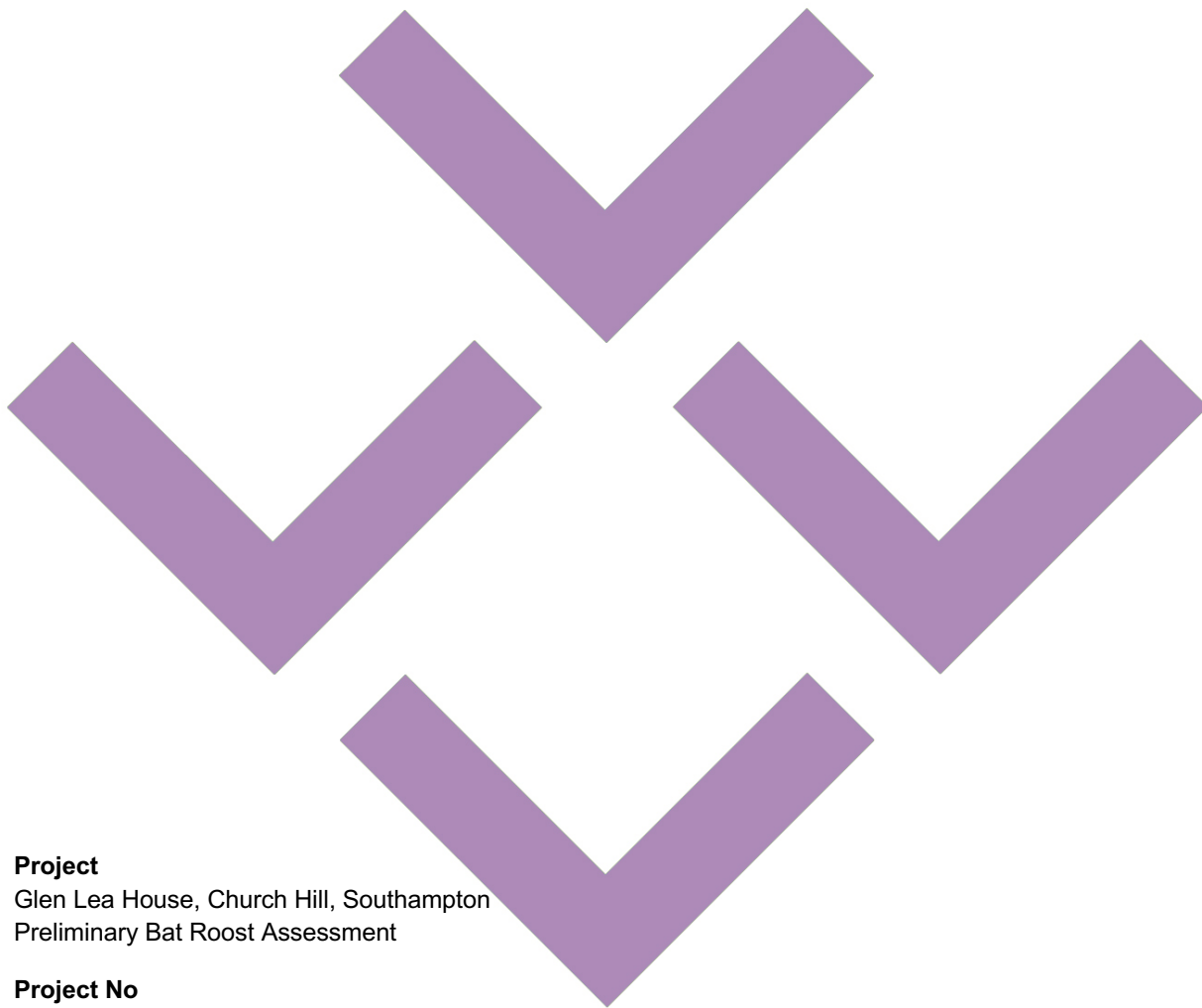




Project

Glen Lea House, Church Hill, Southampton
Preliminary Bat Roost Assessment

Project No

EC1967-01

Client

Samantha Green

Date

November 2022 Updated February 2023

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Report consultants**Bat survey:**

Natalie Boote ACIEEM and Harley Stone GIEMA
Second Survey: Natalie Boote and Pete Satchell

Changes Made	Date	Sign off by Project Manager
Changes to Summary Page 4, 5, 10, 11, 12, 13 and 17 to include second site visit at clients request	20 th February 2023	Natalie Boote

Final Version completed by:

Harley Stone GCIEEM and Georgina Rennie

Technical check completed by:

Paula Richings MCIEEM

Project Manager Disclosure:

The advice which we have prepared and provided is true to the best of our knowledge and utilises information available at the time. The advice has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct.

Quality check completed by:

Nadia Smith

Date

November 2022

Updated February 2023

This Assessment is only valid for the named client and the project described. enims Ltd accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purpose for which it was commissioned. The assessment is only valid for a period of 12 months. If the scope of works or timing of the project is altered the advice given in this report may not be valid.



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Summary

Enims have been commissioned to carry out a Preliminary Bat Roost Assessment of a residential building located at Glen Lea House, Church Hill, West End, Southampton, SO30 3AT (UK Grid Ref: SU 46409 14304). The preliminary assessment is to determine whether the building has the potential to support protected bat species.

Designs have not yet been finalised at time of writing. However, works to redevelop the site for residential use are under consideration.

During the assessment, a search was made for direct evidence of bat activity, such as corpses, droppings, urine stains and scratch marks. Potential access points, particularly those free of cobwebs and other obstructions, were also recorded, irrespective of whether there was direct evidence of use in the vicinity. Equipment used included high-powered torches, binoculars and endoscopes.

There was no direct evidence of bats but numerous access points in the main building were found. Roosting opportunities were found in between brick work, around the wooden soffit box, and gaps in the wooden porch.

It is concluded that the main building has moderate potential to support an active bat roost due to the presence of a loft space and numerous access points into the cavity wall and soffit box. There is a risk of adverse impacts to roosting bats in the absence of appropriate mitigation for the current proposals. Further surveys are recommended in order to confirm the presence or likely absence of bats on site.

The application site lies with nutrient catchments for the River Itchen and Solent designated sites and 'Nutrient Neutrality' may apply to the development proposals. This should be confirmed with the Local Planning Authority.

February 2023 update summary

The site was re-visited on 20th February 2023, at the request of the client. This was due to the client having completed works on the external area of the building (Photograph 7-8, Appendix B), which the client has informed enims took place the day after the site visit in November 2022. The client has informed us that the reason for the works taking place was to make the building water tight, where the garage had previously been removed before our site attendance in November 2022.

The client, informed enims during this second site visit on 20th February 2023 that the client had gained access at height to the soffit area to the north-west of the house. This could not be accessed by enims in November due to the height and location of the feature, however the client has stated that they inspected the area of the soffit on this elevation of the building and that there was no access into the soffit box.

Following the second site visit in February 2023, at the client's request, the site visit update indicates that there are now no potential features for roosting bats to gain access to as of the date of this second site attendance. See photograph 9, Appendix B.

Further Survey Effort/Ecology Requirements

Due to there being features which can be used for bat roosts, two surveys will need to be conducted between May and September, spaced apart from one another, with at least one conducted May through August, as per best practice survey guidance. Should roosting behaviour by bats be detected, a third survey visit will be required in line with best practice bat survey guidance. Further bat survey effort is required to fully assess the impact of proposed works and to support a planning application.

February 2023 update summary

Following the update site visit in February 2023 there are no potential roosting features for bats and no further survey is required.

1 Introduction

1.1 Context and Site Description

Enims were commissioned in October 2020 to carry out a Preliminary Bat Roost Assessment for Glen Lea House, Church Hill, Southampton, SO30 3AT. All native bat species are material planning considerations, which must be accounted for before a planning decision is made. It is therefore important to establish whether a building has any evidence of bats or potential roosting features which bats may utilise. For this reason, external and internal inspections of the property were conducted.

The site consisted mainly of bare ground and hardstanding. There was a concrete driveway which lead down the east of the building to a garden comprising bare ground and rubble from construction works. The garden was bordered by laurel (*Laurus nobilis*) hedges to the east with holly (*Ilex aquifolium*), hazel (*Corylus avellana*) and laurel in the north. Bamboo (*Bambusa* sp.) was found in the easternmost corner and two mature trees within the centre of the garden. The south of the site comprised the main dwelling and a small shed, located adjacent to the driveway. A small, ornamental pond was located next to the shed, surrounded by bare ground and concrete driveway.

1.2 Project Overview

Plans have not been finalised. However, the proposed development to the building will involve extending the roof upwards to create another floor.

1.3 Legislation

All native bat species are fully protected under nature conservation legislation. Protection is afforded under Section 9 of the Wildlife and Countryside Act 1981 (as amended) through the species' inclusion under Schedule 5.

All native bat species are also defined as European Protected Species (EPS) through inclusion in Schedule 2 of The Conservation of Habitats and Species Regulations, 2017 (as amended) / Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (commonly referred to as the Habitats Regulations); the UK implementation of the EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.

In brief, these legislative instruments make it an offence to deliberately or recklessly capture, injure, or kill any bat. Roosts are protected from damage or destruction. Furthermore, it is an offence to deliberately disturb a bat, whether roosting or otherwise.

In addition, the following native bats are identified as Species of Principal Importance in England under Section 41 of the Natural Environment and Rural Communities Act 2006:

- Barbastelle Bat - *Barbastella barbastellus*
- Bechstein's Bat - *Myotis bechsteinii*
- Noctule - *Nyctalus noctula*
- Soprano Pipistrelle - *Pipistrellus pygmaeus*
- Brown Long-eared Bat - *Plecotus auritus*
- Greater Horseshoe Bat - *Rhinolophus ferrumequinum*
- Lesser Horseshoe Bat - *Rhinolophus hipposideros*

1.4 Planning Policy

The National Planning Policy Framework (DfCLG 2021) requires local authorities to avoid and minimise impacts on biodiversity and, where possible, to provide net gains in biodiversity when making planning decisions. Paragraph 174 states that:

“Planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, sites of biodiversity or geographical value and soils”.

Paragraph 180 sets out the principles that local planning authorities should apply when determining planning application and states that:

“development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity”.

Other planning policies at the local level, which are of relevance to this development, include Eastleigh Borough Local Plan 2016-2036, which satisfies the council's obligations under the NERC Act. Policy DM11 Nature Conservation seeks to protect, conserve and enhance biodiversity and designated sites within the borough.

2 Methodology

2.1 Desk Study

Records of granted Natural England bat licences from within 2km of the applications site were searched for using the Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk). Consideration was also given for any potential issues relating to statutory designated nature conservation sites.

2.2 Site Survey

The aim of the assessment was to gather evidence to determine whether the building(s) either had the potential to support bat roosts, or showed direct indications of current/previous use by roosting bats. All surveys were carried out in strict accordance with Good Practice Guidelines published by the Bat Conservation Trust (Collins 2016).

During the survey, a search was made for direct evidence of bat activity, such as corpses, droppings, urine stains and scratch marks. Potential access points, particularly those free of cobwebs and other obstructions, were also recorded, irrespective of whether there was direct evidence of use in the vicinity. Equipment included high-powered torches and endoscopes.

The survey was carried out on 1st November 2022. Weather conditions on that day were sunny with partial cloud, and temperatures around 13 °C.

2.3 Impact Assessment and Approach to Mitigation

The potential for protected species presence was based on the following criteria:

- **Present** – Confirmed presence through first hand survey evidence or recent verified records
- **High Potential** – Local records highlight presence in the local vicinity. The site and immediate surrounds support good quality habitat or good connectivity to such habitat
- **Moderate Potential** – Habitat within the site provides key elements for any species or species group, although may be limited by factors including habitat area, isolation or disturbance. Desk study records highlight presence in proximity to site
- **Low Potential** – On-site habitat is of low or moderate quality for any species or species group, lacking key elements and limited by factors including habitat fragmentation and habitat area. Few or absence of local records, but within national distribution and thus cannot be completely discounted.
- **Negligible Potential** – Habitats within the site are very poor quality or completely absent for any species or species group. Desk study records are absent, the site is outside of the normal range of the species or species group, and the surrounding habitat is unlikely to support wider populations. Presence cannot be completely ruled out but it is considered 'reasonably unlikely' to support any species or species group.

When assigning a level of bat roosting potential (negligible, low, moderate, or high) to a feature, the descriptions in Table 1 were considered.

Table 1. Criteria for the potential of features and habitats to support roosting and foraging/commuting bats (Collins 2016).

Suitability	Description of roosting habitat	Commuting or foraging habitat
Negligible	Negligible habitat features on-site likely to be used by roosting bats	Negligible habitat features on-site likely to be used by commuting or foraging bats.
Low	A structure with one of more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gapped hedgerow or un-vegetated stream, but isolated, i.e., not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, protection, conditions and surrounding habitat.	Continuous, high quality habitat that is a well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

2.4 Personnel

Surveys were led by Consultant Ecologist Natalie Boote ACIEEM, who is a Class 2 bat licence holder and is experienced in bat ecology and field survey techniques. Natalie was assisted in the assessment by Harley Stone GIEMA, Junior Ecologist at enims Ltd.

3 Survey Results

3.1 Desk Study

Within a 2km radius of the site, the following protected species licences for bats were granted between 2016 and 2019:

- Common pipistrelle (*Pipistrellus pipistrellus*) in 2019, 1.3km west of the site.
- Common pipistrelle and serotine (*Eptesicus serotinus*) in 2019, 1.1km northeast of the site.
- Brown long eared (*Plecotus auritus*) and common pipistrelle in 2016, 1.1km east of the site.
- Brown long eared, common pipistrelle and soprano pipistrelle (*Pipistrellus pygmaeus*) in 2016, 1.9km northeast of the site.

No statutory designated nature conservation sites lie within or adjacent to the site boundary. However, the application site is located within the nutrient catchments of the River Itchen and the Solent international habitat sites.

3.2 Site Survey

Photographs of the site are presented in Appendix B.

3.2.1 Building 1

Building 1 (B1) was a residential building. Externally, it was made with brick and generally in good condition. However, where work had begun, there were some holes exposing the inner cavity wall and gaps in the brickwork had been created where the garage had been removed. There was a wooden soffit box which was generally in good condition, except for the northwest corner which was rotten and provided potential access for bats. Some gaps were present where a wooden porch joined the brick work of the building to the rear. The roof of the building was pitched; it did not have tiles but was covered with bitumen felt.

Internally, the loft of B1 was constructed from breezeblocks, which provided a cavity between inner and outer walls. The roof void was low in height and constructed from metal and wooden beams with sarking boards between the rafters. The internal roof space was in good condition and no features were noted which could provide potential access points for bats. However, mice and rat droppings were present, suggesting access could be gained where inaccessible to inspect.

The cavity wall provides potential roosting spaces for bats, with access points at the holes resulting from garage removal, potentially with access to the walls via the gap in the wooden soffit. The roof void had low potential for roosting bats and no evidence of bats was found.

Overall, Building 1 has moderate potential to support roosting bats.

February 2023 update summary

Following the 2023 site visit, no wooden soffit box could be seen to the north-west corner of the house and the fascias and soffits appeared in good condition. The cavity walls to the east of the house and the wooden porch no longer have access for bats to potentially roost in during the summer months.

3.2.2 Building 2

Building 2 (B2) was a shed which had no features suitable for bat roosting. Therefore, B2 was considered to have negligible potential for bat roosting.

4 Assessment and Recommendations

4.1 Discussion

It is concluded that B1 has a moderate potential to support roosting bats as suitable roosting features have been identified. A key roosting feature identified was a wooden soffit box in the northwest corner and gaps in the brickwork and wooden porch area where a garage had been removed. A roof void is present. However, it is quite shallow and no obvious access points for bats were noted. The shed B2 has negligible potential for bat roosting.

February 2023 update summary

It is concluded B1 has negligible bat roosting potential following external works in November and inspection by the client at height.

4.2 Potential Impacts of Proposed Works

If bats are using the buildings to roost, there is significant likelihood bats will be killed or injured and roosts destroyed through construction works or demolition of the buildings. As European and nationally protected species, bats are fully protected from harm.

February 2023 update summary

There are no potential roosting features for bats and therefore no potential impact to bats

The development proposals are not anticipated to lead to physical fragmentation of commuting routes. However, there is potential for roosting, foraging, and commuting bats to be disturbed by increased lighting during and after construction.

The application site falls within the catchment area of the River Itchen and Solent designated sites for which 'Nutrient Neutrality' applies. Currently, these sites are receiving high levels of nitrogen and phosphorous and such nutrients are causing eutrophication and other negative impacts. Development which results in a net increase in population could result in additional nutrient loading. Due to the uncertainty that new development will not cause further impact, and to be precautionary, the recommended approach is for new development to achieve nutrient neutrality, which is a means of ensuring that new development does not add to existing nutrient loading. It should be confirmed with the Local Planning Authority whether 'Nutrient Neutrality' is applicable to the proposed development at the application site.

4.3 Further Survey Requirements

Due to potential roosting features being present on site, there is moderate potential for bats to be using the buildings as a roost. Two emergence/re-entry surveys will be required to determine if bats are present within the buildings and, therefore, likely to be negatively impacted by the development. The surveys must be carried out between May and September, with at least one conducted May through August, as per best practice survey guidance. Should evidence of roost behaviour be detected, a third survey visit will be necessary.

February 2023 update summary

Due to negligible potential for roosting bats no further survey is required.

4.4 Mitigation Requirements

Further surveys are required to clarify the presence or likely absence of bats on site due to the potential for adverse impacts as a result of the proposed works. Mitigation will be outlined in the accompanying report after the surveys are completed.

No further surveys are required as the building has negligible potential for roosting bats.

4.5 Ecological Enhancements

The National Planning Policy Framework (NPPF) and local policy encourages developers to incorporate ecological enhancements into projects to achieve net gains for biodiversity. Generally, enhancements act to improve the quality of the habitat for the flora and fauna on and within the vicinity of the site. These enhancements can also provide aesthetic appeal, thus adding to the value of the project. The National Planning Practice Guidance (NPPG) provides guidance to planning authorities on how development proposals may provide enhancements to biodiversity and contribute to wildlife and habitat connectivity in the wider area.

Possible opportunities to enhance the wildlife potential, appropriate to this site, are provided below. It is important that any measures adopted be clearly demonstrated to the Planning Authority through inclusion in design plans and accompanying documentation.

- Installation of integrated bat boxes into the walls of buildings, rather than onto the exterior. These boxes are long lasting and require no maintenance.
- Minimisation of external lighting on new builds to avoid disturbance of bats and other nocturnal fauna.

4.6 Data Constraints

The results from the preliminary roost assessment are valid for 12 months due to the mobile nature of bats. After which, surveys should be repeated.

There are no factors which detract from the reliability of the data. However, as bats are currently in their hibernation season, further survey should be completed in the bat active season. This constraint, combined with the recent heavy rain, contribute to lack of evidence/external evidence of bats, such as droppings.

5 Conclusion

The main dwelling (B1) has potential bat roosting features and further survey is required to determine if bats are using the building as a roost. This will comprise a dusk emergence /pre-dawn re-entry survey. Two survey visits are to be carried out between May and September, with one of these before the end of August, and the visits spaced apart from one another.

February 2023 update summary

The main dwelling has negligible potential for roosting bats and therefore no further surveys are required.

The application site lies within the nutrient catchments for the River Itchen and Solent designated sites and 'Nutrient Neutrality' may apply to the development proposals. This is to be confirmed with the Local Planning Authority.

6 References

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DfCLG. (2021). *National Planning Policy Framework*. Department for Communities and Local Government, London.

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Appendix A: Site Plans

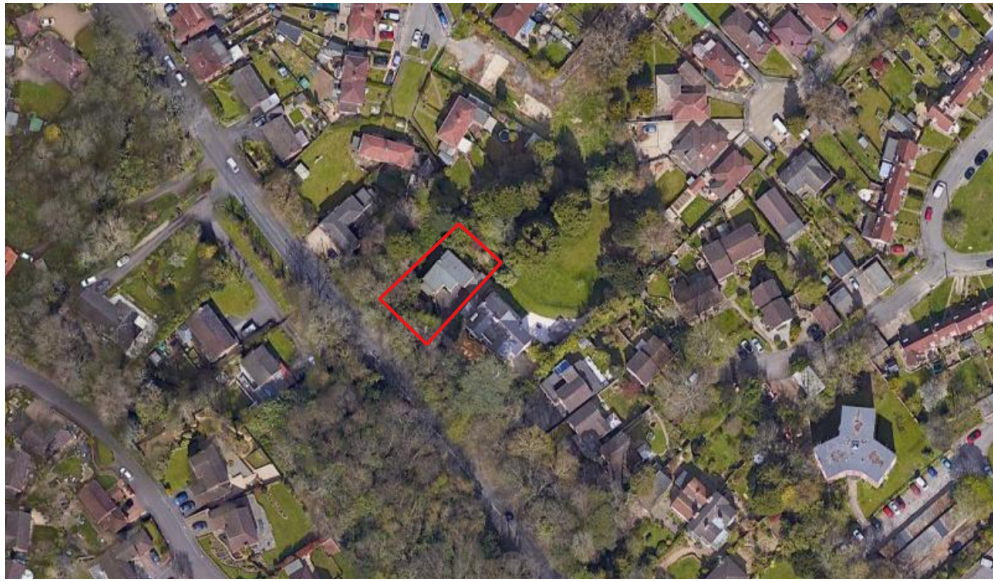


Figure 1. Site location (red) shown in relation to nearby dwellings, trees, and gardens.

Appendix B: Site Photographs



Photograph 1.
B1, northwest elevation



Photograph 2.
Gaps in the wooden porch on southeast elevation of B1



Photograph 3.
Wooden soffit box with gap northwest corner of B1



Photograph 4.
Gaps in the brick work on southeast elevation of B1



Photograph 5.
The roof space of B1



Photograph 6.
The roof space of B1



Photograph 7. Cavity wall east of B1 20/02/23



Photograph 8. Wooden Porch east of B1 20/02/23



Photograph 9. Fascia and soffit north west of B1
20/02/23