AEWC Ltd

Animal Ecology & Wildlife Consultants

Bat Survey Report

Land at 12 Claygate Lane

12 Claygate Lane
Hinchley Wood
Esher
KT10 0AQ

Brigitte de Coriolis

23-005
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Summary

- AEWC Ltd were commissioned by Wynngate Ltd on behalf of their client to undertake detailed bat survey at 12 Claygate Lane, Hinchley Wood, Esher, KT10 0AQ at grid reference TQ 16157 65764 to help inform the proposed development of the site.
- The site comprises the dwelling and associated garden at 12 Claygate Lane in addition to a strip of land extending south from the western edge of the garden.
- The proposal is for demolition of the existing dwelling, to make way for construction of nine new residential dwellings.
- An Ecological Appraisal carried out by Cherryfield Ecology on 26th October 2022 identified that the building had high potential to support roosting bats due to gaps beneath roof and hanging tiles and lead flashing.
- This report details the results of further detailed bat survey, which was carried out between 15th May and 3rd August 2023 by Brigitte de Coriolis, a Natural England licensed bat ecologist.
- The building was considered to have high 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.
- **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 Wynngate Ltd on behalf of their client to undertake detailed bat survey at 12 Claygate Lane, Hinchley Wood, Esher, KT10 0AQ 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, 2016).

1.3 An Ecological Appraisal carried out by Cherryfield Ecology on 26th October 2022 identified that the building had high potential to support roosting bats due to gaps beneath roof and hanging tiles and lead flashing.

1.4 Further surveys were therefore required to ascertain whether bats are present at the site, characterise roosts and determine whether bats represent a constraint to the proposed development.

1.5 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

1.6 The objectives of the survey were to:

- Confirm 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

1.7 The proposed development site is located at 12 Claygate Lane, Hinchley Wood, Esher, KT10 0AQ at central grid reference TQ 16157 65764. The site is located within the suburb of Hinchley Wood to the east of the town of Esher in Surrey. The site is immediately bordered by similar residential properties, with amenity gardens and scattered mature trees connecting the site to areas of woodland, pasture and amenity green space within the surrounding landscape. Stokes Field Local Nature Reserve lies 650m north-east and the River Thames approximately 1.4km to the north. See Figure 1.

FIGURE 1: SHOWING THE LOCATION OF THE SITE

1.8 The site comprises the dwelling and associated garden at 12 Claygate Lane in addition to a strip of land extending south from the western edge of the garden.

FIGURE 2: SHOWING THE BUILDING SUBJECT TO SURVEY.

Legislation

1.9 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.

1.10 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.

1.11 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.

1.12 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

1.13 The proposal is for demolition of the existing dwelling, to make way for construction of nine new residential dwellings. See Figure 3.

FIGURE 3: SHOWING THE PROPOSED PLANS.

2 Methods

Daytime Assessment

2.1 A detailed bat building assessment was undertaken on the 15th May 2023 by Brigitte de Coriolis, a Natural England licensed bat ecologist.

2.2 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.

2.3 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.

2.4 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.

2.5 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.

2.6 Taking account of these architectural, habitat features and signs of presence, the building(s) was/were then assigned a level of roost suitability based the criteria given in the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (Collins, 2016) 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

2.7 The evening emergence surveys were conducted on 15th May, 20th June and 3rd August 2023, 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.

2.8 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.

2.9 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.

2.10 Two surveyors and two professional night vision cameras were used for the emergence surveys (Figure 4). 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

Daytime Assessment

4.1 The building is a two-storey house of brick construction with hanging tiles cladding the upper north-eastern elevation. The tiled roof is hipped, with gabled intersecting roofs to the north-east and south-west elevations and a cat slide to the south-eastern hip.

4.2 Numerous gaps were noted beneath lifted roof tiles on all elevations, particularly on upper courses below the ridge and alongside the hips. Gaps were also noted beneath upper courses of hanging tiles and beneath lifted lead flashing at the dormer windows. No evidence of bats was identified anywhere around the exterior of the property.

4.3 Internally a single large loft void is present spanning the entire property. The roof is lined internally with timber sarking and insulated at floor level with fibreglass wool. The ridge cavity was visible due to a narrow gap in the sarking, with cobwebbing noted along the majority of the ridge. The loft void was found to be largely dusty with no visible light ingress and no evidence of bats identified present.

Photograph 1: *North-east and north-west elevations*

Photograph 2: *South-west elevation*

Photograph 3: *Gaps beneath hanging tiles*

Photograph 4: *Gaps beneath roof tiles*

Photograph 5: *Large loft void*

Photograph 6: *Visible ridge cavity with cobwebbing*

Emergence Surveys

4.4 **15th May 2023** – Weather conditions were suitable for the survey (11.5°C, calm and clear) and any bats present were likely to be active. The survey recorded very low bat

activity with only three common pipistrelle (*Pipistrellus pipistrellus*) passes recorded starting 45 minutes after sunset. No bats were recorded emerging from the building.

4.5 **20th June 2023** – Weather conditions were good for the survey (19°C and clear with a slight breeze) and any bats present were likely to be active. The survey recorded low bat activity with only three common pipistrelles passing the site from 30 minutes after sunset, in addition to two noctule bats (*Nyctalus noctula*) commuting over the building. No bats were recorded emerging from the building.

4.6 **3rd August** 2023 – Weather conditions were good for the survey (18°C with 60% cloud cover and a slight breeze) and any bats present were likely to be active. The survey recorded a moderate level of common pipistrelle and soprano pipistrelle (*Pipistrellus pygmaeus*) foraging activity around the property, however no bats were recorded to emerge from the building during the survey.

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

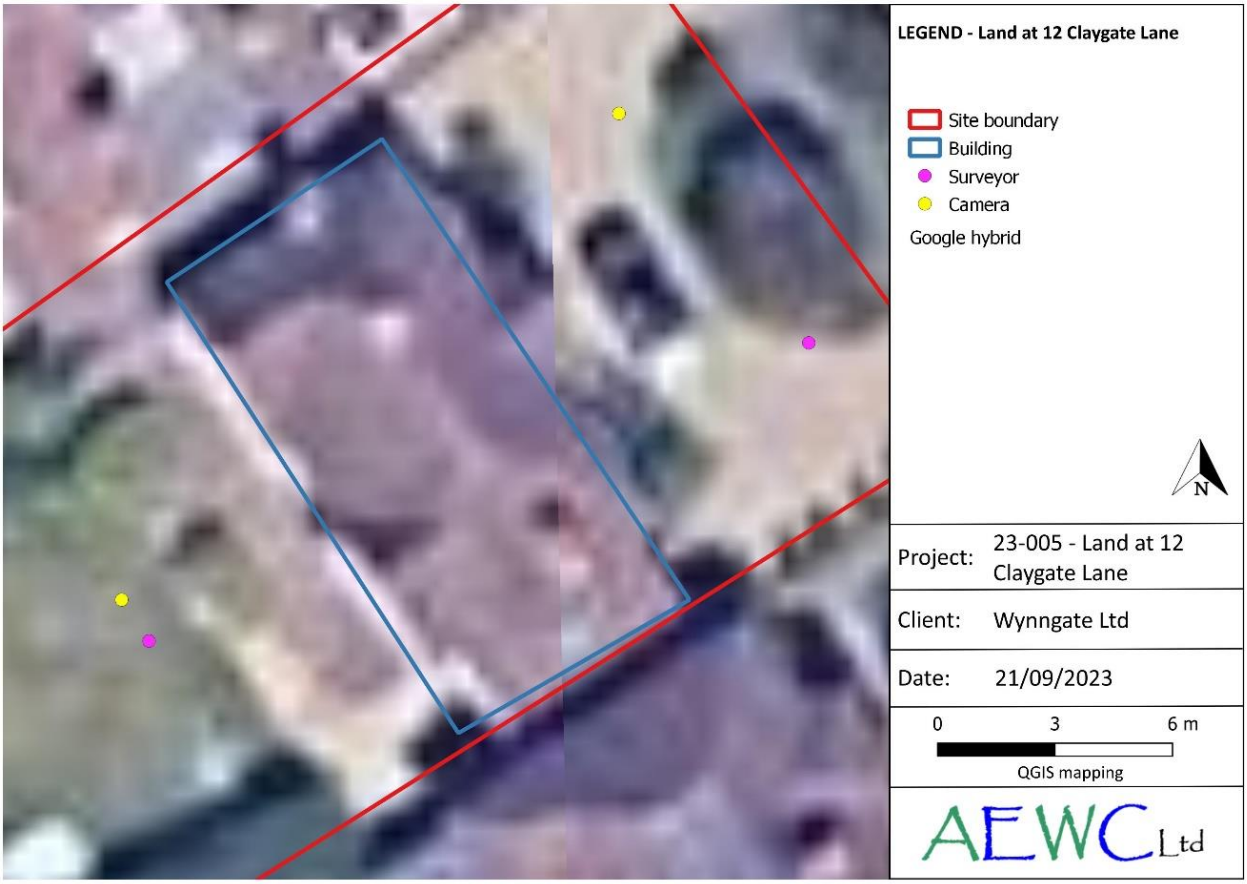

FIGURE 4: SHOWING POSITIONS OF SURVEYORS AND NIGHT VISION CAMERAS DURING THE 2023 EMERGENCE SURVEYS.

5 Evaluation, Conclusions & Recommendations

5.1 Initial observations consider the local area suitable for bats. The surrounding amenity gardens, scattered trees and central strip of scrub habitat making up part of the site provide good foraging habitat for common bat species, with areas of woodland and pasture in the wider landscape offering further foraging and commuting habitat, and trees and buildings within the local area additionally offering potential roosting opportunities.

5.2 The daytime assessment identified high potential for bats in the house on site due to numerous gaps beneath lifted roof and hanging tiles and lifted lead flashing. A small gap in timber sarking along the length of the ridge provided potential access from the ridge cavity through into the loft void, however the level of cobwebbing and lack of evidence of bats indicates that the void has not been used by void-dwelling bat species for some time, if ever.

5.3 No bats were recorded emerging from the building during three evening emergence surveys. All three surveys were carried out within the peak maternity season for bats, with surveys pre, during and post-parturition. The first two surveys recorded very little bat activity of predominantly common pipistrelles, a typically early emerging species, with bats not recorded until 30-45 minutes after sunset. It is therefore considered unlikely that there are any maternity roosts, or day roosts used in early summer, in close proximity to the building on site.

5.4 The final survey in August recorded a moderate level of activity of two pipistrelle species with bats recorded earlier in the survey. This was carried out at a time of year when pipistrelle maternity colonies have started to disband, suggesting that properties in the local area may be used for late summer day roosting following the maternity period for these species.

5.5 The building was considered to have high 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.

5.6 **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.**

5.7 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. **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.**

5.8 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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