graham Long FLS assisting with emergence surveys for building coverage.

3.0 SURVEY RESULTS

Daytime Inspection Results

The site is sloping and adjacent to a range of well-spaced residential houses on a road leading out to the rural areas of the Village. See **Photos 1 to 4** of the site. The brick bungalow and garage with concrete interlocking tiles sites between a rural drive and road. The design and age of the building generally presents limited suitable roosting opportunities within the structure. Suitable roosting gaps were located within the property roof structure only (see **Photos 5-17**). There were in particular gaps on the north and south side, just under the ridge tiles by the chimney, a favoured roost location. Internal examination of the loft located c6 droppings under two areas of roof apex. Dropping evidence indicates infrequent use of the void but use of the ridge tiles could not be further quantified fully. Survey confirmed potential roosting.

Emergence / Activity Survey

The daytime bat survey was then supplemented by emergence survey applying the standard methodology using the Bat survey guidelines (Bat Conservation Trust, 2016). Results are included in **Table 1, Figure 6** below. Bat survey recorded no roosting / use of the house from the survey to date. In addition, Common Pipistrelle, Noctule Bat and Serotine were all recorded foraging / commuting over the site during survey work



Photo 1/2 Rosebank (front North and south aspect) ridge tile gap indicated



Photo 3/4 Rosebank (north aspect)



Photo 5/6 Rosebank (south aspect) no potential recorded evidence or potential recorded within eaves and soffit structure



Photo 7/8 Rosebank, no potential recorded evidence or potential recorded within eaves and soffit structure



Photo 9/10 Plain tiles. These provide limited bat access potential unless damaged or lifting. Hips and Ridge tiles generally very well pointed with no access gap other than two areas of ridge and tile gaps beneath.



Photo 11/12 Plain tiled roof with two areas 1 north 1 south aspect by chimney with very suitable tile gap just below ridge tiles.



Photo 13/14 internal roof area of building with no long-term accumulation of cobwebs.



Photo 15/16 internal roof area of building with no long-term accumulation of cobwebs. Evidence internally of Brown Long-eared bats recorded, with a few droppings.

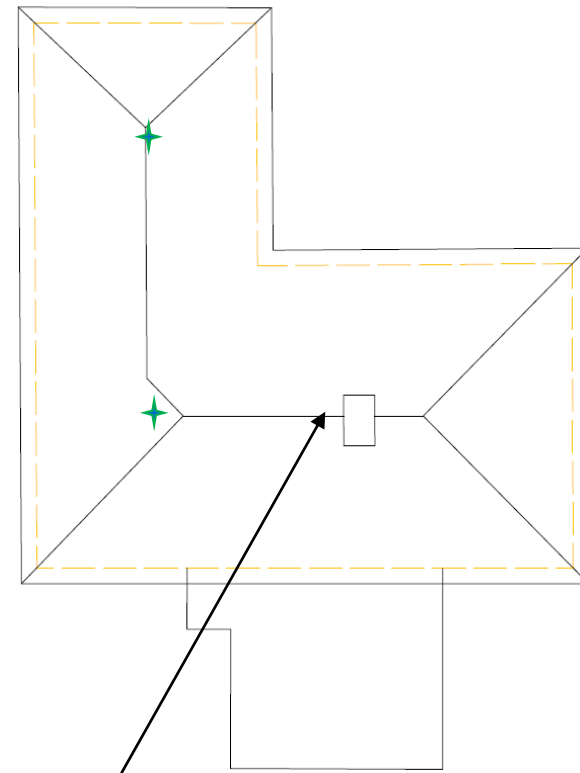
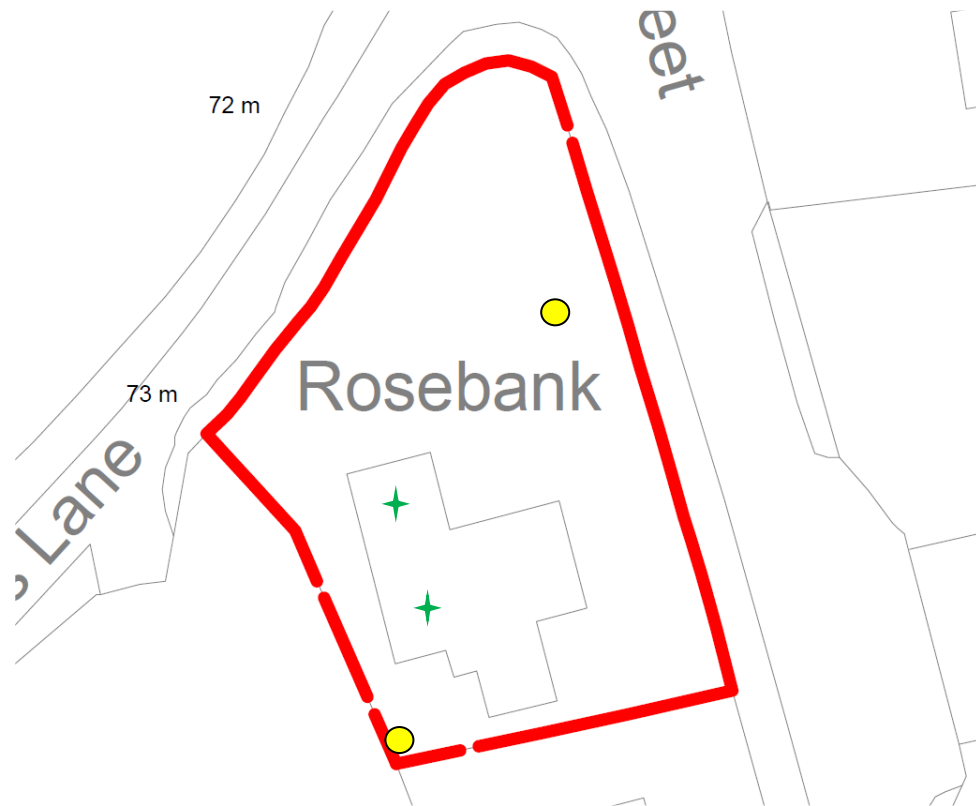
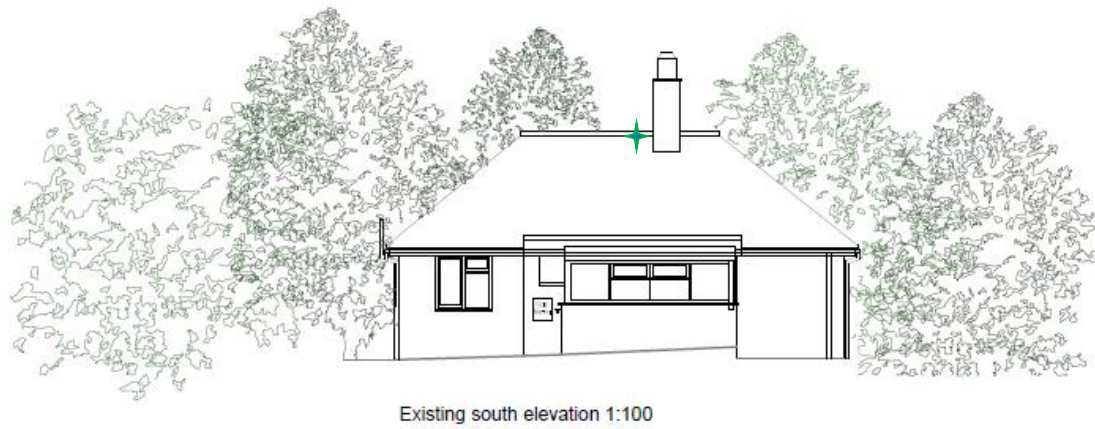


Figure 5 Survey Results

Key		
Brown Long-eared droppings	(in void)	★
Potential Roost entrance	↗	
Main Survey locations	●	



Key

- Brown Long-eared (droppings in roof void)
- Potential Roost entrance/exit
- Tile gap ✦

Figure 6 Survey Results

Table 1: Bat Survey Results

Date	Survey	Weather	Results Summary
	External Inspection Internal Inspection		A survey of the dwelling identified dropping evidence Very light scatter of c 8 PA droppings relating to older very periodic / Exploratory use PA x1
19/5/2022	Emergence Survey	Cloud 4/8	21:11 PP down lane c
		Wind SW1	21.14 PP down Lane c
		Temp 16c-15c	21.18 PP f on Lane
		Precip 0	21 .24 PP f 21.30 PP f 21.40 PP x2 f 21.47 PP f No recorded Emergence.
06/06/2022	Emergence Survey	Cloud 2/8	21:44 PP HxS
		Wind SW0-1	21:47 PP fp front garden
		Temp 15,5-12c	21:54 PP fp over northside of garden
		Precip nil	21:56 PP fp from south 22:03, 12,14 PP f garden 22:24 PP f Generally low activity No recorded Emergence.
27/06/2022	Return Survey	Cloud 1/8	03.58 PA pass east to we
		Wind sw1	Generally low activity
		Temp 10c-10c	No recorded return.
		Precip nil	
To Complete	Pre demolition works - update survey to confirm current status. Initial supervision of works		To Complete
Key: PP = Common Pipistrelle, PS = Soprano Pipistrelle, NN = Noctule, ES=Serotine PA =Brown Long-eared, My =Myotis Species, MyM = Whiskered Bat F = foraging; C = commuting; HxS = heard but not seen; SxH = seen but not heard; E = emergence; R-E = Re-entry			

Summary Interpretation for Bats & Constraints to survey

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 (Bat Conservation Trust, 2016). The house was initially evaluated as having potential given older dropping evidence.

Given the findings from the survey to date, it is therefore considered likely that the historic use site or building exploration, will be affected by the proposals to demolish and replace the house.

Further emergence survey could be completed, but based on the current survey and building / potential roost impacts, information from further survey is considered unlikely to provide much further information. An update survey will however occur prior to start of works to confirm current status.

The survey was carried out during a window of time in May -June 2022 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.

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.

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.

4.0 MITIGATION FOR BATS

The proposed scheme at Rosebank is predicted to impact is predicted to impact a historic non-breeding transitional single / low occurrence event or even exploration by Brown Long-eared Bat (1), No. estimated population in any given year.

See **Figures 6 & 7**.

Summary of the mitigation strategy

In order to minimise impact on local bat populations and bat roosting opportunities, the following measures are proposed to be implemented:

- All activities with potential to disturb bats will be under the supervision of a licensed bat worker following the method statement agreed and (EPS) European Protected Species Licence
- Prior to starting works a Schwegler Bat roosting box (1x 1FF) (**Figure 7**) will be installed within a nearby tree within a nearby tree within the garden to provide alternative roosting during the works and to increase local roosting opportunity longer term;
- Prior to starting works all contractors will be briefed by the bat worker to ensure that they are aware of the presence 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;
- Prior to starting works a Pre-works inspection survey will be undertaken to ascertain / check levels of bat activity / roosting locations have not changed from that outlined in this report. Any significant change will require reassessment of the methodology;
- Bats are very vulnerable to disturbance during hibernation, late pregnancy, and while dependent young that are unable to fly are in the roosts. All works associated with the development that may disturb bats (roof strip) will be undertaken 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);
- 2x2fr Roost unit will be built into the new walls of the replacement building (see **Figure 7**). This will be as mitigation and scheme enhancement. The handmade clay tile roof will also provide further niche roosting opportunity.
- All roost sites should not be illuminated by any site lighting during construction and operation. Please refer to Institution of Lighting Professionals, Guidance Note 08/18 Bats and artificial lighting in the UK for further information. Luminaires be low level and directional to light essential walkways and doorways etc only and should feature a peak wavelength of >550 nm with red / warm light spectrum to avoid the component of light most disturbing to Bats

The mitigation proposal is based on allowing access to roosting opportunities within the new building (see **Figure 7**). The new roost sites will be sympathetic and complimentary to the building design.

The property owners will instruct a suitably qualified bat ecologist to undertake a post-development survey and completion statement / Natural England licence return to ensure roosts are functional. This will be carried out between June and August and will consist of external inspection of the bat roosting areas. All Bat records will also be submitted to the local Biological Records Centre.

The owners of 'Rosebank' will be responsible for ensuring that the monitoring is completed and to inform any future owners or tenants of the property of the bat roosts within buildings and garden. The owners are to pass on the information contained within this document which provides information on the location of the bat roosts in the building. The owners are aware that they are required to contact the statutory Nature Conservation Adviser (Natural England) for advice prior to any activity which may affect or disturb the bat roosts.

Following the Bat Mitigation Guidelines (EN, 2004), considering the scale of site level impacts (page 37, section 6.1) the scale of impact to the roosting bats is, based on current survey, considered to be nil -low historic exploration / transitional roost). The procedure and mitigation provided is precautionary with the overall impact on the population of bats in the local area should therefore be neutral.

5.0 POTENTIAL FOR OTHER PROTECTED SPECIES

Breeding Birds

Wild birds and their nests are protected from intentional harm by the provisions of the Wildlife and Countryside Act 1981 (as amended). Therefore, any vegetation and building clearance associated with the development will be required to be carried out sensitively to ensure that bird nests are not impacted by any works being carried out when birds are not breeding (the main bird nesting period is March-Aug inclusive) or after thorough checking by a suitably experienced ecologist. The mitigation proposed will ensure that legal and policy provisions relating to protected species will be met.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Compliance with legislation

On the basis of the survey undertaken and presence of bat roosts, with bats listed on Schedule 2 of the Habitats Regulations 2017, the following tests must be met:

- *that there is no satisfactory alternative, and*
- *that the action authorized will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.*
- *that the action is required in 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;*

Comment:

In relation to Conservation of Habitats & Species Regulations 2017) the following conclusions are made:

- The current building is not suited to the owner's needs in terms of use, design and layout.
- The proposed actions will provide an economic benefit from the construction and process of the works.
- The proposed actions will not be detrimental to the bat populations. The method statement will ensure that the method and timing of works with minimise the impact to the bat populations on site.
- There is insufficient current evidence of use for a European Protected Species (EPS) Licence, a few older droppings and no evidence of recent use. An update survey will be completed prior to start of works to update on status. Any evidence of recent use of the house will require re-evaluation and potential EPS licence to permit works. All activities with potential to disturb bats will be under the supervision of a licensed bat worker following the precautionary method statement.

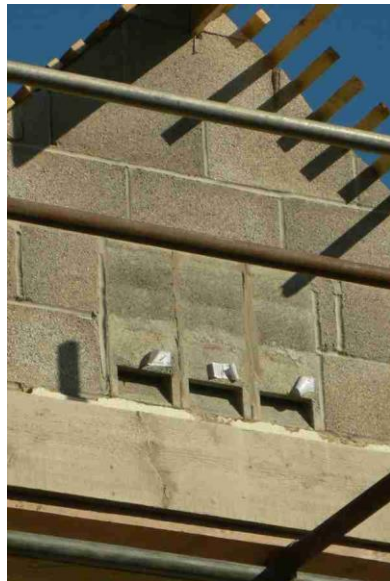
The mitigation and monitoring detailed within this report and the Method Statement may be subject to a planning condition.

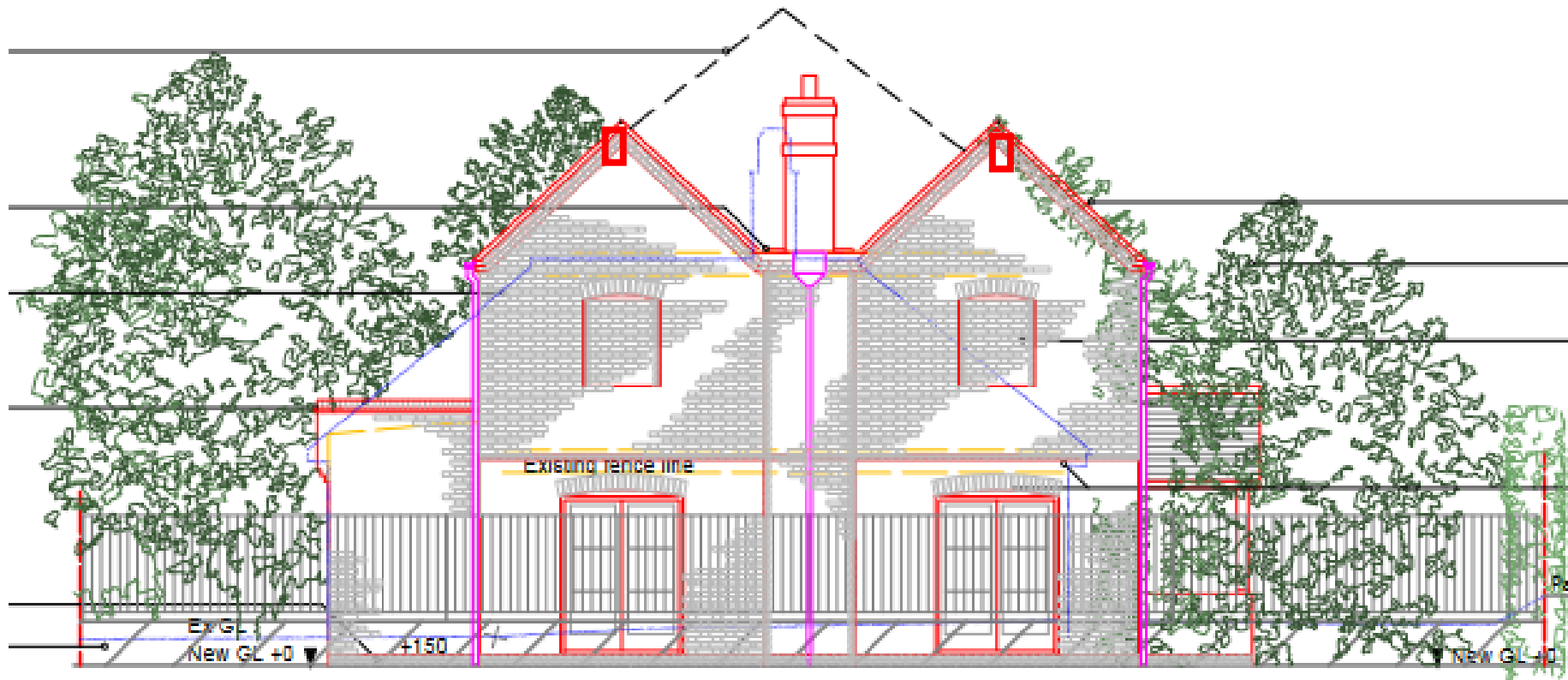
Mitigation and Enhancement.

Roosts opportunity will be incorporated into the scheme. This will include a Schwegler 1ff roosting unit within the garden, with 2fr roost units incorporated into replacement dwelling (see **Figure 7**)

<p>Figure 7a</p> <p>Schwegler 1FF</p> <p>The 1FF has an opening at the bottom, allowing droppings to fall out, it does not need cleaning and is therefore especially suitable for hanging in inaccessible places such as steep slopes and house walls.</p> <p>Depending on their individual temperature requirements, the animals can choose between the cooler wood-concrete or the warmer wooden panel</p>	
<p>Figure 7b</p> <p>Schwegler Bat Roost Unit 2FR</p> <p>Dimensions: height 47.5 x width 20 x depth 12.5 cm, Entrance: width 15 x height 2 cm, Weight: ca. 9,8 kg</p> <p>The same as a 1FR but with knock-outs to allow</p>	

joining.





Proposed south elevation 1:100

Figure 7c Mitigation / enhancement 2fr Roost Unit 

REFERENCES

Bat Conservation Trust 2016 Bat Surveys Good Practice Guidelines 3rd Edition

Report Author

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Aluco Ecology Ltd