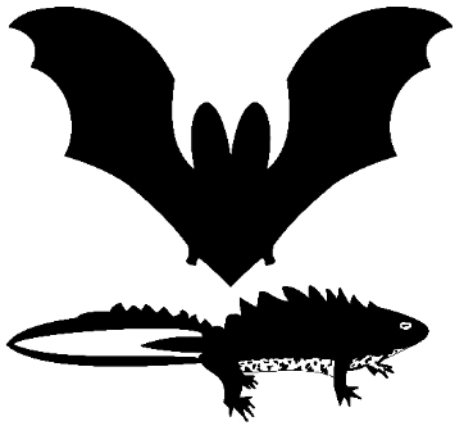




AEWC^{Ltd}

Animal Ecology & Wildlife Consultants

Bat Survey Report

18 Primrose Lane

**18 Primrose Lane
Winnersh
Wokingham
Berkshire
RG41 5UR**

Thomas Wright

24-009
November 2024

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Summary

- AEWCLtd were commissioned by Rosalind Amara to undertake detailed bat survey at 18 Primrose Lane, Winnersh, Wokingham, RG41 5UR at central grid reference SU 78371 71457 to help inform the proposed development of the site.
- The site consists of a single, complex multi-pitched detached residential dwelling supporting handmade clay tiles, as well as a small shed which was not subject to survey.
- The proposal is to repair and replace parts of the existing roof of the residential dwelling, including the replacement of lifted or damaged roof and hanging tiles. Additionally, the building will be extended at the northern elevation.
- A previous Preliminary Roost Assessment (PRA) was conducted on 5th March 2024 by John Wenman ecological consultancy which identified that the building had moderate potential to support roosting bats and further surveys to determine the presence or likely absence of bats were recommended.
- An update bat assessment was carried out on the 20th May 2024 by Brigitte de Coriolis of AEWCLtd, a Natural England licenced ecologist, which confirmed that the building had moderate potential for bats.
- This report details the results of the detailed bat survey, which was carried out between the 20th May and 28th June 2024 by Brigitte de Coriolis, a Natural England licensed bat ecologist.
- The daytime assessment identified moderate potential for the house to support roosting bats due to the presence of gaps beneath the roof tiles and hanging tiles providing potential access points and roost features. The dense cobwebbing and build-up of dust as well as high degrees of light ingress within the voids indicate a likely absence of void dwelling bats. The building was therefore considered more suitable for crevice-dwelling bat species.
- **The house was considered to have moderate potential to support roosting bats, however bats were not found during the emergence survey and, as such, there are no known constraints regarding these species and the proposed development.**
- Bats are highly mobile species and therefore may turn up on sites at any time. Should bats, or evidence of bats, be identified during the works, the procedure in Section 6 of this report must be followed.

This report has been prepared by AEWCLtd, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the Professional Guidance and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1 Introduction

- 1.1 AEWCLtd were commissioned by Rosalind Amara to undertake a detailed bat survey at 18 Primrose Lane, Winnersh, Wokingham, RG41 5UR to help inform the proposed development of the site.
- 1.2 The bat surveys and report writing were carried out in accordance with Bat Surveys: Good Practice Guidelines (Bat Conservation Trust, 2023).
- 1.3 A previous Preliminary Roost Assessment (PRA) was conducted on 5th March 2024 by John Wenman ecological consultancy which identified that the residential dwelling had moderate potential to support roosting bats and further surveys to determine the presence or likely absence of bats were recommended.
- 1.4 An update bat assessment was carried out on the 20th May 2024 by Brigitte de Coriolis, which confirmed the building as having moderate potential for bats.
- 1.5 Further surveys were therefore required for the building to ascertain whether bats are present or increase confidence in a result of likely absence of bat roosts, to determine whether bats represent a constraint to the proposed development and identify any mitigation, compensation and licensing requirements for the development.
- 1.6 This report details the results of the bat survey and outlines recommendations in relation to bats and the proposed development of the site.

Aims and Objectives

- 1.7 The objectives of the survey were to:
 - Identify the potential of the building on the site to support roosting bats;
 - Identify whether bats are present using the building on site;
 - Estimate the size and status of any existing bat roost within the building;
 - Determine the potential impacts on any bat roost from the proposed development schedule; and
 - Provide information for use in the design and development of ecological mitigation and enhancement measures where appropriate.

Site Location

- 1.8 The proposed development site is located at 18 Primrose Lane, Winnersh, Wokingham, RG41 5UR at central grid reference SU 78370 71457. The site is located within the village of Winnersh, approximately 125m south of the A329, and is immediately surrounded by residential developments and associated amenity gardens surrounded by mature tree lines and parkland to the north. The surrounding landscape comprises residential and commercial developments to the northwest of the site. Mature tree lines and hedgerows connect the site to small blocks of woodland and parkland. See Figure 1.

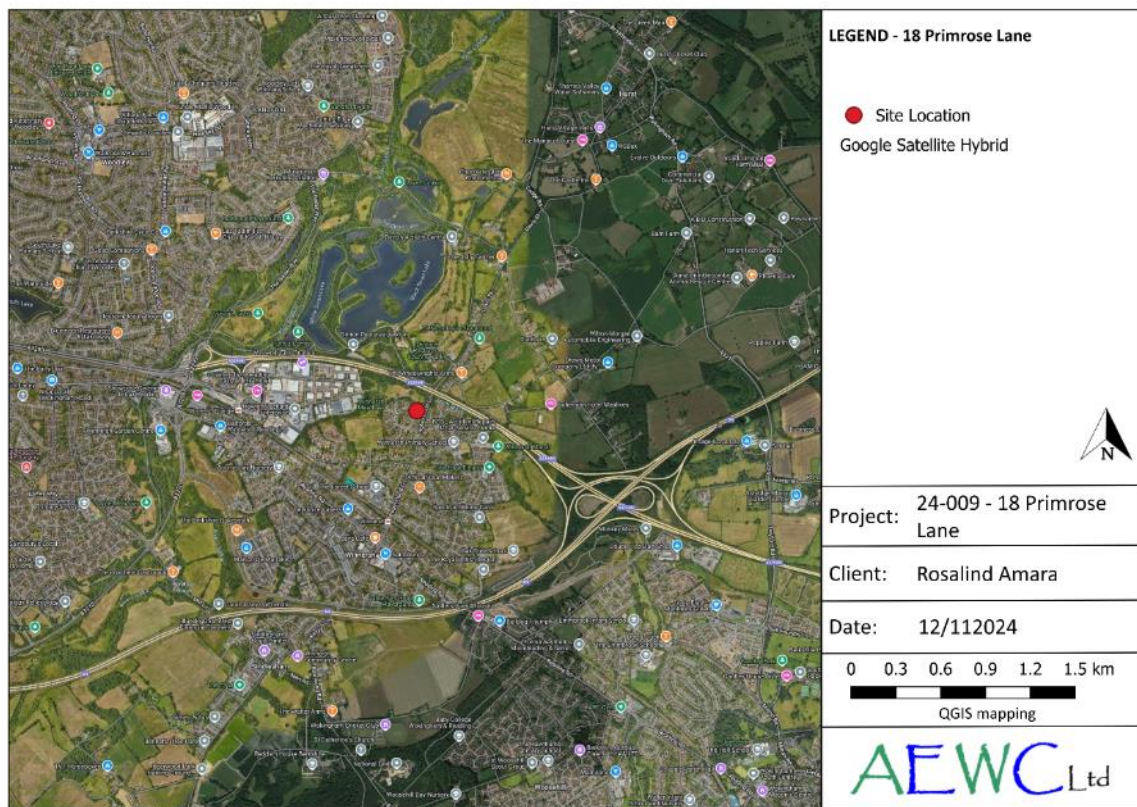


FIGURE 1: SHOWING THE LOCATION OF THE SITE

1.9 The site consists of a single, complex multi-pitched detached residential dwelling supporting handmade clay tiles and a small shed which was not subject to survey.

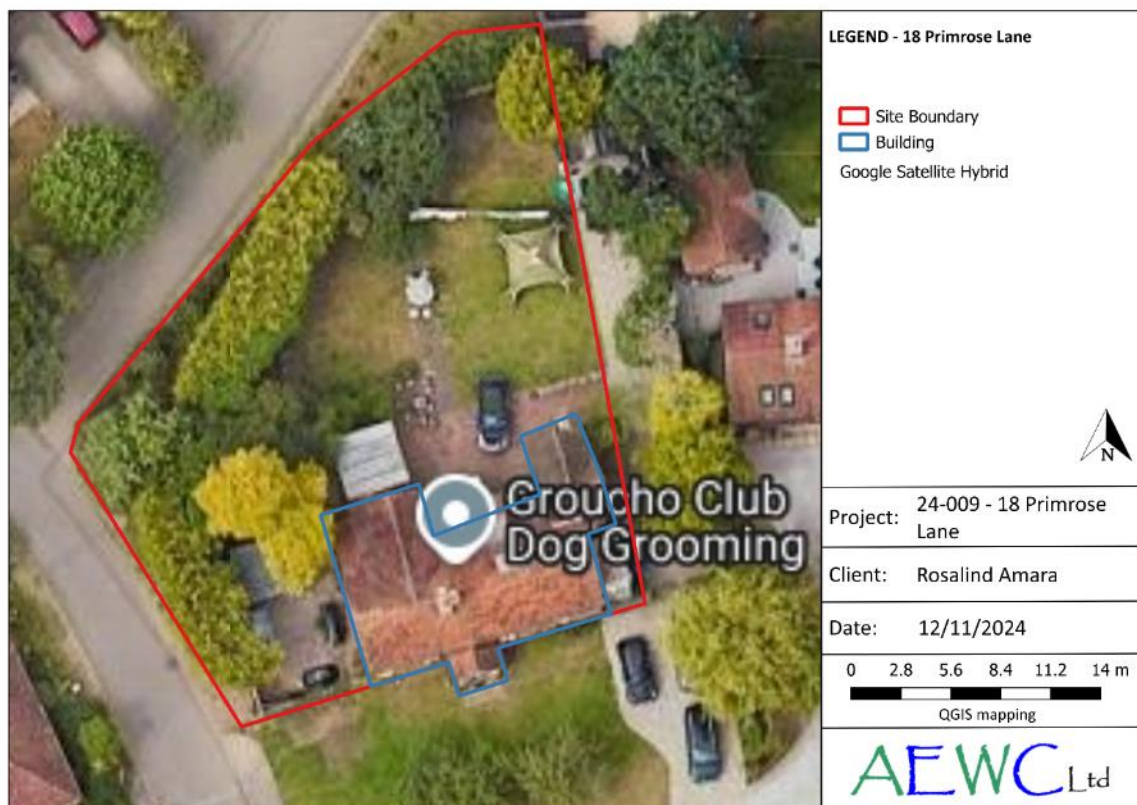


FIGURE 2: SHOWING THE BUILDING SUBJECT TO SURVEY

Legislation

1.10 All species of bats are listed on *Schedule 5 of the Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

1.11 A roost is defined as ‘any structure or place which a bat uses for shelter or protection’. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present.

1.12 Any disturbance of a bat occupying a roost can lead to prosecution. Disturbance can be caused by noise, vibration and artificial lighting. Penalties for breaking the law can include fines of £5,000 per bat, imprisonment and the seizure of equipment.

1.13 Furthermore, seven bat species (barbastelle, Bechstein’s, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe) are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Development proposals

1.14 The proposal is to repair and replace parts of the existing roof, including the replacement of lifted or damaged roof and hanging tiles. Additionally, the building will be extended on the northern elevation of the property.

2 Methods

Pre-existing Information Search

2.1 The Multi Agency Geographic Information for the Countryside (MAGIC) website provided by the Department for Environment, Food and Rural Affairs (Defra) was consulted to obtain information about any international or European level designated nature conservation sites within 2km of the site boundary, afforded protection either directly by the Conservation of Habitat and Species (Amendment)(EU Exit) Regulations 2019 or to the same level of protection through planning policy (the National Planning Policy Framework and Local Development Framework). Information regarding statutory designated sites, such as Sites of Special Scientific Interest (SSSI), within a 2km radius of the site were also obtained from MAGIC.

- 2.2 MAGIC was also used to assess the habitats surrounding the site and obtain records of granted EPS licences within 2km of the site, to infer species likely to be present and better assess in-combination impacts of the proposed works.

Daytime Assessment

- 2.3 A detailed update bat building inspection was undertaken on the 20th May 2024 by Bridgitte de Coriolis, a Natural England licensed bat ecologist.
- 2.4 A systematic internal inspection of the building was conducted using a high-powered torch to illuminate all areas thought to be suitable for roosting bats. Additionally, an external search around the perimeter of the building was conducted and any possible access points i.e. gaps and crevices were noted and surveyed with a high-powered torch and ladder as appropriate.
- 2.5 The building's suitability for bat roosting was assessed by examining structural features that may influence the suitability of a building to support roosting bats; these include the presence of a roof void, the presence of access points into the building (including gaps beneath barge boards, weatherboarding, soffits and fascias, gaps under lead flashing, gaps within masonry and under loose tiles, gaps between tenon and mortise joints), the complexity and size of any roof void and daytime light levels in the roof void.
- 2.6 The building's suitability for roosting bats was also assessed by examining the surrounding habitat. Important habitat features surrounding the structure which may influence roost potential include whether the structure is in a semi-rural or parkland location, its proximity to significant linear habitat features such as a watercourse, mature hedgerow, wooded lanes or an area of woodland.
- 2.7 All surfaces were also surveyed for signs of bat presence. Features of potential value to bats were surveyed not only for the presence of bats but also for signs that could indicate use by bats, such as:
- bat droppings that are dry and do not putrefy, but can crumble away to dust;
 - staining of access points used by bats to enter the structure; and
 - feeding remains such as moth and butterfly wings.
- 2.8 Taking account of these architectural, habitat features and signs of presence, the building was then assigned a level of roost suitability based the criteria given in the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (Collins, 2023) and professional judgement. The primary objective of this exercise was to identify the need for further detailed bat survey later in the year, or alternatively to obtain sufficient information that would dismiss the need for further assessment.

Emergence Surveys

- 2.9 The evening emergence surveys were conducted on 20th May and 28th June 2024, a time of year when bats are active, and maternity colonies should be present. Conditions were good for all bat surveys with warm weather, and any bats present were likely to be active. The emergence surveys began a minimum of 15 minutes

before sunset and finished a minimum of 1 and a half hours after sunset on each survey.

- 2.10 Batlogger M bat detectors were used for taking time-expanded recordings of any bats when they may emerge from the buildings. These recordings were analysed on Elekon bat analysis software that facilitates species identification.
- 2.11 Professional Canon XA night vision video cameras were used as night vision aids (NVA's) alongside surveyors to film areas of the buildings with the assistance of external infra-red lamps to ensure suitable lighting to accurately identify if bats emerge from the building. Cameras were deployed on tripod stands to view areas with bat roosting potential. Footage was reviewed at an appropriate speed on a computer after the survey using VLC player software which does not skip frames at any review speed, to ensure any bat emergences and bat emergence points were recorded. Where necessary footage was slowed down to ensure the exact emerge point could be identified.
- 2.12 Three surveyors and three professional night vision cameras were used for both emergence surveys (Figure 5). The surveyors and cameras were positioned to get a good all-round view of the buildings with a particular focus on the areas of impact and where potential roost features were identified present.

3 Constraints/Limitations

- 3.1 Bats are difficult to locate in large structures, with so many potential roosting areas, particularly in inaccessible areas such as large buildings, finding the exact roosting site can be difficult, especially male/single bat roosting sites. It should be noted that it is not always possible to identify bat presence by examining externally around buildings as poor weather conditions may have washed away droppings which were deposited on exposed surfaces.
- 3.2 Bats can have seasonal use of buildings and being so mobile may arrive and start using a site after it has been surveyed, or roost somewhere else during the period it was surveyed. For this reason, bats may potentially be present but remain undetected, particularly during daytime assessment.

4 Results

Pre-existing Information Search

Statutory Designated Sites

- 4.1 Lavells Lakes which is a Local Nature Reserve is the only statutory designated site located 1200m north of the proposed site. See Figure 3.

Non-statutory Designated Sites

4.2 There are no non-statutory sites located within 2km of the proposed site.

Granted EPS Bat Licences

4.3 There are granted EPS licences for bats within 2km of the site. These are detailed in Table 1 and shown in Figure 4.

TABLE 1: EPS LICENCES WITHIN 2KM OF THE SITE

Case reference of granted application	Species on the licence	Licence Start Date	Licence End Date	Impact on a breeding site	Damag e of a breeding site	Damag e of a resting place	Destructi on of a breeding site	Destructi on of a resting place
2015-13607-EPS-MIT	C-PIP	26/08/2015	05/08/2020	N	N	N	N	Y
2015-13607-EPS-MIT-1	C-PIP	01/12/2015	05/08/2020	N	N	N	N	Y
2015-14054-EPS-MIT	Great crested newt	08/09/2015	31/10/2015	N	N	Y	N	Y
EPSA2013-6712-A-AD2	Great crested newt	07/07/2015	30/06/2020	N	N	Y	N	Y
EPSA2013-6712-A-AD2-1	Great crested newt	01/10/2015	30/06/2020	N	N	Y	N	Y
EPSA2013-6712-A-AD2-2	Great crested newt	06/11/2015	30/06/2020	N	N	Y	N	Y
EPSA2013-6712-A-AD2-3	Great crested newt	08/06/2016	30/06/2020	N	N	Y	N	Y
EPSM2009-1161	C-PIP;BLE	30/10/2009	30/09/2011	N	N/A	N/A	N	Y
EPSM2009-899	C-PIP	15/04/2010	14/04/2012	N	N/A	N/A	N	Y
2019-41221-EPS-MIT	Great crested newt	01/08/2019	31/12/2025	N	N	Y	N	Y
2019-41221-EPS-MIT-1	Great crested newt	25/02/2020	31/12/2025	N	N	Y	N	Y
2017-32001-EPS-MIT	C-PIP	01/01/2018	30/04/2018	N	N	N	N	Y
2014-718-EPS-MIT	Great crested newt	16/05/2014	30/04/2015	N	N	Y	N	Y
2014-649-EPS-MIT	C-PIP S-PIP	02/05/2014	31/10/2014	N	N	N	N	Y

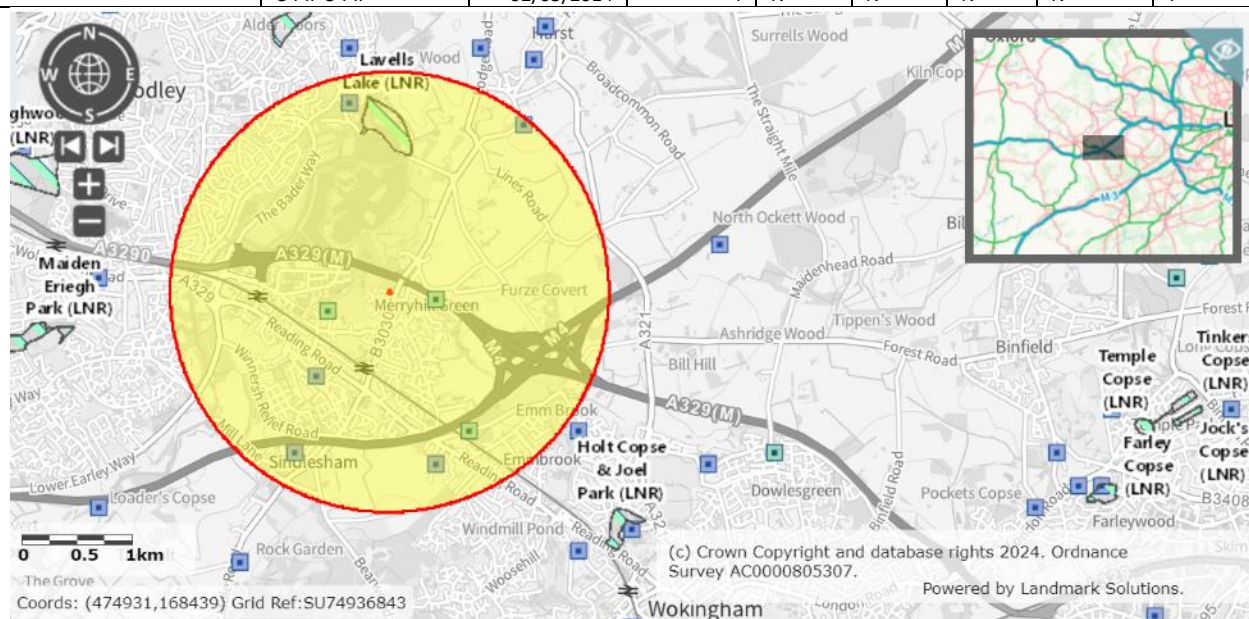


FIGURE 3: SHOWING STATUTORY DESIGNATED SITES AND GRANTED EPS LICENCES WITHIN 2KM OF THE SITE. BAT LICENCES SHOWN IN BLUE WITH AMPHIBIAN LICENCES IN GREEN

Habitats of Principal Importance

4.4 There are no HPI located within or immediately adjacent to the site.

Daytime Assessment

- 4.5 A full bat assessment was conducted on the 5th March 2024 which was conducted by John Wenman ecological consultancy. The building was assessed as holding moderate potential to support crevice dwelling bats. Full results can be found within the associated report.
- 4.6 AEWC Ltd conducted an update bat assessment on the 20th May 2024. The findings were very similar to those identified by the report produced by John Wenman ecological consultancy.
- 4.7 The main house is the only building on-site subject to survey. The house is a two-storey, residential dwelling of brick construction with a complex pitched roof supporting handmade clay tiles on all elevations. Externally, multiple features were noted with potential for crevice-dwelling bats. The roof tiles covering the main house roof and hanging tiles cladding the dormers were handmade with camber and the roof naturally sagged in multiple places. Additionally, several broken and missing tiles on all elevations of the property provided multiple gaps of suitable size for bats to access all elevation of the house. Lifted lead flashing around the chimney and areas of missing mortar at the ridge provided more suitable potential access points for bats.
- 4.8 The property contains three separate roof voids, the eastern most roof void has recently been relined with modern breathable membrane due to past water ingress. A window on the east elevation allows for a high degree of light ingress into the roof void. The west roof void was found to be highly cobwebbed throughout the roof void especially at the ridge. The northern roof void is cluttered with the presence of a large water tank within the central space of the roof void. Again, this roof void was found to have a high degree of light ingress due to exposed bathroom lights, additional to this a high degree of dust clogged cobwebbing was found throughout the roof void especially at the ridge.



Photograph 1: South and west elevations and example of awnings



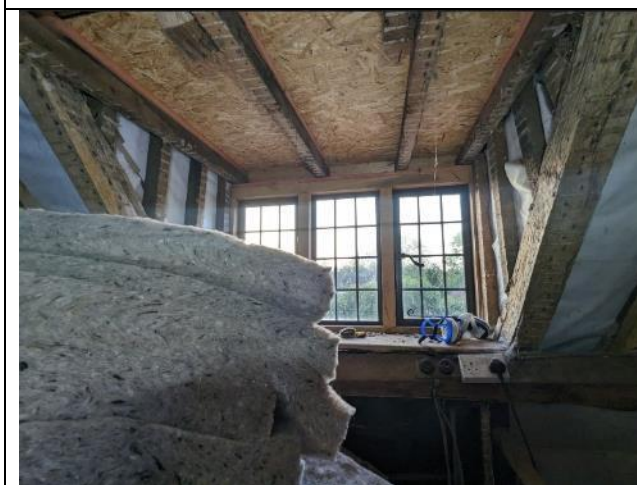
Photograph 2: North elevation



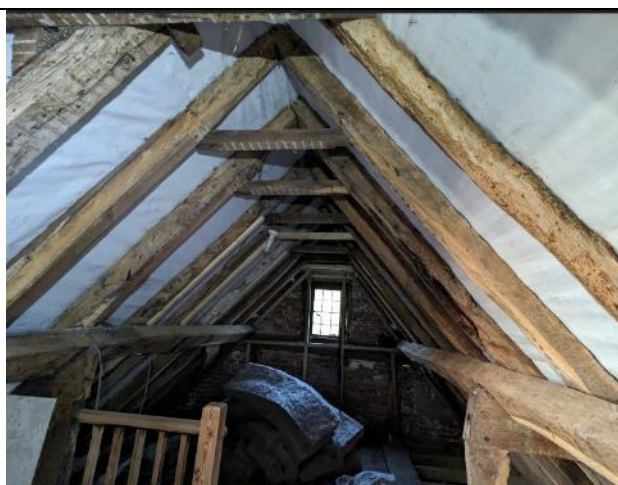
Photograph 3: Heavily cobwebbed ridge of eastern side of main void



Photograph 4: Chicken wire-lined pitch of western-side of main void



Photograph 4: East gable end window allowing intense light ingress



Photograph 4: Breathable membrane and north-facing window in main void



Photograph 4: Gaps under cambered tiles



Photograph 4: Hanging tiles on dormer on north pitch

Emergence Surveys

- 4.9 **20th May 2024** – Weather conditions were good for the survey (17.6°C, clear with a slight breeze) and any bats present were likely to be active. The survey recorded a moderate level of commuting and foraging activity by common pipistrelles (*Pipistrellus*

pipistrellus) and soprano pipistrelles (*Pipistrellus pygmeus*). In addition, two noctules (*Nyctalus noctula*) were recorded commuting over the site. No bats were recorded emerging from the building.

4.10 **28th June 2024** – Weather conditions were good for the survey (16.2°C and clear with a slight breeze) and any bats present were likely to be active. The survey recorded a moderate level of bat activity, with predominantly commuting and foraging common pipistrelles and soprano pipistrelles. Additionally, a single noctule commuted over the site. No bats were recorded emerging from the building.

4.11 A diagram showing the locations of the surveyors and night vision cameras during the evening surveys can be seen in Figure 4 below.

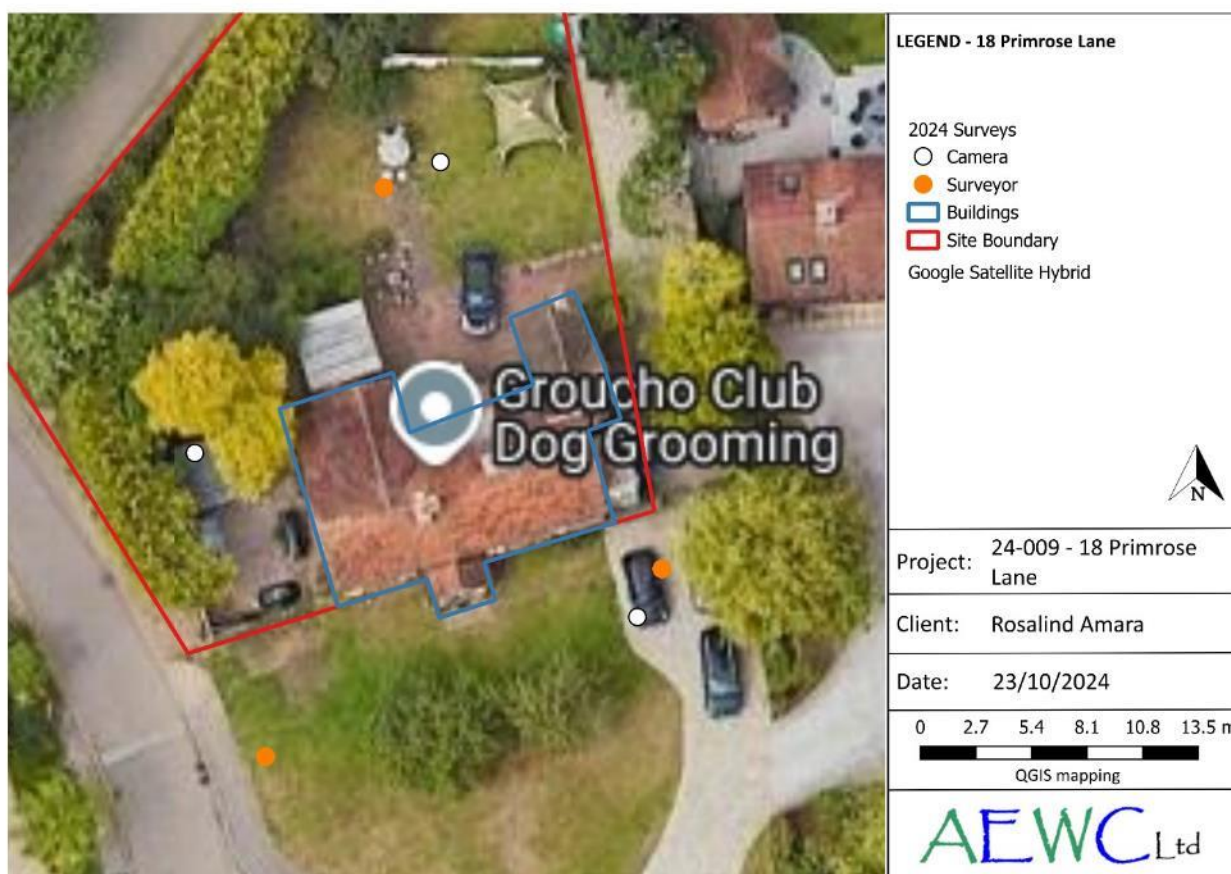


FIGURE 4: SHOWING POSITIONS OF SURVEYORS AND NIGHT VISION CAMERAS DURING THE 20TH MAY AND 28TH JUNE 2024 EMERGENCE SURVEYS

5 Evaluation, Conclusions & Recommendations

5.1 Initial observations consider the local area suitable for bats. Extensive woodland, pasture and coastal areas in close proximity to the site with a network of connective tree and hedge lines provides excellent foraging and commuting habitat for a range of bat species. Buildings and trees within the local area additionally offer potential roosting opportunities.

- 5.2 The daytime assessment identified moderate potential for the house to support roosting bats due to the presence of gaps beneath the roof and hanging tiles providing potential access points and roost features. The dense cobwebbing and build up of dust as well as high degrees of light ingress within the roof voids indicate a likely absence of void dwelling bats. The building was therefore considered more suitable for crevice-dwelling bat species.
- 5.3 Both emergence surveys were conducted in good weather and during the peak maternity season, during which no bats were recorded to emerge from the property. This indicates the likely of absence of bat roosts from the house.
- 5.4 **The house was considered to have moderate potential to support roosting bats, however bats were not found during the emergence surveys and as such, there are no known constraints regarding these species and the proposed development.**
- 5.5 Bats are highly mobile species and therefore may turn up on sites at any time. Should bats, or evidence of bats, be identified during the works the procedure in Section 6 of this report must be followed.
- 5.6 Lighting can have notable negative impacts on commuting bats, that are known to be present locally. There is potential for lighting during and post-development to cause indirect disturbance to bats using the site and surrounding area. Additional external lighting should be avoided or kept to the minimum necessary, and preferably on a motion sensor to reduce lighting time. **Lighting should be designed in accordance with the Institute of Lighting Professionals Guidance note 8: ‘Bats and Artificial lighting in the UK’ which can be downloaded for free from the ILP website.**
- 5.7 Additional work lighting which may be required must be positioned to ensure that it shines onto the area of works with minimal spread into the wider area.

6 Procedure to follow in the event a bat is found on site.

- 6.1 Bats are present within the vicinity of the site and may be found at any location on, in or around the buildings. Bats are protected species, and these procedures must be followed to avoid committing an offence.
- 6.2 If a bat is found at any location around the site DO NOT TOUCH unless necessary for the safety of the bat.
- 6.3 If the bat was uncovered in a roosting location carefully replace covering ensuring the bat is not crushed or harmed. If this is not possible cover the animal with a loose covering.
- 6.4 Stop all work at that area and the immediate vicinity. Work may continue at other areas around the site.

- 6.5 Call the AEWC Ltd bat licensed project ecologist Brigitte de Coriolis 07545130203, call the office on 08452 505585, or licensed ecologist Daniel Whitby 07764813002.

7 References

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