

7 REDINGTON GARDENS, LONDON
BAT SURVEY REPORT

Prepared for Wolff Architects

by

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1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes a suite of bat roost surveys of approximately 0.1ha of land at Redington Gardens, London, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference TQ 25732 85929. The study was commissioned by Wolff Architects in two phases in April and May 2023.

1.1.2 The site is located in a residential area in the Borough of Camden, London. The site comprises a single detached house and garage set in a garden comprising mature trees and shrubs. The site is bordered to the south-west and south-east by Redington Road and Redington Gardens with residential properties beyond; and to the north-west and north-east by further residential properties. The location and boundary of the site are shown in *Appendix A*. A full description of the habitats within the site is provided in the Ecological Appraisal report (HDA, 2023).

1.2 Legislative context

1.2.1 All UK bat species are protected as 'European Protected Species' (EPS) under the 2017 Conservation of Habitats and Species Regulations (as amended). In relation to EPS, the 2017 Regulations make it an offence to:

- Deliberately capture, injure or kill any wild animal of an EPS;
- Deliberately disturb wild animals of any such species, in particular any disturbance which is likely to: (i) impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or to hibernate or migrate; (ii) affect significantly the local distribution or abundance of the species to which they belong;
- Damage or destroy a breeding site or resting place of such an animal; and/or
- To (a) be in possession of, or to control; (b) to transport any live or dead animal or any part of an animal; (c) to sell or exchange or (d) offer for sale or exchange any live or dead animal or part of an animal of an EPS.

1.2.2 In addition, all UK bat species are protected under the 1981 Wildlife and Countryside Act (as amended). All species are listed on Schedule 5 of the Act and are subject to the provisions of Sections 9.4b and 9.4c, which make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection; and/or
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat.

1.2.3 If works are planned that are likely to constitute an offence under the current legislation, then works should be carried out under an appropriate Natural England licence.

- 1.2.4 Seven species of bat (Barbastelle, Bechstein's, Noctule, Soprano Pipistrelle, Brown Long-eared, Greater Horseshoe and Lesser Horseshoe) are also identified as Species of Principal Importance under Section 41 of the 2006 NERC Act. Section 40 of the Act requires planning authorities to regard these species as a material consideration in the planning process.

1.3 Development proposals

- 1.3.1 Proposals for the site include the demolition of the existing two storey detached dwellinghouse, and replacement with a new two storey detached dwelling house, with associated accommodation within the roof space including dormer windows (Wolff Architects Ltd, 2023).

1.4 Scope and purpose of the report

- 1.4.1 In recognition of the proposed redevelopment of the site, the potential for the site to support roosting bats, and within the legislative context set out in *Section 1.2*, a suite of bat surveys was undertaken to determine use of the site by bats and to identify any need for licensing or mitigation. This is the subject of this report. Specifically, the aims of the study were:
- i. To identify potential bat roosts in trees and structures within the site, where potentially affected by the proposed redevelopment;
 - ii. To determine the presence/likely absence of roosting bats within suitable features where affected by the proposed redevelopment and identify species and numbers;
 - iii. To determine the requirement, if any, for licensing in respect of bats; and
 - iv. To provide outline recommendations for any mitigation and/or enhancement required to ensure that the development avoids adverse impacts on bats and, where possible, provides enhancements to support the long-term favourable conservation status of bats in accordance with nature conservation legislation, planning policy and the 2006 NERC Act.

2 METHODOLOGY

2.1 Introduction

- 2.1.1 The methodology followed in relation to all bat survey work undertaken at the site is consistent with current legislation and good practice guidelines set out by the Bat Conservation Trust (BCT, 2016). The following sections detail the suite of surveys undertaken to inform the proposed works and the results of these surveys are provided in *Section 3*.

2.2 Phase 1 bat scoping survey

- 2.2.1 A Phase 1 bat scoping survey of the site was carried out by Nick Chambers of HDA on 17th May 2023. During the survey, all buildings and trees within the site were assessed for

their potential to support roosting bats and classified according to their potential against published guidelines (BCT, 2016).

Phase 1 building survey

- 2.2.2 All buildings within the site were inspected externally from ground level using binoculars and a powerful torch to identify and investigate any potential entry and exit points such as missing roof tiles, loose fascias and lifted lead flashing, and to look for evidence of entry/exit in the form of staining, discolouration and/or scratch marks.
- 2.2.3 Internally, buildings were searched exhaustively where possible, to look for evidence of current or former occupation by bats. A powerful torch was used to investigate any accessible cavities, crevices and recesses in each building.
- 2.2.4 In view of the findings of the building inspections, the potential of the buildings to support roosting bats ('confirmed roost', 'high', 'moderate', 'low' or 'negligible') was assessed in accordance with current best practice guidelines (BCT, 2016). Assessment of bat roosting potential requires consideration of a number of criteria, including the design and construction of the building or structure, the size and location of potential features and access points, the position of the building or structure, aspect, geographical location, surrounding land use and adjacent landscape linkages.

Phase 1 tree survey

- 2.2.5 All trees within the site were inspected from ground-level, with the aid of binoculars and a powerful torch, to identify potential features suitable for use by roosting bats. Potential features include splits, cracks and cavities, peeling bark, woodpecker holes, broken branches and a covering of ivy where this is of a sufficient age to provide a suitable microclimate between the tree and ivy stem(s).
- 2.2.6 In accordance with current best practice guidelines (BCT, 2016), trees were placed into one of the following five categories based on the nature, size, location and quality of features present in each tree and surrounding habitat:
- Negligible suitability - Trees with no or negligible features for roosting bats;
 - Low suitability - Trees 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;
 - Moderate suitability - Trees with one or more potential roost sites that could be used by bats but are unlikely to support roost types of high conservation status;
 - High suitability - Trees 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; or

- Known or confirmed bat roost.

2.2.7 The results of the Phase 1 bat scoping survey determined the need for further surveys in relation to bats.

2.3 Phase 2 bat roost survey

2.3.1 Phase 2 roost surveys comprising dusk emergence surveys, were conducted where buildings had been identified as having potential to support roosting bats. Phase 2 bat roost surveys were conducted to determine the presence/probable absence of roosting bats and, where present, identify species and numbers. The level of survey effort conducted was determined with reference to the identified bat roosting potential of the building in accordance with best practice guidelines (BCT, 2016).

2.3.2 No trees were identified with features of bat roost potential during the Phase 1 bat scoping survey and subsequently no Phase 2 bat roost surveys were undertaken.

2.3.3 Surveyors with electronic bat detectors¹ were positioned around each feature to record bats emerging from or entering the building. For the more complex/dark locations, surveyors were supplemented by infrared camcorders² coupled with infrared lights to illuminate the possible roost features. Potential emergences/re-entries recordings were analysed in real time by an ecologist the following day. Surveyors and camcorders were positioned to provide adequate coverage of all potential emergence points on each feature surveyed. Dusk emergence surveys began 15 minutes before sunset, ending approximately 1.5 hours after sunset. Records were made of any emergences and re-entries, and incidental records were also made of bat commuting and foraging activity in the vicinity of the surveyors.

2.3.4 Details of the date and timing of the Phase 2 bat roost surveys are provided in *Table 1* below.

Table 1: Timing and conditions of Phase 2 bat roost surveys

Feature surveyed	Date / Time	Sunset	Conditions
B1	08.06.2023 21:00 – 22:45	21:15	0% cloud cover, Beaufort Scale = 2, dry, 20-15°C
	29.06.2023 21:07 – 22:52	21:22	80% cloud cover, Beaufort Scale = 0, dry, 20-19°C

¹ Batlogger and Anabat Express with 'Analook' recording software.

² Canon XA40 4K camcorders with infrared capability.

2.4 Limitations

- 2.4.1 All surveys followed best practice guidelines (BCT, 2016) and were conducted at an appropriate time of year, under favourable weather conditions and with an appropriate level of survey effort both in terms of the number of surveyors used and number of survey visits undertaken. The surveys are therefore considered sufficient to allow a robust assessment of the likely effects of the proposed works on bats.

3 RESULTS

3.1 Phase 1 bat scoping survey

- 3.1.1 All buildings and trees within the site were inspected during the Phase 1 bat scoping survey. The results of the Phase 1 scoping survey are summarised in *Table 2* below and the location of the building is shown in *Appendix A*. Photograph references (in brackets) relate to the supporting photographs provided in *Appendix B*.

Table 2: Phase 1 bat survey results

Building Ref	Description	Findings	Bat Roosting Potential
B1 (Photos 1-3)	A detached house with brick and render elevations and a pitched tiled roof.	External Potential bat roosting features are limited to gaps where the soffit box meets the wall on the northern and western elevations. Internal A boarded and insulated loft space with daylight visible through small gaps under the roof on the northern elevation. No evidence of bats recorded.	Moderate

3.2 Phase 2 bat roost survey

- 3.2.1 In view of the findings of the Phase 1 bat scoping survey and the proposals for the site, in accordance with current best practice guidelines (BCT, 2016), B1 was subject to Phase 2 emergence surveys using an appropriate number of surveyors to ensure comprehensive coverage. Details of the results of the Phase 2 bat roost survey are provided in *Table 3* below.

Table 3: Results of Phase 2 bat roost surveys

Building	Date / Type	Results	Updated roost status
B1	Dusk 08.06.2023	No emergences/ re-entries	Moderate
	Dusk 29.06.2023	No emergences/ re-entries	

- 3.2.2 Incidental records of bat foraging and commuting activity around the surveyed building was made during the Phase 2 bat roost surveys. Activity was restricted to occasional passes by Common Pipistrelle bats.

4 SUMMARY AND IMPACT ASSESSMENT

- 4.1 No bats were recorded emerging from the surveyed building (B1) during the Phase 2 bat roost surveys. In view of the survey findings, it is considered highly unlikely that the proposed works would have any adverse effect on roosting bats or the favourable conservation status of the local bat population.
- 4.2 Notwithstanding the above, due to the opportunities for roosting bats remaining within B1 and the highly mobile nature of bats, often using roosts on a seasonal or transitory basis, it is conceivable that this building could be colonised by bats in the future and a precautionary approach to works is therefore recommended in *Section 5* below.
- 4.3 Overall the level of bat foraging and commuting activity recorded in the vicinity of the surveyed building during the Phase 2 bat roost survey was considered to be low, being restricted to occasional passes by Common Pipistrelle bats. Notwithstanding this, in addition to implementing precautionary measures to avoid any effects of the development on roosting bats during construction, development proposals should also seek to maintain and enhance opportunities for roosting, foraging and commuting bats within the site following development in accordance with planning policy and the 2006 NERC Act. Measures by which this can be achieved are further identified in *Section 5* below.

5 RECOMMENDATIONS

- 5.1 This section identifies measures to be implemented during the proposed works in order to avoid and mitigate potential effects of the works on bats and to maintain the favourable conservation status of the local bat population. In addition, measures for long-term maintenance and enhancement of opportunities at the site for roosting, foraging and commuting bats are included in accordance with the National Planning Policy Framework (NPPF, 2021) and the 2006 NERC Act.

5.2 Roosting bats

- 5.2.1 Current knowledge suggests that there are no bat roosts associated with any of the buildings or trees on site and therefore a Natural England licence will not be required for the removal of these features. Due to the opportunities for roosting bats that remain within B1, and the highly mobile nature of bats, it is recommended however that a cautious approach is taken to the demolition/stripping of B1, either through further survey immediately in advance of works to confirm continued absence of roosting bats or through a sensitive approach to works as set out below.

Further survey

- 5.2.2 Bats may occupy roost sites on a seasonal or temporary basis and old roost sites may be abandoned and new roosts occupied within relatively short periods of time. In view of this it is recommended that a single emergence survey of B1 is carried out immediately in advance of works commencing. This would ensure that up-to-date information is available to confirm the continued absence of roosting bats and avoid the need for supervised works assuming no bats are encountered (see below).

Approach to works

- 5.2.3 Unless a survey is carried out to confirm the continued absence of roosting bats as detailed above, all demolition/stripping works involving the removal of features with the potential to conceal roosting bats should be overseen by a licensed bat worker under an Ecological Watching Brief. Potential features on B1 include gaps under the soffit boxes on both the northern and western elevations. Suitable features should be inspected prior to works progressing and a cautious approach to removal should be employed, with features removed by hand, where appropriate.
- 5.2.4 In the event that a bat is discovered during further survey or demolition/stripping works at the site, works to the building must cease and an appropriate Natural England derogation licence should be applied for, and approved, before works can continue.
- 5.2.5 It is recommended that a minimum of one bat roosting feature (such as a Greenwoods Ecohabitats Two Crevice Bat Box, or similar) is mounted on a south to west-facing location on the building or mature tree within the site in order to offset any loss of potential roosting habitat and offer new long-term provision for roosting bats at the site in accordance with the 2021 NPPF and the 2006 NERC Act. Ideally, the bat box should be provided prior to the commencement of demolition/stripping works to the building with bat roosting potential in order to maintain current roosting opportunities at the site throughout the construction phase.

5.3 Protection and enhancement of roosting, foraging and commuting opportunities

- 5.3.1 Notwithstanding the current low interest of the site for foraging and commuting bats, wherever possible, development proposals should seek to maintain and enhance the value of the site for foraging and commuting bats in accordance with the 2021 NPPF and the 2006 NERC Act. This could be achieved through the retention of the mature trees in the garden, through the provision of new planting and the avoidance of significant light spill from adjacent development. In order to maximise the value of landscape planting for the local bat population, consideration should be given to the use of nectar and pollen-rich plant species in order to encourage invertebrate prey for foraging bats.

- 5.3.2 Additional bat boxes to that described in *Section 5.2* could also be provided on the building and/or retained trees in order to further enhance opportunities for roosting bats at the site. Bat boxes should be positioned on south to west-facing elevations of buildings or trees and avoid areas affected by (existing or proposed) artificial light spill.
- 5.3.3 The site is currently subject to moderate light spill from surrounding residential development. The integrity of retained and new foraging and commuting habitat, both within the site and its surrounds, should be conserved through the sensitive use of lighting throughout the construction and operational phases of the proposed development. Consideration should be given to the use of directional, hooded and low-level lighting where appropriate, together with use of narrow spectrum and/or low UV bulbs, whilst maintaining a minimum level required for safety.

6 CONCLUSION


- 6.1 The findings of the suite of bat surveys indicate that there are no active bat roosts present within the site at the time of survey. It should be noted however that roosting bats can move roosts frequently and it is therefore recommended that the precautionary measures identified in *Section 5* above are implemented during construction to avoid any unexpected impacts on bats and/or contravention of legislation relating to this group.
- 6.2 Notwithstanding the absence of roosting bats within the building and trees, development proposals for the site should seek to maintain and where possible enhance opportunities for roosting, foraging and commuting bats in accordance with planning policy and guidance and Section 40 of the NERC Act. Measures by which this can be achieved are given in *Section 5* of this report.

7 REFERENCES

- Altringham, J. (2003) *The New Naturalist: British Bats*. Harper Collins Publishers, London.
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APPENDIX A

Bat roost survey summary plan

APPENDIX B

Site photographs



Photo 1: Northern elevation of B1.



Photo 2: Western elevation of B1.



Photo 3: Loft space of B1