AEWC Ltd

Animal Ecology & Wildlife Consultants

Bat Survey Report

Rigates Home Farm

Climping Street
Climping
West Sussex
BN17 5RQ

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24-038
April 2025

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Summary

- AEWC Ltd were commissioned by JB Architecture on behalf of their client to undertake a detailed bat survey at Rigates Home Farm, Climping Street, Climping, West Sussex, BN17 5RQ at central grid reference TQ 00168 01511 to help inform the proposed development of the site.
- The site is a portion of a residential property comprising a residential flat, an agricultural shed, hard standing, and garden containing trees and shrubs, with a section of a belt of woodland in the east of the site.
- Proposals include the demolition of the existing residential flat and agricultural shed, and construction of a new residential dwelling and garage.
- A bat assessment was carried out on the 24th June 2024 as part of a Preliminary Ecological Appraisal, which identified moderate potential for the residential flat to support crevice-dwelling species of bat due to clay tile hangings and lifted lead flashing on three of the elevations. The agricultural shed was found to have negligible potential to support bats.
- This report details the results of the detailed bat survey, which was carried out between the 4th July and 28th August 2024 by Natalie Arscott, a Natural England licensed bat ecologist, for the residential flat only.
- **Emergence surveys identified day roosts for low numbers of common pipistrelles (*Pipistrellus pipistrellus*) and soprano pipistrelles (*Pipistrellus pygmaeus*) beneath the clay tile hangings and lifted lead flashing on the southwestern elevation and northeastern elevation of the northwest wing of the residential flat**.
- **The proposed work will have a detrimental effect on bats or disturb or damage their roost, therefore a Natural England development licence will be required for works to proceed to ensure that an offence will not be committed. This will encompass a Mitigation Strategy to ensure that the development is designed to protect bats and to minimise long term impacts upon the local bat population.**

1 Introduction

1.1 AEWC Ltd were commissioned by JB Architecture on behalf of their client to undertake a detailed bat survey at Rigates Home Farm, Climping Street, Climping, West Sussex, BN17 5RQ 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 bat assessment was carried out on the 24th June 2024 as part of a Preliminary Ecological Appraisal, which identified moderate potential for bats in the residential flat on-site due to the presence of clay tile hangings with suitable gaps.

1.4 Further surveys were therefore required for the building assessed as holding moderate potential to determine whether bats represent a constraint to the proposed development and identify any mitigation, compensation and licensing requirements for the 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:

- 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

1.7 The proposed development site is located at Rigates Home Farm, Climping Street, Climping, West Sussex, BN17 5RQ at central grid reference TQ 00168 01511. The site is located in a rural part of Climping, between Littlehampton and Bognor Regis in West Sussex, approximately 320m south of the A259 and 930m north of the coastline. The surrounding landscape comprises predominantly agricultural land with connective hedge and tree lines, as well as scattered residential and commercial properties and small woodland blocks. See Figure 1.

1.8 The site is approximately 0.24ha in size and is a portion of a residential property comprising a residential flat, an agricultural shed, hard standing, and garden containing trees and shrubs, with a section of a belt of woodland in the east of the site. See Figure 2.

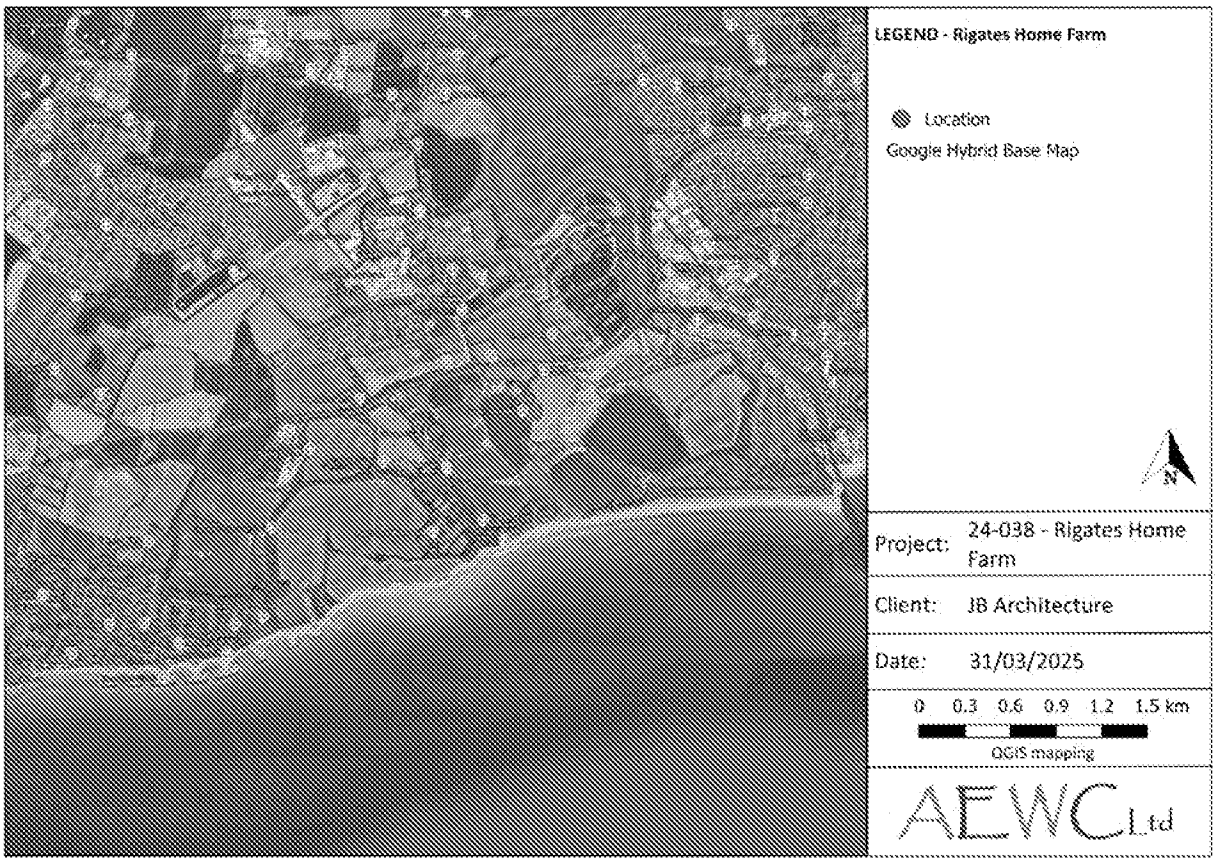


FIGURE 1: SHOWING THE LOCATION OF THE SITE

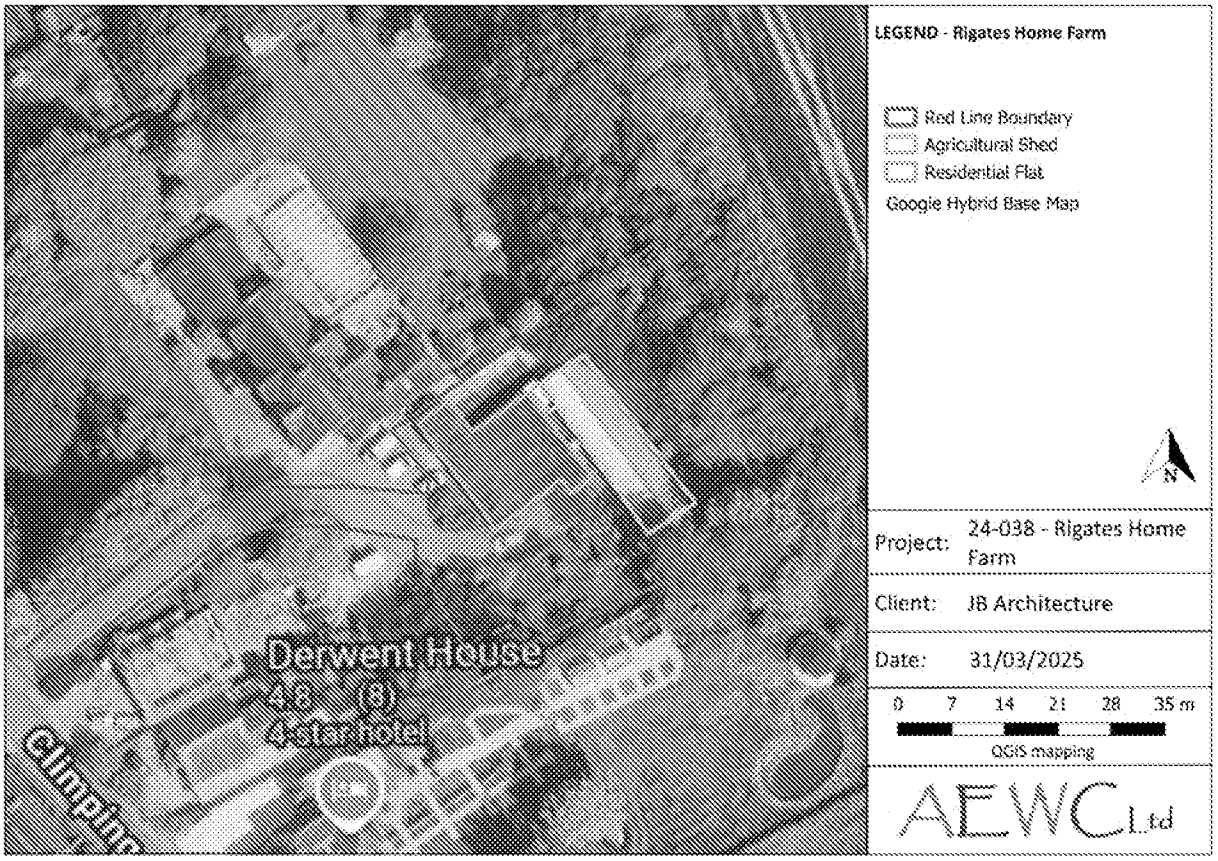


FIGURE 2: SHOWING THE SITE BOUNDARY AND BUILDINGS

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 Development proposals include the demolition of the existing residential flat and agricultural shed, and construction of a new residential dwelling and garage. See Figure 3.

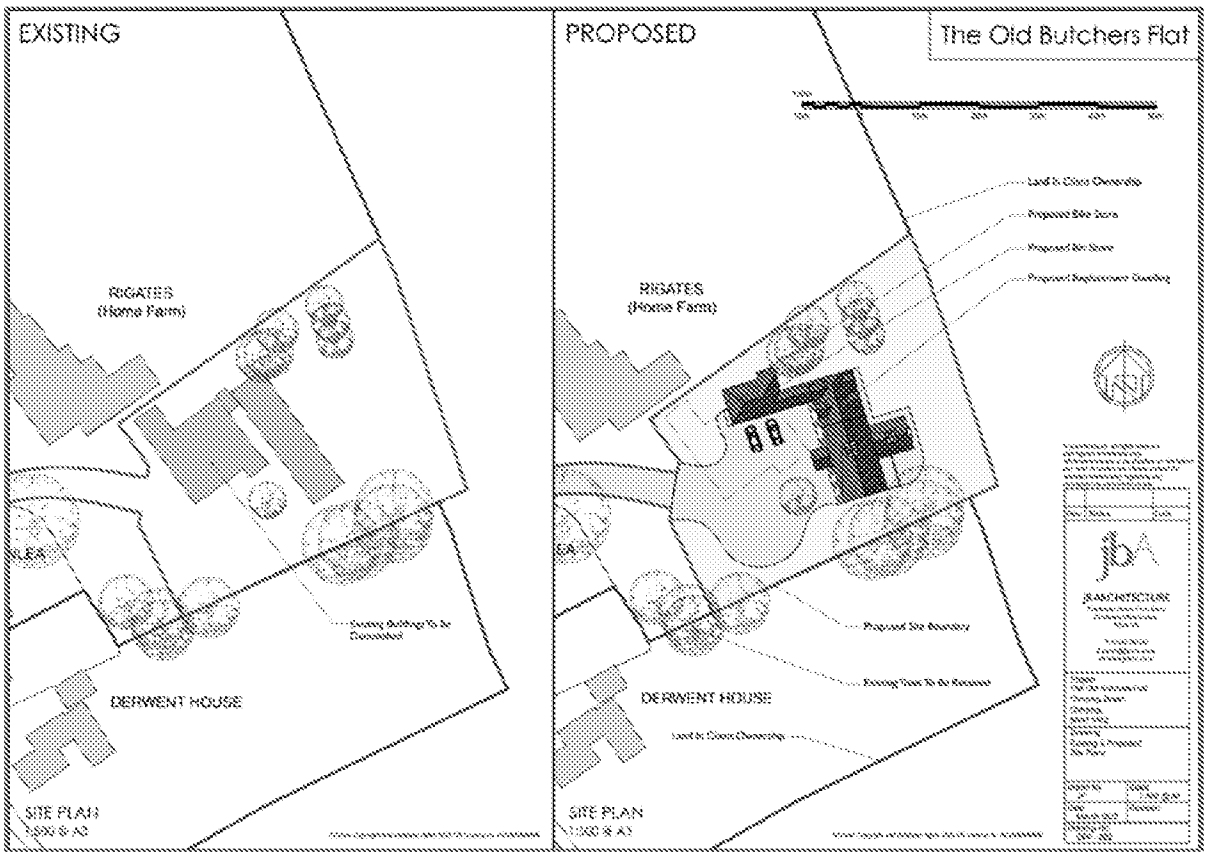


FIGURE 3: SHOWING THE EXISTING AND PROPOSED PLANS

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 of the residential flat and agricultural shed was undertaken on the 24th June 2024 by Natalie Arscott, a Natural England licensed bat ecologist, as part of a Preliminary Ecological Appraisal.

2.4 A systematic internal inspection of the buildings 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 buildings' 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 buildings' 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 Emergence surveys were carried out for the residential flat only. The evening emergence surveys were conducted on 4th July, 4th August and 28th August 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 Two surveyors and three professional night vision cameras were used for all the emergence surveys (Figure 6). The surveyors and cameras were positioned to get a good all-round view of the potential roosting features on the building. The only potential roosting features identified were associated with the clay tile hangings which are present on the southwestern elevation and the northwestern and northeastern elevations of the northwest wing of the building. Other parts of the building were therefore not covered by the emergence surveys as they had negligible potential to support roosting bats.

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 There are statutory designated sites located within 2km of the proposed site. The nearest statutory designated site is Climping Beach Site of Special Scientific Interest (SSSI) located approximately 1.2km to the southeast of the site. See Figure 4.

Non-Statutory Designated Sites

4.2 There are non-statutory sites located within 2km of the proposed site. The nearest non-statutory designated site is Littlehampton Golf Course and Atherington Beach Local Wildlife Site (LWS) located approximately 900m to the south of the site.

Granted EPS Bat Licences

4.3 There are no granted EPS licences for bats within 2km of the site. See Figure 4.

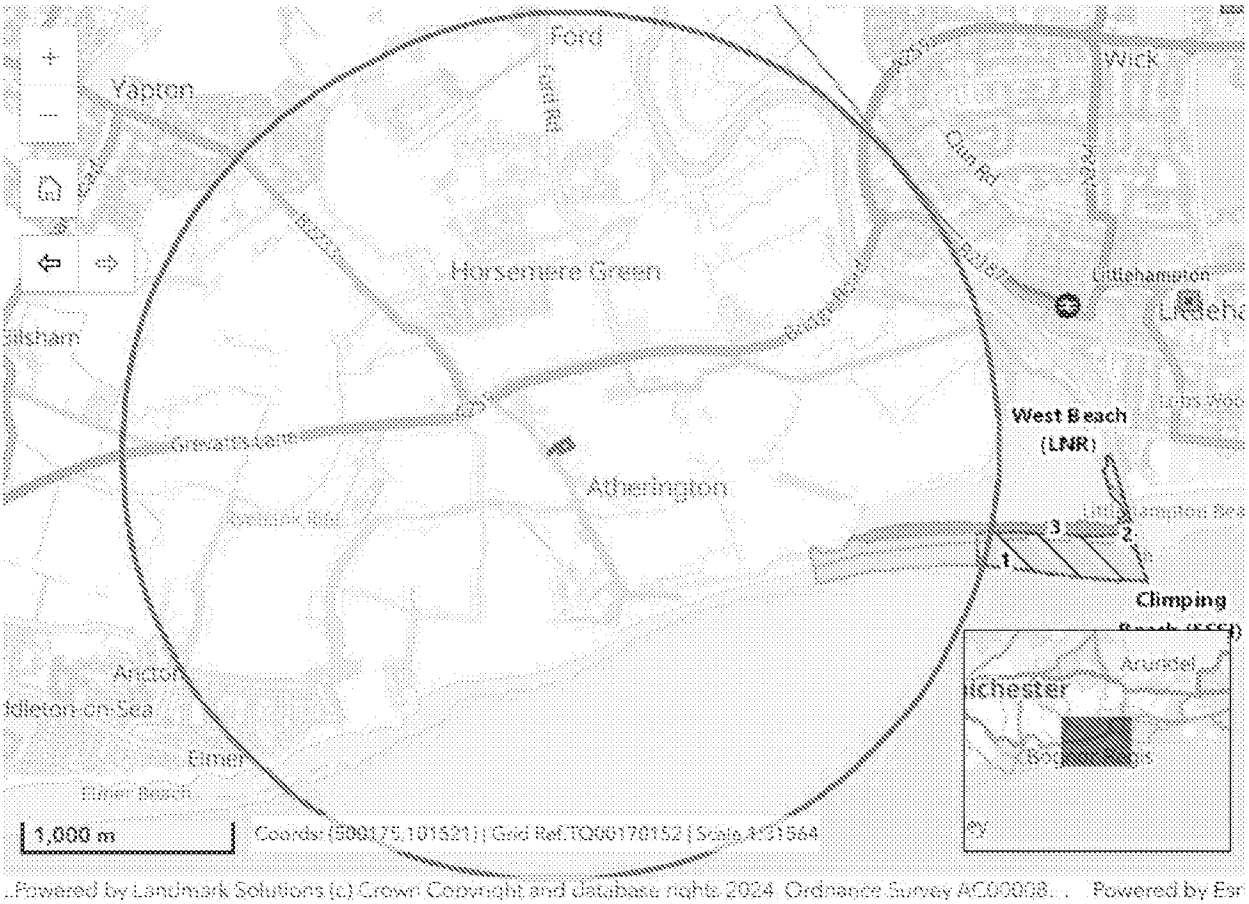


FIGURE 4: SHOWING STATUTORY DESIGNATED SITES AND ABSENCE OF EPS LICENCES WITHIN 2KM OF THE SITE

Habitats of Principal Importance

4.4 There are no HPI mapped within or immediately adjacent to the site. See Figure 5. The Preliminary Ecological Appraisal did identify woodland in the east of the site, but this is not considered to meet the criteria of priority habitat.

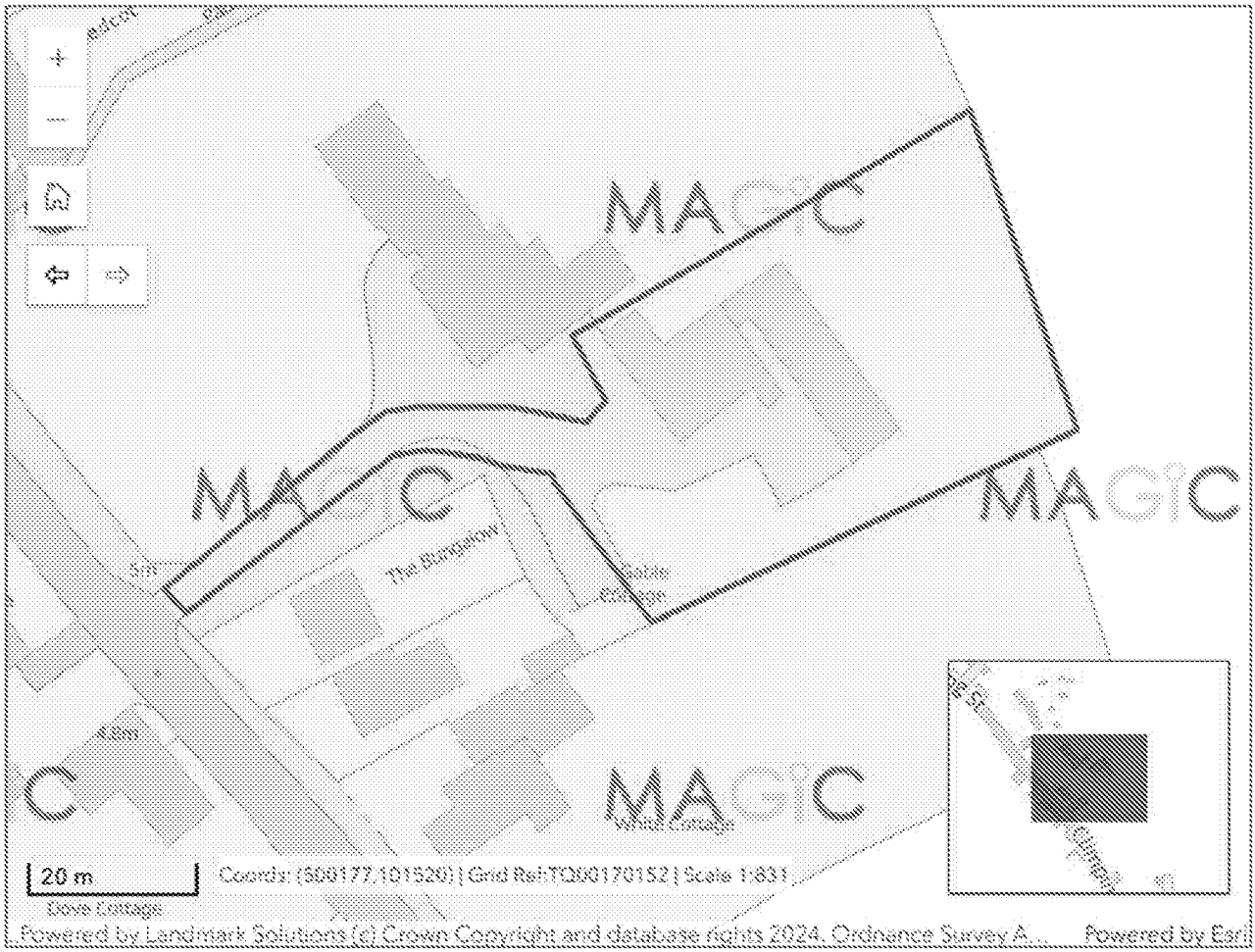


FIGURE 5: SHOWING ABSENCE OF PRIORITY HABITATS IN PROXIMITY TO THE SITE

Daytime Assessment

Residential Flat

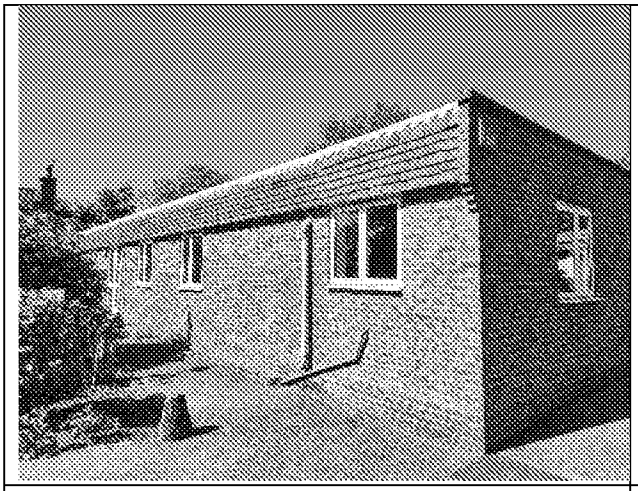
4.5 The residential flat is a single storey brick-built building with a flat roof covered by bituminous felt. There is a small timber extension at the southeast corner. Internally there is no enclosed roof void.

4.6 The upper sections of the southwestern elevation and the northwestern and northeastern elevations of the northwest wing of the building are covered by clay tile hangings. These are overlaid with lead flashing where the tiles meet the roof edge. The tiles are handmade and therefore have natural camber, creating a small gap beneath each tile which would provide suitable access for crevice-dwelling species of bat. Additionally, there are several lifted, slipped, and missing tiles, also providing access to the batten space behind the tile hangings, and lifted lead flashing provides further crevice roosting spaces.

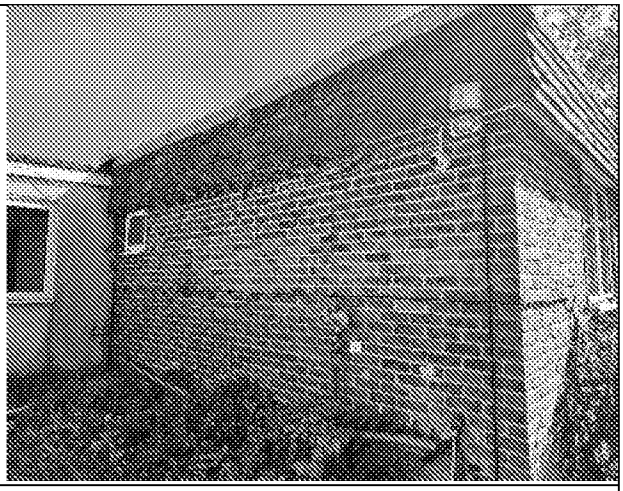
4.7 The remainder of the building is in good condition, with no cracks, crevices, or other potential roosting features.

4.8 No evidence of bats, such as droppings, was identified.

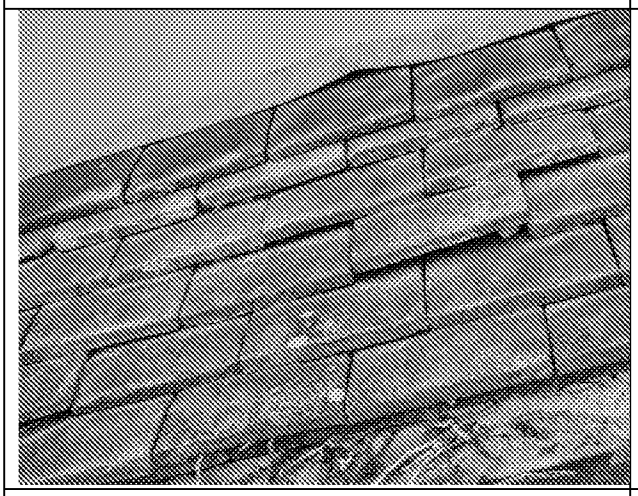
4.9 Overall, it was considered that the residential flat had moderate potential to support crevice-dwelling species of bat. Roosting potential is within the clay tile hangings and lead flashing only, which are present on the southwestern elevation and the northwestern and northeastern elevations of the northwest wing of the building. The remainder of the building has negligible potential to support bats.



Photograph 1 – the residential flat viewed from the southern corner.



Photograph 2 – the residential flat viewed from the northern corner.



Photograph 3 – clay tile hangings with gaps suitable for bats.

Photograph 4 – clay tile hangings with gaps suitable for bats.

Emergence Surveys

4.10 **4th July** – Weather conditions were good for the survey (15.7°C and dry with full cloud cover and a moderate breeze) and any bats present were likely to be active. The survey recorded two common pipistrelles (*Pipistrellus pipistrellus*) emerging from beneath clay tile hangings and one common pipistrelle emerging from beneath lifted lead flashing on the northeastern elevation of the northwestern wing of the building. One common pipistrelle was then observed to re-enter beneath clay tile hangings on the same elevation towards the end of the survey. Moderate levels of common pipistrelle foraging throughout the survey. A single Nathusius's pipistrelle (*Pipistrellus nathusii*) and soprano pipistrelle (*Pipistrellus pygmaeus*) pass was also heard.

4.11 **4th August** – Weather conditions were good for the survey (17°C and clear with a light breeze) and any bats present were likely to be active. The survey recorded one

bat emergence from beneath clay tile hangings on the southwestern elevation, close to the southern corner of the building, 26 minutes after sunset. No echolocation was recorded, however based on the emergence time, size of the bat, flight pattern, and species recorded at a similar time, it is considered highly likely to be a pipistrelle species (*Pipistrellus* sp.). A moderate level of common pipistrelle activity was recorded during the survey, predominantly in the first 45 minutes after sunset. A single soprano pipistrelle (*Pipistrellus pygmaeus*) pass was recorded.

4.12 **28th August** – Weather conditions were good for the survey (20°C and still with moderate cloud cover) and any bats present were likely to be active. The survey recorded two common pipistrelles and one soprano pipistrelle (*Pipistrellus pygmaeus*) emerging from beneath clay tile hangings and one common pipistrelle emerging from beneath lifted lead flashing on the northeastern elevation of the northwestern wing of the building. High levels of common pipistrelle foraging were recorded throughout the survey. There were a low number of passes from a noctule or Leisler's bat (*Nyctalus* sp.), long-eared bat (*Plecotus* sp.), and serotine (*Eptesicus serotinus*).

4.13 The full results of the bat activity surveys can be seen in Table 2. A diagram showing the locations of the surveyors, night vision cameras, and emergence and re-entry points during the evening surveys can be seen in Figure 6 below.

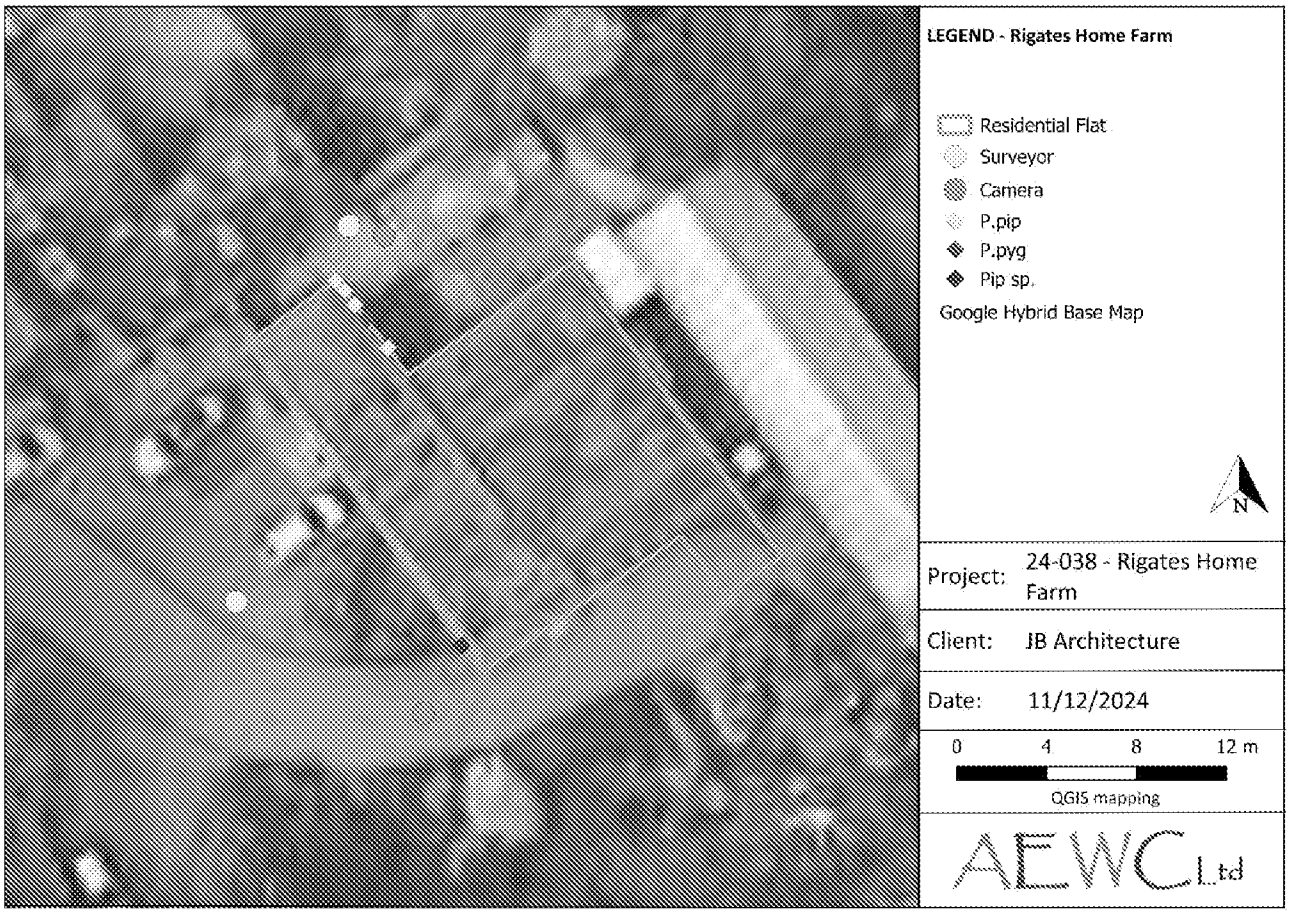


FIGURE 6: SHOWING POSITIONS OF SURVEYORS, NIGHT VISION CAMERAS AND BAT EMERGENCE/ RE-ENTRY DURING THE 4TH JULY, 4TH AUGUST AND 28TH AUGUST EMERGENCE SURVEYS

TABLE 1 - RESULTS OF THE EMERGENCE SURVEYS

DATE	SURVEYOR / CAMERA POSITION	TIME	SPECIES	ACTIVITY RECORDED
4TH JULY	N CORNER	21:24	P.pip	Emergence from lead flashing
4TH JULY	N CORNER	21:37	P.pip	Emergence from hanging tiles
4TH JULY	N CORNER	21:44	P.pip	Emergence from hanging tiles
4TH JULY	N CORNER	22:19	P.pip	Re-entry into latest emergence spot (hanging tiles)
4TH AUGUST	S CORNER	21:11	Pip sp.	Emergence from hanging tiles
28TH AUGUST	N CORNER	20:07	P.pyg	Emergence from hanging tiles
28TH AUGUST	N CORNER	20:09	P.pip	Emergence from hanging tiles
28TH AUGUST	N CORNER	20:15	P.pip	Emergence from lead flashing
28TH AUGUST	N CORNER	20:16	P.pip	Emergence from hanging tiles

5 Evaluation

5.1 Initial observations consider the local area suitable for bats. Agricultural land and woodland blocks in close proximity to the site with a network of connective tree and hedge lines provide 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 residential flat to support bats due to clay tile hangings and lifted lead flashing on three of the elevations. The potential roosting features were suitable for crevice-dwelling species of bat only. The agricultural shed was found to have negligible potential to support bats.

5.3 Emergence surveys were carried out for the residential flat between the 4th July and 28th August 2024, which identified the presence of bat roosts.

5.4 The surveys identified that the clay tile hangings and lifted lead flashing were being utilised by low numbers of common and soprano pipistrelles for roosting. A total of eight bat emergences were recorded across the three surveys, with peak counts of three common pipistrelles, one soprano pipistrelle, and one unidentified pipistrelle species.

5.5 It is considered that the roosts present are day roosts for individual pipistrelle bats. It is considered unlikely that the building supports any maternity roosts, since the surveys covered the maternity period and only low numbers of bats were recorded to emerge.

5.6 Pipistrelle bats frequently roost switch between nearby suitable roosting sites. Whilst not subject to detailed bat survey, it was noted that the large main house which is adjacent to the residential flat appeared highly suitable for crevice-dwelling bat species, with clay tile hangings and lifted roof tiles. It is possible that pipistrelles could be supported within the main house, and these bats may also utilise the clay tile hangings on the residential flat.

6 Conclusions & Recommendations

6.1 The surveys of the residential flat have identified day roosts for low numbers of common and soprano pipistrelles beneath the clay tile hangings and lifted lead flashing on the southwestern elevation and northeastern elevation of the northwest wing of the building.

6.2 **A lack of any mitigation would result in a negative impact on pipistrelle bats through potential death and roost destruction as well as disturbance to bats present on the site.**

6.3 Mitigation and compensation for the species confirmed to be roosting on site will be required. This should follow the mitigation hierarchy; however, it will not be possible to avoid impacts since the building is to be demolished. New roosting features suitable for pipistrelles are to be incorporated into the new building. **This compensation will ensure that there is no loss of roost availability, and the favourable conservation status of the species is maintained.**

6.4 The proposed work will have a detrimental effect on bats or disturb or damage their roost, therefore **a Natural England development licence will be required for works to proceed to ensure that an offence will not be committed**. This will encompass a Mitigation Strategy to ensure that the development is designed to protect bats and to minimise long term impacts upon the local bat population.

6.5 There are three tests detailed in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which must be satisfied before a Natural England licence can be issued to permit otherwise prohibited acts:

1 Regulation 53(2)(e) states that licences may be granted for "preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment".
2 Regulation 53(9)(a) states that a licence may not be granted unless the licensing authority (Natural England) is satisfied that "there is no satisfactory alternative".
3 Regulation 52(9)(b) states that a licence cannot be issued unless the licensing authority (Natural England) is satisfied that the action proposed "will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range".

6.6 For Natural England to be able to issue such a licence, full planning permission must first be obtained as this will satisfy tests 1 and 2, described above. Test 3 can be

satisfied by measures to ensure that minimal disturbance to bats is caused by the works to be carried out on the site and that the site plans include the adequate replacement of any roosts that are lost.

6.7 The site will need to be licenced under a full EPS licence, registered under the Bat Mitigation Class Licence (BMCL), or registered under the Bat Earned Recognition (BER) Class Licence Pilot Scheme under which it fits into Accreditation Level 1. Under this licence a full plan of compensation is required in addition to confirmation of adherence to suitable mitigation strategies, under the BER scheme the licensee and joint licensee are jointly responsible for adherence to the mitigation and compensation requirements for the site. For this site the mitigation would include the following measures:

- Works directly impacting the identified roosting areas with the clay tile hangings and lead flashing on the building will need to be carried out whilst temperatures are above 8°C.
- Prior to works commencing, the residential flat must be fully inspected by a licensed bat ecologist. All known roost areas and areas with potential for bats will be soft-stripped under direct supervision of the licensed ecologist, able to handle and check any bats found and move them to a safe place.
- Bat boxes will be erected near the building to act as a safe place to move any bats found into.
- New access points will be created in the proposed dwelling, to provide access for bats to roost in similar areas and locations to existing, providing the same aspect and microclimate.
- **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.**

6.8 A Reasoned Statement (which sets out the planning background to the site and includes a copy of the planning permission) is not required in this instance. The exception in this instance is because Natural England guidance states a reasoned statement is not required where:

- where bats and their roosts will be affected by:
    - repairs and maintenance
    - roof replacements, loft conversions and extensions
    - renovations of existing domestic dwellings and associated structures, such as garages
    - housing developments of less than 1 hectare, including:
    - existing buildings and associated structures that may need to be demolished before redevelopment takes place (whether domestic dwellings or other types of buildings)
    - barn conversions for domestic dwellings (this doesn't include conversions for commercial use, such as holiday lets)

6.9 Natural England licenses are usually completed by an ecological consultant who must be suitably qualified to carry out the mitigation (for example, holds a licence to survey for bats) or by a consultant registered under the Bat Mitigation Class Licence and Bat Earned Recognition Licence schemes.

6.10 The licence application will require surveys to be no more than two seasons old prior to works commencing, therefore if works do not take place before 2026, top up surveys will be required.

7 References

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