AEWC Ltd

Animal Ecology & Wildlife Consultants

# Bat Survey Report

## Avenue Lodge

**51 Ham Common**
**Ham**
**Richmond**
**TW10 7JG**

Brigitte de Coriolis

23-234
July 2024

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# Summary


- AEWC Ltd were commissioned by HCUK Group on behalf of their client to undertake detailed bat survey at Avenue Lodge, 51 Ham Common, Ham, Richmond, TW10 7JG at central grid reference TQ 17698 72167 to help inform the proposed development of the site.
- There are three buildings present on site: a large, detached house, a small pool house adjoining to the north and a detached cottage. Only the pool house is subject to proposals under this planning application and is the only building covered within this report.
- Proposals are for removal of the existing pool house roof and remodelling of the building with a new flat roof.
- This report details the results of the detailed bat survey, which was carried out between 18th March and 12th June 2024 by Brigitte de Coriolis and assisted by Natalie Arscott, both Natural England licensed bat ecologists.
- A bat assessment was carried out on 18th March 2024 which identified moderate potential for bats within the batten spaces of the roof which may be impacted by the proposed works, further detailed bat survey was therefore required.
- Emergence surveys were carried out between 9th May and 12th June 2024 which did not record any bats emerging from the pool house, indicating the likely absence of bat roosts from this building. 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.**

# 1 Introduction

1.1 AEWC Ltd were commissioned by HCUK Group on behalf of their client to undertake detailed bat survey at Avenue Lodge, 51 Ham Common, Ham, Richmond, TW10 7JG 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 No ecological surveys are known to have been carried out for the site previously. Bat assessment was therefore required to ascertain whether bats, or potential for bats, is present at the site and represents a constraint to the proposed development.

1.4 A bat assessment was carried out on 18th March 2024 which identified moderate potential for bats within the batten spaces of the roof.

1.5 Further surveys were therefore required for the pool house, to ascertain whether bats are present or increase confidence in a result of likely absence of bat roosts from the building, to determine whether bats represent a constraint to the proposed development and identify any mitigation, compensation and licencing 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 buildings 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 Avenue Lodge, 51 Ham Common, Ham, Richmond, TW10 7JG at central grid reference TQ 17698 72167. The site is located off Ham Common in a semi-urban and predominantly residential part of Richmond, approximately 200m to the west of the A307. The site is bordered by amenity space to the north, further residential properties to the east and west, and Ham Common, a public park, to the south. The surrounding landscape comprises predominantly residential properties with blocks of woodland, open green space, and the River Thames, with Richmond Park just over 1km to the east. See Figure 1.

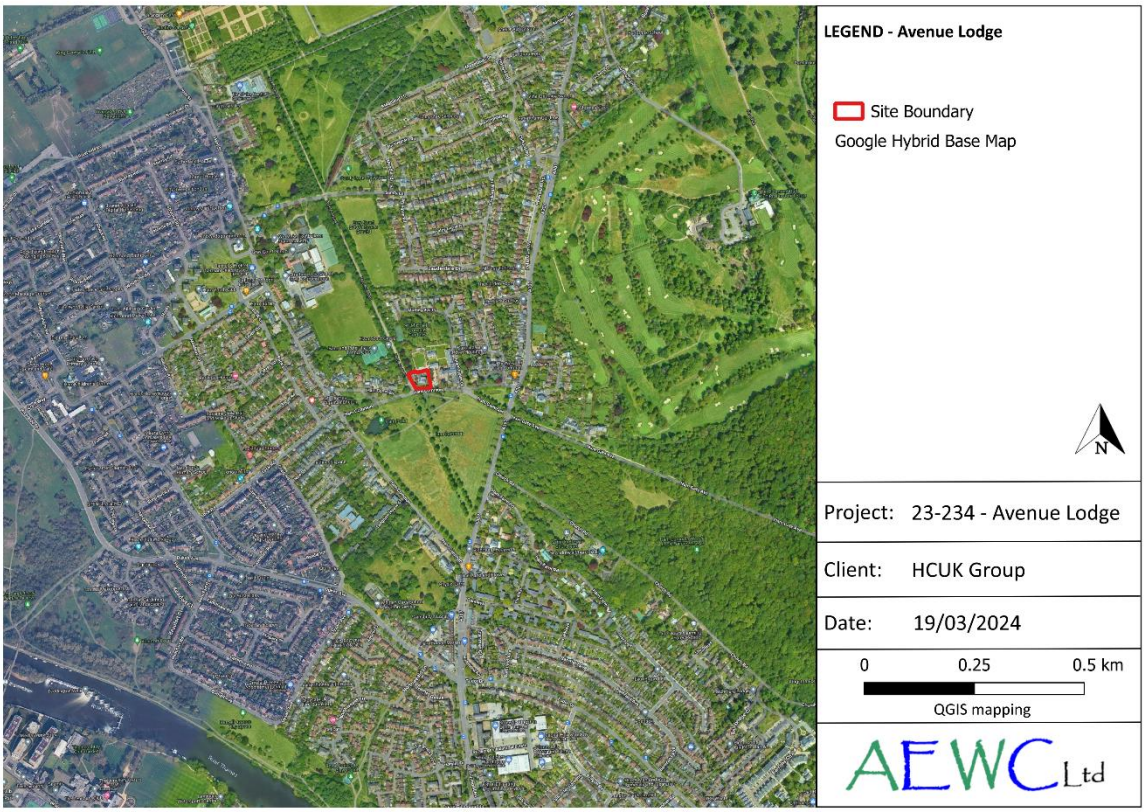



**FIGURE 1: SHOWING THE LOCATION OF THE SITE**

1.9 There are three buildings present on site: a large, detached house, a small pool house adjoining to the north and a detached cottage. Only the pool house is subject to proposals under this planning application and is the only building covered within this report. See Figure 2.


**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 Proposals are for removal of the existing pool house roof and remodelling of the building with a new flat roof.

**FIGURE 3: SHOWING THE EXISTING (TOP) AND PROPOSED (BOTTOM) PLANS.**

# 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 bat building inspection was undertaken on 15th March 2024 by Brigitte de Coriolis and assisted by Natalie Arscott, both Natural England licensed bat ecologists.

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 facias, 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 9th May and 12th 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 One surveyor and two professional night vision cameras were used for the emergence surveys (Figure 6). The surveyor and cameras were positioned to get a good all-round view of the building with a particular focus on the areas of impact and where potential roost features were identified present. Given the structure of the pool house, with a parapet wall forming the northern, eastern and western edges, all identified potential roost features and access points had a southernly aspect and the building was therefore surveyed along the southern elevation only.

# 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.

3.3 The bat assessment was undertaken in March, outside of the main active season for bats, therefore any external evidence of the presence of bats in the main active season would likely have been destroyed by weathering.

3.4 The hatch into the small central roof void above the pool house changing room was too small to enter, however the void could be partially inspected from the hatch itself.

# 4 Results

## ***Pre-existing Information Search***

*Statutory Designated Sites:*

4.1 There are statutory designated sites located within 2km of the proposed site. The nearest statutory designated site is Ham Common, Richmond, London LNR approximately 200m south-east of the site. This adjoins Richmond Park, which is designated as a SSSI, SAC and NNR. See Figure 4.

*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 four granted EPS licences for bats within 2km of the site, with two amendments to one of these. 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 | Damage of a breeding site | Damage of a resting place | Destruction of a breeding site | Destruction of a resting place |
|---|---|---|---|---|---|---|---|---|
| 2014-274-EPS-MIT | S-PIP | 01/06/2014 | 30/09/2015 | N | N | N | N | Y |
| 2014-274-EPS-MIT-1 | S-PIP | 01/04/2015 | 30/09/2016 | N | N | N | N | Y |
| 2014-274-EPS-MIT-2 | S-PIP | 20/03/2015 | 30/09/2015 | N | N | N | N | Y |
| 2015-15368-EPS-MIT | C-PIP S-PIP | 27/10/2015 | 15/10/2020 | N | N | N | N | Y |
| 2019-43456-EPS-MIT | BLE S-PIP | 13/11/2019 | 28/02/2025 | N | N | Y | N | Y |
| 2016-25082-EPS-MIT | BLE C-PIP S-PIP | 06/09/2016 | 01/09/2021 | N | N | N | N | Y |

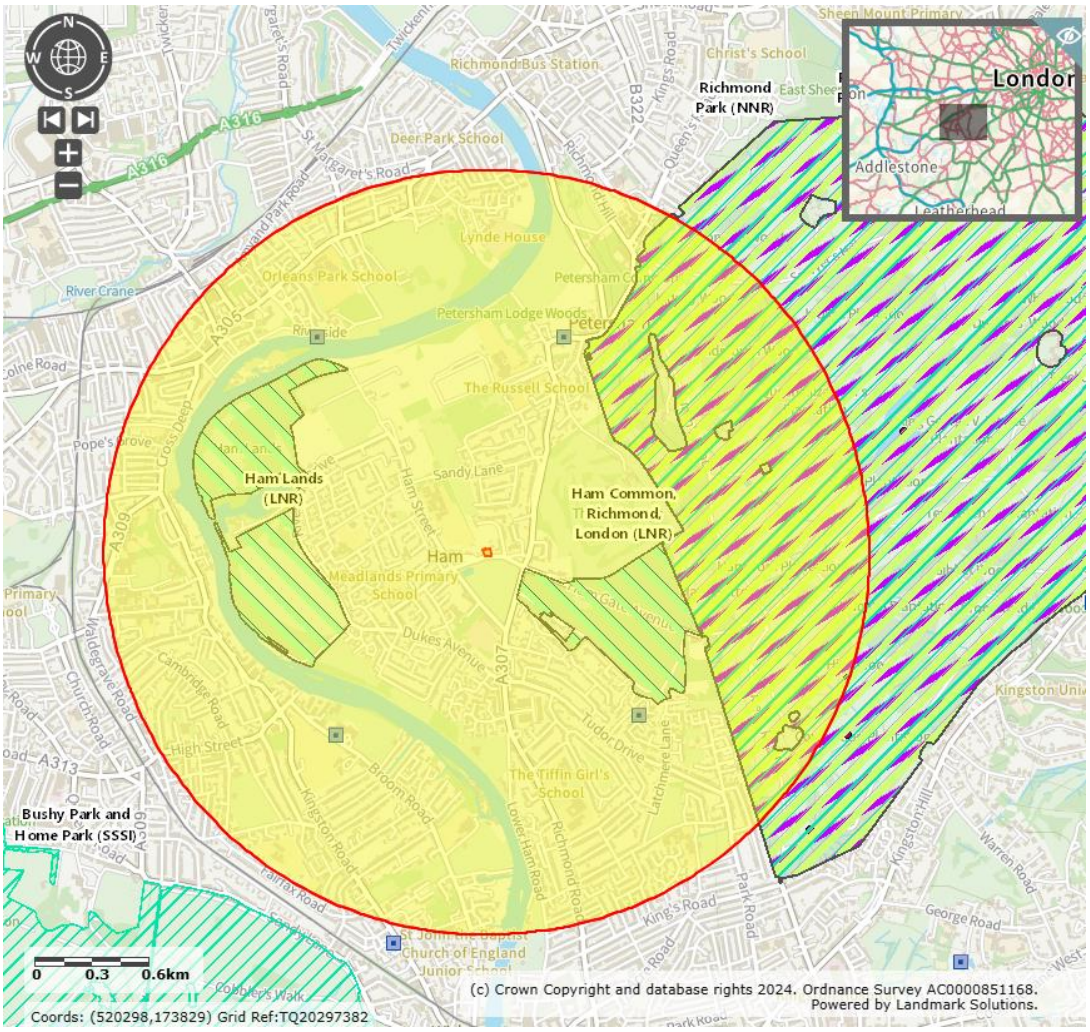



**FIGURE 4: SHOWING STATUTORY DESIGNATED SITES AND GRANTED EPS LICENCES WITHIN 2KM OF THE SITE. BAT LICENCES SHOWN IN BLUE.**

*Habitats of Principal Importance*

4.4 There are no HPI located within or immediately adjacent to the site. Several HPI were identified in close proximity, these consist of Woodpasture and Parkland across the road to the south, with Traditional Orchard bordered by a narrow belt of Deciduous Woodland approximately 60m north of the site. See Figure 5.

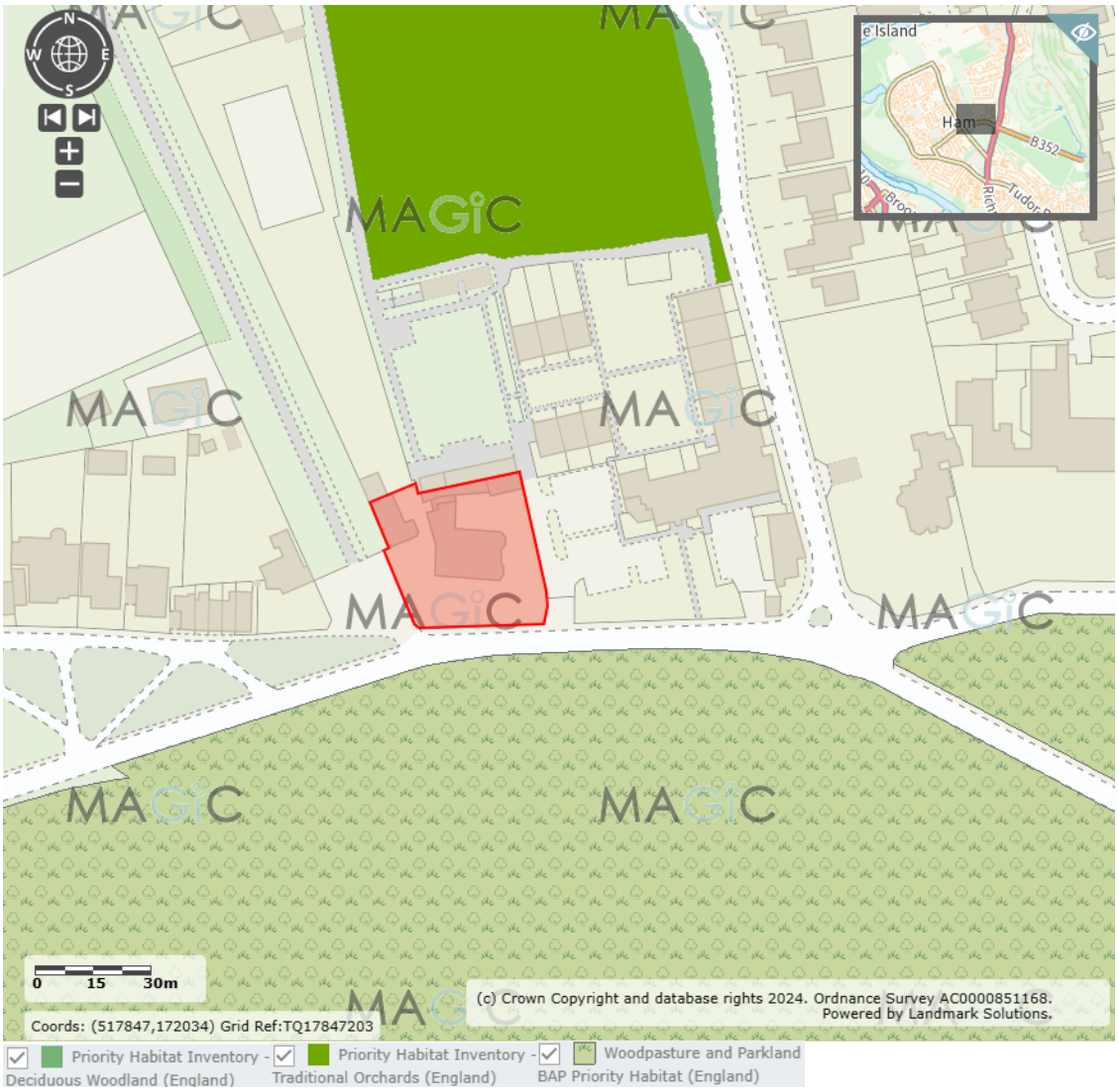



**FIGURE 5: SHOWING PRIORITY HABITATS IN PROXIMITY TO THE SITE.**

***Daytime Assessment***

4.5 The pool house was a single-storey, brick-built building that adjoined to the north of the main house. It had a sloping roof with a southerly aspect off a rear parapet wall, supporting clay interlocking roof tiles. The building contained a swimming pool, central changing room, and plant room at the western end.

4.6 The building walls were predominantly in good condition, however some mortar gaps in the brickwork were seen on the central part of the southern elevation, creating crevice opportunities.

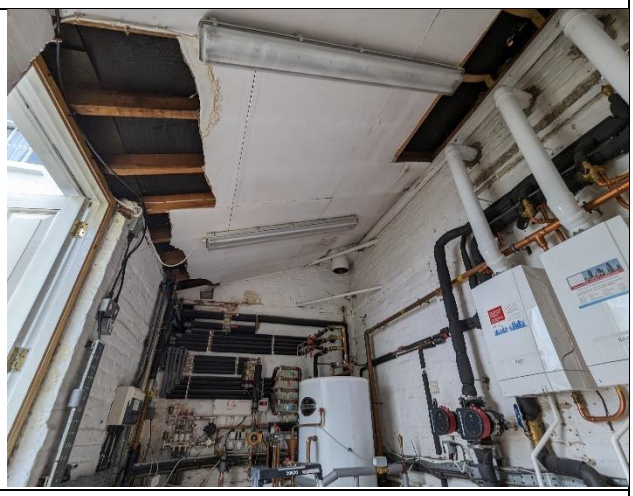
4.7 Many of the roof tiles were lifted, especially in the western portion of the building, creating gaps into the batten spaces that may be utilised by bats.

4.8 Internally, the plant room was open to the roof apex, with no roof void. There was a small, bitumen-lined void above the changing room, which could not be entered but was partially viewed from the hatch. The void apex was noted to be cobwebbed and no evidence of bats was seen. The swimming pool had a sloped timber ceiling fixed beneath the rafters, with no separate roof void present.

**Photograph 1:** *The pool house viewed from the south.*

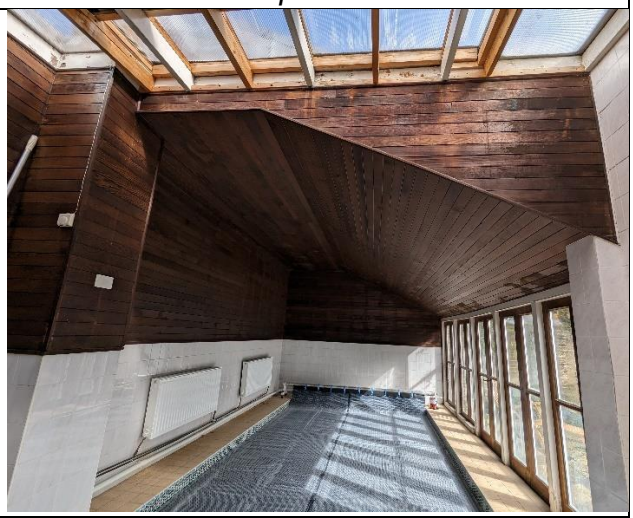
**Photograph 2:** *Lifted roof tiles.*

**Photograph 3:** *Mortar gaps in the brickwork.*



**Photograph 4:** *The plant room at the western end of the pool house.*

**Photograph 5:** *The small void above the changing room.*



**Photograph 6:** *The swimming pool, with timber ceiling below the rafters.*

***Emergence Surveys***

4.9 **9th May 2024** – Weather conditions were good for the survey (19.9°C with 40% cloud cover and a slight breeze) and any bats present were likely to be active. The survey recorded a low-level of bat activity, with a low number of commuting and foraging common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and serotine bats (*Eptesicus serotinus*), in addition to a single Nathusius' pipistrelle (*Pipistrellus nathusii)* commuting over the site. No bats were recorded emerging from the building.

4.10 **12th June 2024** – Weather conditions were good for the survey (13.5°C with 30% cloud cover and a light breeze) and any bats present were likely to be active. The survey recorded very low bat activity, with no bats were recorded until 40 minutes after sunset. A low number of common pipistrelles and a single brown long-eared bat (*Plecotus auritus*) commuted over the site in the latter half of the survey.

4.11 A diagram showing the locations of the surveyor and night vision cameras during the evening surveys can be seen in Figure 6 below.


**FIGURE 6: SHOWING POSITIONS OF SURVEYOR AND NIGHT VISION CAMERAS DURING THE 2024 EMERGENCE SURVEYS.**

# 5 Evaluation, Conclusions & Recommendations

5.1 Initial observations consider the local area suitable for bats. Whilst much of the surrounding landscape is urban, there are areas of parkland and woodland nearby and a continuous tree line runs adjacent to the west of the property. These features would provide suitable foraging and commuting habitat for a range of bat species. Buildings and trees within the local area additionally offer potential roosting opportunities.

5.2 From the daytime assessment it was considered that the pool house had moderate potential to support roosting bats. No bats or evidence of bats was found, but there were potential roosting features including gaps under roof tiles and mortar gaps in brickwork. Features were not optimal for void-dwelling bat species, due to a single central roof void which was very small and offered minimal flight space, and the building was more suitable for crevice-dwellers.

5.3 Emergence surveys were carried out between 9th May and 12th June 2024 which did not record any bats emerging from the pool house, indicating the likely absence of bat roosts from the pool house.

5.4 The pool 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 in these areas. Additional external lighting should be avoided or kept to the minimum necessary, and preferably on a motion sensor to reduce lighting time. No lighting should be positioned so as to shine on potential roosts and commuting features. **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 ecologists Daniel Whitby 07764813002 or Annika Binet 07528 956486.

# 7 References

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