65 Station Road, Worsborough, Barnsley, S70 4SZ

Bat Report

Prepared on behalf of

Mark Latham

Final Report

09 May 2024

65 Station Road, Worsborough, Barnsley, S70 4SZ
Bat Report

Document Control

Client:	Mark Latham
Date:	9 May 2024
Status:	Final report v2
Report Prepared for Issue by:	Elizabeth Davies BSc (Hons) MCIEEM [redacted]

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This report has been prepared, and is only valid for the named client, for the project described. The information which we have prepared and provided is in accordance with CIEEM's Code of Professional Conduct. Liz Ecology confirms that the opinions expressed are our true and professional bona fide opinions. The report is in accordance with the agreement under which our services were performed.

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The content of the report may, in part, be based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third party has not been independently verified by Liz Ecology unless otherwise stated in the report.

Provided no significant changes are made to the proposals or on the site subsequent to the report's issue; this report can be considered valid for 18 months from the date of issue, in line with CIEEM's Advice Note on The Lifespan of Ecological Reports and Surveys (2019).

As part of membership to our professional body (CIEEM) we are required to provide our biological results to applicable biological record centres. As such, it is our intention to supply biological data collected as part of this assessment to the relevant centre unless directly instructed in writing not to do so by the client.

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NON-TECHNICAL SUMMARY

- Liz Ecology was commissioned by Mark Latham to conduct a Preliminary Roost Appraisal survey of 65 Station Road, Worsborough, Barnsley, S70 4SZ. The survey was conducted to support a planning application (Reference 2024/0191/INVALID) for a conversion of the structure to a residential property.
- A preliminary roost assessment was undertaken on 13th March 2024 by Elizabeth Davies (licenced bat worker). No evidence of bats was noted internally.
- The garage has been assessed as holding negligible potential to support roosting bats, due to a lack of access, suitable features and roosting opportunities.
- The County ecologist disagreed with the assessment made by Liz Ecology, and stated the building held low potential for roosting bats. As such a single phase 2 emergence survey was conducted on 7th May 2024 to establish presence/absence of roosting bats. No bats were recorded emerging from the building. No further survey or licensing will be required for the development.
- No nesting birds were recorded internally or externally on the building.

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1. INTRODUCTION

1.1 Liz Ecology was commissioned by Mark Latham to conduct a Preliminary Roost Appraisal survey of the garage at 65 Station Road, Worsborough, Barnsley, S70 4SZ (Grid reference SE 36423 03742). The survey was conducted to support a planning application (2024/0191/INVALID) for a conversion of the structure to a residential property.

1.2 Elizabeth Davies has over 8 years of experience undertaking Bat Roost Assessments. She is a full member of CIEEM and holds a Class 2 Bat Licence. She has extensive experience of bat mitigation and holds EPS licences for a variety of projects and species.

Site description

1.3 The proposed development site 'the Site' comprises a disused garage, likely first constructed in 1642 from dates on a sandstone in the wall, and associated garden areas. It is defined in Figure 1, in Appendix 1.

1.4 The site is located in the residential area of Worsborough, to the south-east of Barnsley. The Site is surrounded by residential properties on the east and west, and arable land on the south and north. There are copses and tree lines within the local area. In the wider area there are residential properties, arable land and woodland.

Legislation

1.5 All bat species are legally protected under the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019. All species of bat are also protected under the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to:

- Deliberately kill, injure or capture bats;
- Deliberately disturb bats in such a way as to be likely to significantly affect:

  (i) the ability of any significant group of bats to survive, breed or rear or nurture their young; or

  (ii) the local distribution or abundance of bats;
- Intentionally or recklessly disturb any bat whilst it is occupying a roost;
- Damage or destroy bat roosts; and
- Intentionally or recklessly obstruct access to a bat roost.

1.6 This legal protection means that where activities have the potential to impact on bats, the results of a bat survey and an appropriate mitigation strategy must be submitted to Natural England.

1.7 There are 17 breeding species of bat in the UK, seven of which are of Principal Importance for the conservation of biodiversity in England under Section 41 (S41) of the NERC Act 2006. There is a clear responsibility on local planning authorities to further their conservation.

Report structure

1.8 Section 2 of the report provides details of the methodologies adopted and Section 3 provides an account of the survey results. Section 4 provides conclusions regards the results in relation to the proposed development and presents appropriate measures of best practice and mitigation where necessary.

2. METHODOLOGY

Desk study

2.1 A search of the Multi-Agency Geographical Information for the Countryside (MAGIC) website was conducted for statutory sites designated for bats within 5 km of the property, as well as mitigation licenses for bats within 1 km of the property. A search for bat records within 2km of the property was conducted by Barnsley Biological Records Centre.

Bats

Preliminary Roost Appraisal

2.2 Bats roost in a wide variety of sites within buildings, with many species roosting in cracks and crevices, within rubble stone or cavity walls, under slates and within timber beam joints where they are difficult to see. Bats often access buildings at key areas such as the gable end, soffits, barge-boards, ridge tiles, between double lintels or around window frames.

2.3 The presence of roosting bats can be spotted through signs such as accumulations of moth or butterfly wings or bat droppings and staining around potential entrance and exit points. The absence of these cannot, however, be treated as conclusive evidence that bats are not using the buildings. An assessment was therefore also made of the potential of the building to support bats based on the following scale (Table 1):

Table 1: Criteria for assessing bat roosting potential of buildings

Confirmed Roost	Evidence of bat occupation found
High Roosting Potential	With significant roosting potential, either because they contain a large number of suitable features or those features present appear optimal
Moderate Roosting Potential	Features with moderate roosting potential, with roosting features appearing less suitable
Low or Negligible Roosting Potential	Buildings with few, if any, features suitable for roosting

2.4 A direct search for evidence of bats was therefore conducted on the 13th March 2024 by Elizabeth Davies (licensed bat worker). The survey involved making a detailed internal and external inspection of the building(s) on site, compiling information on potential bat access points, roosting features and any evidence of bats found (for example actual bats present, or signs of bats present including droppings and urine staining). The roof void was searched thoroughly, and any samples of droppings collected and sent for DNA analysis, where found.

2.5 The survey methodology was undertaken with the Bat Conservation Trust's Good Practice Guidelines (Collins, 2023) in mind. The survey was aided as required by binoculars, a high-powered torch, ladder and an endoscope to view features on the building or search accessible cracks and crevices for the presence of bats where required.

Emergence Surveys

2.6 The county ecologist assessed the building as holding low potential to support roosting bats, and as such a single dusk emergence survey was undertaken on the 7th May 2024.

2.7 The evening emergence survey commenced 20 minutes before sunset, and continued for up to 2 hours after sunset. Two surveyors were situated at key points around the building. Echometer Touch 2 Pro and Baton XD detectors with recording equipment were used to record any bats that were seen leaving or re-entering the building. Visual observations were also used to record flight patterns and feeding behaviour to aid identification to species level. General bat activity within the vicinity of the buildings was also recorded. Notes were recorded on times, species and behaviour.

2.8 Two infrared lights (IR Flood, max distance 50 meters), and a Hisseu Wireless Security Camera System with 3 x 5 megapixel outdoor Wi-Fi IP camera with night vision was also used, to record late emerging species and to ensure exact locations of any bat emergences were recorded. Photographs of the view seen by the camera at the darkest point of the survey is given in Appendix 4.

2.9 All recorded bat calls were subsequently analysed using the software Analook and Kaleidoscope.

Nesting Birds

2.10 Any birds seen whilst carrying out the survey were recorded and the type and quality of habitats available for birds was considered, including vegetation suitable for nesting and habitat with the potential to support valued species including breeding and wintering birds.

Constraints

2.11 Access into the void was not possible due to the derelict nature of the structure. There was no flooring around where a ladder would have been required to access the void. The client did however manage to access the void as he is not constrained by the same health and safety requirements as Liz Ecology. The photographs provided by the client from within the void space enabled an assessment of roosting potential within the loft space.

2.12 During the dusk survey it was not possible to obtain full visibility of the rear of the property with the IR camera, however, a surveyor was also positioned to the rear of the building and had a full view of the property. The survey was also supported by cameras, which would have recorded if a bat had flown over the roof or emerged from the building.

3. RESULTS

Desk study

3.1 The site does not form part of an international or national site designated for nature conservation.

3.2 The site is located within a SSSI Impact Risk Zone, however, the development type does not trigger the requirement to consult with Natural England.

3.3 There are no statutory sites within the zone of influence of the application site which notes bats in its citation.

3.4 There is one granted European Protected Species (EPS) licence within the search area, approximately 250m south-east of the site, for soprano pipistrelle bats dated 2017.

3.5 Table 2 below lists bat species within the 1km data search area (post 2009).

Table 2: Bat species within 1km

Common Name	Location
Noctule	11 records including roosts from 2012 to 2018
Common pipistrelle	9 records from 2014 to 2021
Soprano pipistrelle	3 records from 2015 to 2021
Daubenton's	2 records from 2015 and 2017.
Brown long-eared	1 record from 2017

Preliminary Roost Appraisal

3.6 A description of the building to be affected by the proposed works is provided below, whilst a series of photographs of the property have been provided in Appendix 3.

External

3.7 The following was noted:

- The building is a semi-detached garage building, constructed from stone. The walls were re-pointed in September 2023, leaving no crevices externally for roosting bats.
- The roof is pitched, with slate roof tiles, and a clay ridge. The roof was fixed and re-pointed in September 2023, prior to the client's ownership. As such there are no access points on the roof which offer potential for roosting bats.
- The chimney was capped as part of the roofing works conducted in September 2023. There is no access for bats on the chimney, and the lead flashing is reasonable well sealed with no access for bats.

- The window and door frames are constructed from wood and metal and are in poor condition with some gaps.
- No signs of nesting birds were recorded.

Internal

3.8 The inside of the property is split across three levels, the basement, the first floor and the attic. Full access was available to the basement and first floor, both of which were heavily cobwebbed. There were distinct rooms within the basement, all of which had boarded wooden ceilings, with heavy cobwebbing on the beams. The cobwebs on the beams had an accumulation of dust which suggested the cobwebs have been there for a number of years. A thorough search of all areas, especially under any gaps in windows was completed and no bat droppings were noted. There were very few crevice features noted which offered suitability for bats. There was access into the chimney from the room, however, externally the chimney was capped. The chimney was surveyed internally through use of a torch and endoscope and no evidence of use by bats was noted. The client also stated that until this January the building was cluttered with an accumulation of items, which would have prevented the building from offering flying space to bats. There are a small number of areas of access into the building through openings around windows, however, where possible these had been boarded over to prevent access.

3.9 The client accessed the attic on the 23rd March 2024. Photographs of the attic space were provided, which showed the following:

- The attic was sealed from the rest of the property by a door.
- There were lath and plaster ceilings, which were mostly intact. There was one area of ceiling where the lath was intact but the plaster had fallen off. The lath does not offer any access for bats from the outside of the building due to the small size of the gaps between each lath.
- The gable of the property was plastered, which was in moderate condition with a few small gaps showing brickwork.
- The attic is partitioned from the rest of the building with a lath and plaster wall. The lath is visible in some areas on this wall where plaster has fallen away.
- The floor is boarded, with no visible insulation present. The boarding on the floor is in moderate condition, with some areas of boarding no longer present.
- There is heavy cobwebbing within the attic, which is very dusty and shows the cobwebs have been in place for a long time.

3.10 The garage is considered to hold negligible potential to support roosting bats due to a lack of suitable access points, or roosting opportunities.

Phase 2 Bat Survey

3.11 The full results and weather conditions of the emergence survey are given in Appendix 4.

3.12 A dusk survey was undertaken on 7th May 2024. There were no bats seen to emerge from the property.

3.13 Bat activity was low, the majority of the general activity was common pipistrelle, soprano pipistrelle and occasional passes by noctule bats.

Nesting Bird Survey

3.14 No birds' nests were recorded internally or externally on the property. It is therefore considered that birds are not currently nesting within the property.

4. CONCLUSIONS

4.1 The property has been identified as holding negligible potential to support roosting bats due to a lack of suitable features and roosting opportunities. Therefore, no further action has been recommended.

4.2 Following as assessment by the County ecologist that the building held low roosting potential an emergence survey was conducted, which showed no use of the building as a roost. No further survey or licensing will be required.

4.3 In the event that bat(s) are encountered at any stage during the works, all works will cease, and a suitably qualified bat ecologist or Natural England should be contacted for advice. All building contractors are explicitly forbidden from handling bats or interfering with bats in any way.

4.4 The property did not support nesting birds at the time of survey. If nesting birds are encountered during the proposed works, all works will cease, and a suitably qualified ecologist will be contacted for advice. All building contractors are explicitly forbidden from disturbing nesting birds in any way.

Lighting

4.5 Given the presence of foraging and commuting bats, the lighting scheme must be in line with Guidance Note 08/18 Bats and Artificial Lighting in the UK, the following will be required:

- LED lighting will be used and light levels should be kept as low as possible. Metal halide, fluorescent sources should not be used.
- Lighting will be directed to where it is needed and away from the boundary features.
- Only luminaires with an upward light ratio of 0% and with good optical control should be used, luminaires should always be mounted on the horizontal, i.e. no upward tilt.
- Any external security lighting should be set on motion-sensors and short (1 min) timers.
- Internal lighting within the new rooms should be recessed where installed in proximity to windows to reduce glare and light spill.
- Light sources should emit minimal ultra-violet light, peak higher than 550nm and be of a warm white spectrum (ideally <2700 Kelvin).

5. ENHANCEMENTS

5.1 In line with the National Planning Policy Framework (NPPF) to provide net gains for biodiversity, the installation of a bat brick or tube and integrated sparrow nest brick/boxes on the new walls of the building.

5.2 This would provide additional habitat for bats and birds in the area. The bat brick/box should be fitted on south or west facing walls, as close to the eaves as possible. Bat bricks/boxes should not be fitted above or immediately adjacent to windows. These bat boxes are self-contained with only a small entrance slot visible on the external wall. The integrated bird brick/boxes should be installed on the north or east elevation at the eaves. Boxes for house sparrows are best fitted in groups of

at least three as these are colonial species. Both of these can be rendered, or brick faced. Suggestions for placement are given below.

.

Integrated rendered sparrow boxes.

An integrated rendered bat box to be fitted at the eaves- examples below

6. REFERENCES

Bat Conservation Trust and Institution of Lighting Professionals (2018) *Guidance Note 08/18 Bats and Artificial* Lighting *in the UK. Bats and the built environment series.*

Collins, J (ed) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). The Bat Conservation Trust, London.

Ministry of Housing, Communities and Local Government (2021) *National Planning Policy Framework.*

Mitchell-Jones A.J. & McLeish A.P. (2004). The Bat Workers' Manual (3rd Edition) Joint Nature Conservation Committee.

Mitchell-Jones, A. J. (2004). Bat Mitigation Guidelines, English Nature.

Multi-Agency Geographical Information for the Countryside (MAGIC) Website

Appendix 1: Site Location

Legend

Site boundary

Project:
65 Station Road, Worsborough, Barnsley

Figure 1: Site Location
Date: 14/03/2024 Version: Final

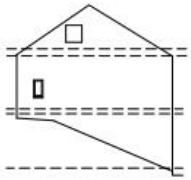
Author: ED

LIZ ECOLOGY

Copyright Google Earth. All Dimensions are approximate.

Appendix 2: Proposals

EXISTING
FRONT ELEVATION
SCALE 1:100



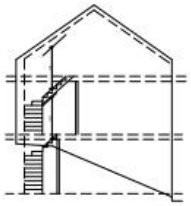
EXISTING
SIDE ELEVATION
SCALE 1:100

EXISTING
REAR ELEVATION
SCALE 1:100

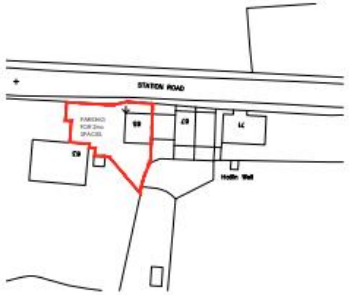
PROPOSED
FRONT ELEVATION
SCALE 1:100

PROPOSED
SIDE ELEVATION
SCALE 1:100

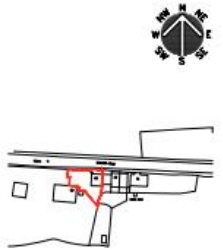
PROPOSED
REAR ELEVATION
SCALE 1:100



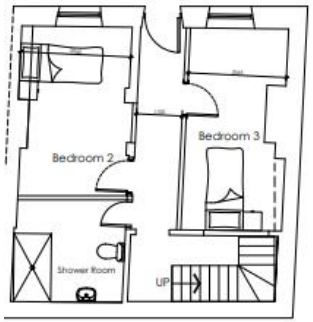
PROPOSED
STAIR SECTION
SCALE 1:100



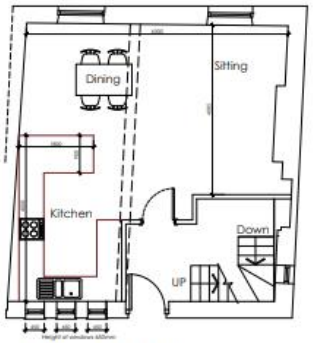
BLOCK PLAN
SCALE 1:500



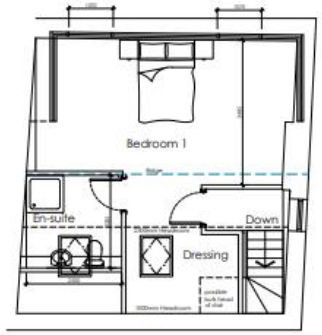
LOCATION PLAN
SCALE 1:1250



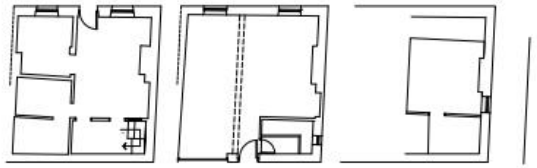
PROPOSED LOWER
GROUND FLOOR PLAN
SCALE 1:50



PROPOSED GROUND
FLOOR PLAN
SCALE 1:50



PROPOSED FIRST
FLOOR PLAN
SCALE 1:50



EXISTING PLANS
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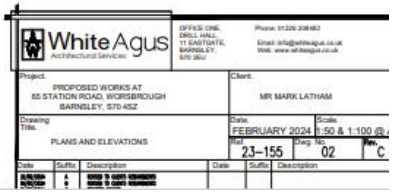

Appendix 3: Photographs

Photograph 1: Front of property

Photograph 2: Rear of property

Photograph 3: Side of property

Photograph 4: Inside first floor, showing area where floor is missing under attic entrance

Photograph 5: Inside basement

Photograph 6: Inside first floor

Photograph 7: Inside attic

Photograph 8: Inside attic

Photograph 9: Inside attic

Photograph 10: Inside attic

Appendix IV: Emergence Survey Results

Date: 07/05/2024	**Weather conditions:** Clear, dry	**Sunset/rise:** 20:48	**Location:** 65 Station Road, Barnsley			
Temperature Start: 14 End: 13	**Wind Force:** 2/12	**Equipment:** EMT Pro 2, Baton XD and recording equipment	**Cloud:** 0%	**Start Time:** 20:24	**End Time**: 22:30	**Surveyor and Position:** ED – North west AB – South
Time	**Sp.**	**Number**	**Comments**			
20:51	Noctule	1	Heard not seen			
21:03	Noctule	1	Flew along road to north of property			
21:15	Common pipistrelle	2	Flew from north over garden, foraging.			
21:17	Soprano pipistrelle	1	Heard not seen			
21:32	Common pipistrelle	1	Heard not seen			
21:49	Common pipistrelle	1	Heard not seen			
21:59	Common pipistrelle	1	Heard not seen			
22:06	Common pipistrelle	1	Heard not seen			
22:14	Soprano pipistrelle	1	Heard not seen			
22:26	Common pipistrelle	1	Heard not seen			
22:27	Soprano pipistrelle	1	Heard not seen			

Legend
Camera location
Surveyor location
Site boundary
Project:
65 Station Road, Worsborough, Barnsley
Figure 2: Emergence survey surveyor locations
Date: 09/05/2024 Version: Final
Author: ED
LIZ ECOLOGY
Copyright Google Earth. All Dimensions are approximate.

Camera 1:

Camera 2:

Camera 3: