

THE STABLES, COWFOLD ROAD, BOLNEY

ECOLOGICAL ASSESSMENT, Including PRELIMINARY ROOST

ASSESSMENT AND EMERGENCE SURVEY

LOCATION: TQ 25744 22411

Date: 19.06.26

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Introduction

Bakerwell Limited were commissioned by Cityzen to undertake an Ecological Assessment (EA) including a Preliminary Ecological Appraisal (PEA) and subsequent bat surveys to identify key constraints prior to the conversion of an outbuilding into a residential unit located on Cowfold Road, Bolney (hereafter referred to as 'The Site', see Figure 1.) The Site is located to the southwest of Bolney, West Sussex, accessible from Cowfold Road. The Site is approximately 0.12ha in size.

The PEA was carried out to assess the on-site habitats and assess the presence, or potential for the presence of protected species, including bats, and to provide recommendation to avoid harm to any species found during proposed renovation works. Recommendations for enhancement in line with the NPPF are also provided. The Site comprises two outbuildings to the rear of a residential property, a single storey garage B1, and the old stables B2, English oak *Quercus robur* are located within the red line boundary and a further two are located immediately off site to the rear of building B2. The appraisal and subsequent bat surveys have been commissioned to assess the feasibility of demolishing one of the buildings and replacing with a single-storey dwelling, while maintaining the original footprint of the building.

Methodology

Preliminary Ecological Appraisal

The site was visited on the 4th November 2025 by Georgia Robertson BSc and Michael Potter MSci from Bakerwell Ltd, to carry out a survey of habitats present on site, and Potential Roost Assessment (PRA) for bats alongside the PEA, as accredited agents under the licence of Fiona Baker (CL 18 - 2015 - 12847- CLS-CLS, level 2, (previous -20114224)).

An online desk study was carried out using Magic.gov.uk to identify protected sites, habitats and granted EPSML within the vicinity of the site.

Habitats were identified following the standard UK Habitat Classification (UKHab Ltd, 2023) during the PEA. The site was surveyed on foot and existing habitat and constraints for the works were noted and recorded on a map.

Bats

Bats are protected in law as laid out in Appendix 1. During the PRA, evidence and signs of potential for presence of bats were noted, including but not limited to: individuals or dead animals, droppings, tiny scratches, urine staining, flies, smoothing of surfaces around access points, a bat distinctive smell and in warm weather, any audible squeaking. Where droppings were found, they were sent off for DNA analysis to confirm species.

Table 1: Potential Bat Roosting Features and Evidence after (BCT, 2023)

Potential Bat Roosting Features (PRFs)	Signs Indicating Possible Use by Bats
In trees - Natural holes - Woodpecker holes - Cracks/splits in major limbs - Loose bark - Hollows/cavities - Dense epicormic growth - Bird and bat boxes	- Live, dead, or skeletons of, bats - Feeding remains e.g. insect wings - Tiny scratches around entry point - Urine staining around entry point - Bat droppings in or around entry points - Audible squeaking at dusk or in warm weather - Flies around entry point - Distinctive smell of bats - Smoothing of surfaces around cavity

In buildings • Gaps around windows / doors • Gaps between mortar / brickwork • Gaps under cracked / broken / missing ridge tiles, roof tiles and hanging tiles • Gaps under lead flashing and between roofing felt flaps • Large roof void • Gaps into soffits, barge boards, gable ends and under eaves	• Live, dead, or skeletons of, bats • Bat droppings in the roof void (particularly below ridge beam and apex) • Feeding remains e.g. insect wings • Tiny scratches around entry point • Urine staining around entry point • Bat droppings in or around entry points • Audible squeaking at dusk or in warm weather • Flies around entry point • Distinctive smell of bats • Smoothing of surfaces around cavity
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Roost Potential

The buildings were assigned a category of potential suitability as a bat roost ranging from none (no potential roosting features) to high and confirmed roost (where PRFs are present with evidence of use, observation or previous records of bats confirmed to be roosting).

Table 2: Categories for Bat Roosting Potential in Structures (BCT, 2023)

Potential Suitability	Description
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/ suitable shelter at all ground/ underground levels).
Negligible	No obvious habitat features on site likely to be used by roosting bats, however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. Limited connectivity to wider landscape with other bat habitats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. Does not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/ stable hibernation site, but could be used by individual hibernating bats). Limited connectivity to wider landscape with other bat habitats.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation- the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed). Connected to wider landscape with good foraging habitat.
High Potential	A structure 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 due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts e.g. maternity of classic cool/ stable

	hibernation site. Well connected to good foraging habitat and known roosts nearby.
Confirmed Roost category used in association with building potential	PRFs with evidence of use present, observation or previous records of bats confirmed to be roosting.

The trees were assigned a category of potential suitability of either none, further assessment required or PRF and confirmed roost.

Table 3: Categories for Bat Roosting Potential in Trees (BCT, 2023)

Potential Suitability	Description
None	Either no potential roost features (PRF)s in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present
Confirmed Roost category used in association with tree potential	PRFs with evidence of use present, observation or previous records of bats confirmed to be roosting.

The Bat Conservation Trust survey guidelines (2023) states that: “These categories are allocated irrespective of the presence of a roost. If a roost is confirmed to be present then the categorisation still stands (because other roosts may be present but undiscovered) but ‘confirmed roost’ should be added, e.g. Low- confirmed roost, Medium- confirmed roost, High- confirmed roost.”

During the PRA, torches, were used at ground level and internally at all accessible levels to look for features within buildings and trees suitable for roosting bats in compliance with the Bat Conservation Trust Survey Guidelines (2023) by the surveyors.

Other Species

The suitability of all on site habitats were assessed for their potential to support protected and notable species.

Bat Emergence Surveys

Dusk emergence surveys of buildings B1 and B2 were completed on 6th May 2026 and 27th May 2026 by the following surveyors: Fiona Baker, Georgia Robertson BSc, Lorna Scott MSc, Eli Shrubbs MSc, Hope Littler Bsc, and Sam Ashby ACIEEM.

Following BCT guidance (2023) Night Vision Aids (NVAs) and Echo Meter Touch Pros (EMTs) were used in all surveyor locations to ensure all available aspects of the buildings or tree were under

constant observation throughout the survey and that bat calls could be identified. Surveyor positions, emergence points, and flight paths of all species, were recorded on a plan (Figure 3) to provide important context.

The EMT automatically identifies calls in the field, using the Echo Meter Pro software. However, auto identification is designed for records of single bats in free flight and uncluttered environments and is not appropriate for roost emergence, multiple bats, cluttered environments or social calls. Calls were therefore further analysed using Sonobat.

Analysis of bat calls may not always provide a confident conclusion of the species recorded, due to the overlap in range of peak frequencies of some species and the way that calls may change within cluttered environments (Reason et al (2016). and other literature have shown that identifying *Myotis* species with confidence without observing species-specific behaviour is extremely difficult (Parsons and Jones 2000; Walters et al. 2012). Where a confident conclusion could not be drawn as to the species, calls were identified to genus level such as *Myotis* sp.

Review of footage recorded by NVAs is carried out as soon as possible after surveys and where possible by surveyors present during the emergence survey to ensure contextual information around site variations is given due considerations. Observation of emergence locations, either through on site observation or NVA footage review, will lead to further consideration of internal roost positions and deployment of internal cameras, and recording devices if appropriate.

Limitations

Due to the nature of the site and lack of access to the southern, eastern and western sides of the building, views to these aspects of the buildings were limited. Surveyors were briefed to note down any flight patterns of bats that originated from these aspects, and to record calls from activity in the vicinity.

Results

Site Wide Results

The site is located within a semi-rural setting to the southwest of Bolney. The north and west of the site are bound by roads and residential property and graveyard immediately to the west. A petrol station and industrial building are located to the east and residential property to the south.

Designated Sites Results

There are no statutory protected sites located on The Site. The High Weald Area of Outstanding Natural Beauty (AONB) approximately 850m east of The Site. Due to the size of the development and construction remaining within the current buildings footprint, the proposal is unlikely to influence habitats within the AONB.

There is no ancient woodland located on site. The closest area of ancient woodland is Three Corner Piece located approximately 320m south of The Site and is approximately 1.47ha in size. Due to the small scale nature of the works, it is highly unlikely that the proposal will impact this area of ancient woodland.

Site Description

The wider ownership boundary consists of a chapel converted into a residence with associated graveyard to the west of The Site with a Portuguese laurel *Prunus lusitanica* at the southern edge. Adjacent to the chapel on the eastern side is a gravel driveway ending in a turning circle. To the south of the chapel is a patio extending onto a vegetated garden, in which there is a large English oak *Quercus robur*. The construction footprint redline application boundary lies to the south of the wider ownership boundary, and consists of a garage and an outbuilding (buildings B1 and B2). Habitat Descriptions are detailed in Table 4.

Table 4: Habitat Descriptions

Habitat On Site	Description
Buildings	There are two buildings on site within the construction footprint. B1 is a semi-open garage with a slate tiled roof on top of corrugated tin with wooden walls. B2 is a stone barn with a tiled roof.
Habitat Off Site Within the Wider Ownership	Description
Cemeteries and Churchyards	The northwest of the site is has a cemetery with gravestones interspersed on grass.
Developed Land; Sealed Surface	B3 is a chapel that has been converted into a residence, within the wider ownership boundary. A hardstanding driveway leads into the site from Cowfold Road to the north.
Artificial Unvegetated, Unsealed Surface	The driveway leads to a gravel turning circle to the north of B1.

Table 4: Habitat Descriptions

Habitat On Site	Description
Vegetated Garden	There is an area of vegetated garden south west of B1 consisting primarily of amenity grassland with some ornamental planting.
Unvegetated Garden	There are two patios within the ownership boundary. The first is south of B3 and the second north of B2.
Trees	A large English oak tree of approximately 20m is situated adjacent to B2 and a Portuguese laurel is situated to the south of the graveyard.

Protected Species

Bats

Desk Study

The results of the online desk study recorded the closest record of a granted EPSML to be located approximately 500m south from the central OS grid reference (TQ 25744 22411) of the site on Chapel road. The granted licence 2020-49087-EPS-MIT is for the destruction of a resting place and damage to a breeding place. Species listed on the licence were common pipistrelle *Pipistrellus pipistrellus*, brown long-eared bat *Plecotus auritus* and Brandt's bat *Myotis brandtii*.

The site offers moderate suitability for commuting bats, supported by nearby woodlands and ponds that provide suitable foraging resources.

PRA

Potential roosting features were noted on buildings B1 and B2 within the construction footprint, that had the potential to support roosting bats.

T4 was not seen to have any PRFs, however it was not possible to view all aspects of the tree, or into the canopy from ground level. Off site trees were noted to have potential for roosting bats.

These results are detailed below in *Building Assessments* (Table 5) and *Tree Assessment* (Table 6).

Table 5: Building Assessments

Building Number	Description	Potential Roosting Features	Bat Roost Potential
B1	A semi-open garage with 3 walls and 2 large open voids. The roofing is slate tile on top of corrugated tin lined with roofing felt	Gaps underneath tiling across whole roof provide roosting space for crevice dwelling bats.	Moderate
B2	A brick walled barn. The timber roof is lined with roofing felt and covered with slate tiles.	- Gaps underneath tiling across whole roof provide roosting space for crevice dwelling bats. - There is a 2m gap in the soffit next to the front door on the northern aspect of the building. - The interior wooden joinery offers spaces for crevice dwelling bats and feeding perches.	Moderate to High

Table 6: Tree Assessment

Tree Number	Description	Potential Roosting Features	Bat Roost Potential
T4	A veteran English oak tree of approximately 20m in size.	There are no visible PRFs from ground level, however, the tree is too tall to see into the canopy.	FAR

Emergence and Re-entry Surveys

Due to the record of an EPSML licence for a common pipistrelle roost in relatively close proximity to the site, and the presence of suitable potential roosting features to B1 & B2 and foraging on site, further surveys were recommended as follows – two dusk emergence surveys between May and August in line with BCT (2023) guidance.

Results

Surveys were carried out in line with guidance (Collins 2023). Table 7 provides survey dates and weather conditions.

Table 7: Bat Survey Weather Conditions

Date of survey	Sunrise/ Sunset time	Start time (BST)	End time (BST)	Cloud Cover (%)	Temp (°C)	Wind	Rainfall
07.05.26	20:30	20:15	22:00	100	12	1-3mph	0
27.05.26	21:00	20:45	22:30	10	21	8-12mph	0

No bats were seen to emerge or re-enter the potential roosting features within buildings B1 or B2 during either of the surveys.

Activity in the wider area was recorded from a low number of common pipistrelle, soprano pipistrelle, serotine, noctule and *Myotis* species. Pipistrelle, noctule and *Myotis* activity was recorded within the expected emergence times for these species, indicating that there may be roosts in the vicinity.

Although not all aspects of the buildings were covered, surveyors were briefed to look out for flight paths which were potential emergences from unseen aspects, and to record this on survey forms. No such flight paths were observed during either survey. As low bat activity was recorded across both surveys we are confident that roosting bats were not present, however, due to the adjacent trees with bat roost potential a precautionary approach as detailed below will be followed.

Other Species

There was no evidence of other notable or protected species found on site. Due to construction remaining within the original hardstanding footprint of the building, and lack of suitable habitat, the development is unlikely to have any significant impact on other protected species.

Mitigation Measures

Bats

During the PRA, buildings B1 and B2 were classified as having moderate potential for roosting bats, however no bats were seen to emerge or re-enter buildings B1 or B2 during either of the surveys.

No flight paths were observed from unseen aspects of either building, however, due to the limitations in view, the suitable features present on the buildings and adjacent trees and activity recorded during emergence periods, the following methodology will be followed:

- A toolbox talk will be delivered to contractors in advance of works commencing
- The dismantlement of any PRFs will be supervised by a suitably qualified ecologist, and undertaken by hand.

- In the unlikely event a bat is found during works, all works will cease and a Natural England European Protected Species Licence will be obtained – Natural England does not allow EPSML to be obtained on a precautionary basis.

Precautionary Working Methodology

Site-specific best practice procedures will be followed to ensure that all activities are undertaken in a manner which safeguards bats throughout the construction period.

All works will be conducted during daylight hours to minimise risk to commuting and foraging bats, and so that light spill at night is avoided. Work impacting the suitable roosting features will be avoided during the most sensitive periods May – June and December – January will also be avoided.

Any security lights will be fitted with a motion sensor and timed to be on for as short a time as possible, to reduce light spillage.

The proposal as understood at the time of writing will not result in the loss of trees. The following advice is given to inform design, with the objective of avoiding or minimising impacts to trees:

- The mitigation hierarchy should be used when considering the design, to avoid impacts to bats (and other wildlife) where possible.
- Where the design cannot rule out impacts to trees directly or indirectly, the design should demonstrate how impacts will be minimised. Examples of direct impacts are felling, cutting or obstruction of bat roost features, indirect impact examples are light spillage, noise and disturbance.
- If modifications of the construction design result in being unable to retain T4 then this represents a direct impact, and further detailed surveys (aerial or emergence) will be necessary to confirm whether the feature supports roosting bats.

If works are not completed by autumn 2027 then updated surveys will be necessary, to ensure that no roosting bats are present at the time, and to inform any further mitigation requirements.

Enhancement Recommendations

Measures are included here to enhance the site for wildlife to meet the National Planning Policy Framework requirements.

As bats and birds are the most likely species to make use of the location, these are the focus of measures.

Bats

Bat roosting opportunities will be included in the replacement building, consisting of access tiles to allow roosting between the tiles and roofing felt. Type 1F breathable roofing felt or Bat Safe certificated felt will be used, since bats can be caught in other types of felt which contain fibres running through them.

Two external bat boxes (Schwegler 1FF or similar) or bat bricks (Bird Box Bat Brick or similar) incorporated into the walls of the new building will be used. An additional box will be placed on the existing off site residential building prior to works commencing. All bat boxes or bricks will be installed at a minimum height of 3-4m at a south, south-east or south-westerly aspect.

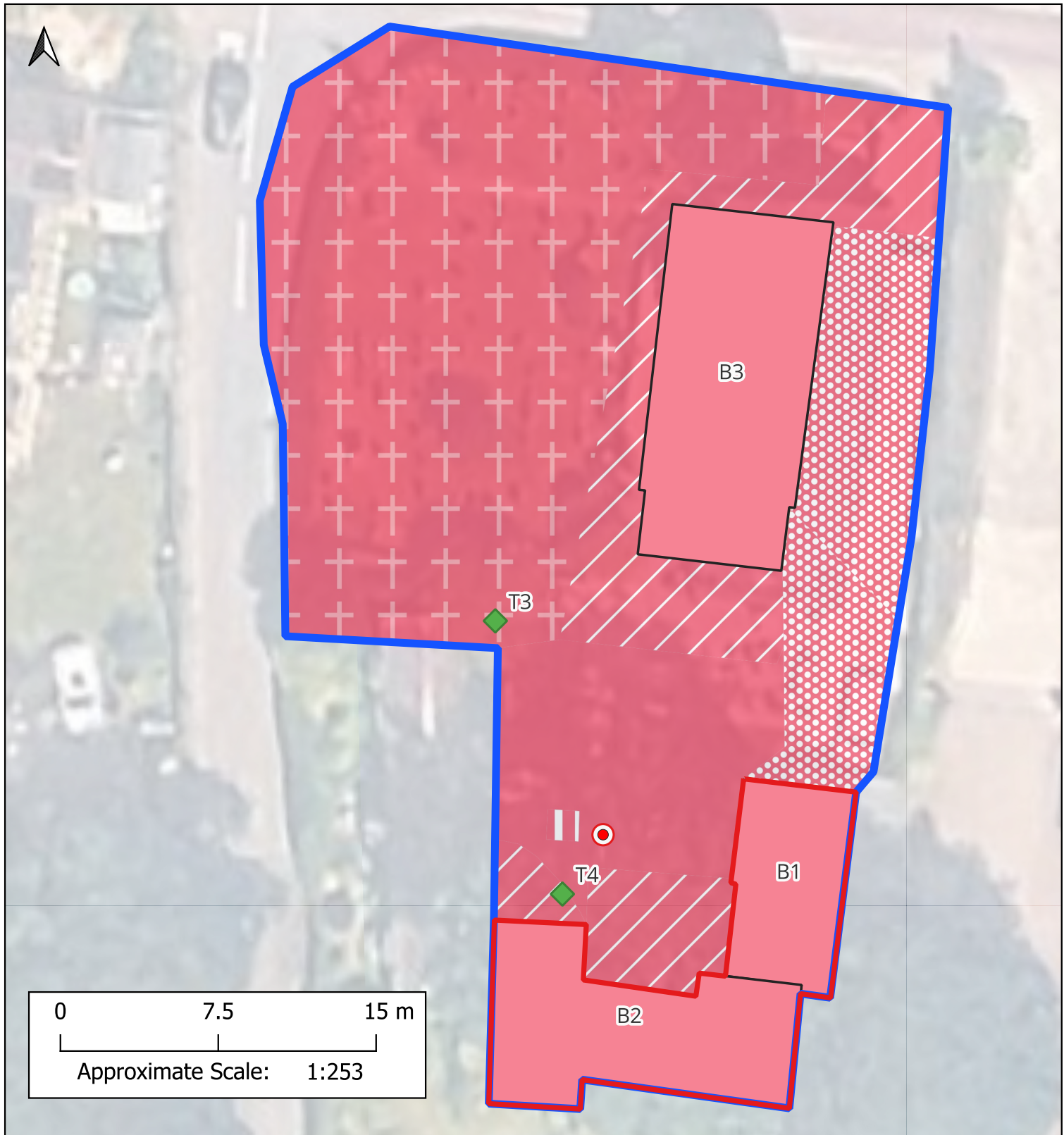
Birds

Two woodcrete bird boxes with a 32mm entrance hole (Schwegler 1B or similar) or bird brick (Bird Brick Bird Box or similar) will be installed on or integral to the walls of the new building. All bird boxes will be installed at least 2m high on a northern or eastern aspect.

Conclusion

The survey found that the application site consists of buildings and hardstanding with the immediate location being a residential home, garden, outbuildings and hardstanding. Potential for bats was identified, but surveys found no roosting bats in the buildings within the red line application boundary. However, potential for off site roosting has been identified and proportionate appropriate precautionary measures to mitigate the potential for impacts have been given in this report. Provided these are followed the proposal will be compliant with known legislation.

In addition, recommendations for ecological enhancements have been given.



Key

- Ownership Boundary
- Construction Footprint
- Buildings u1b
- Artificial unvegetated, unsealed surface u1c
- Cemeteries and churchyards
- Developed land; sealed surface u1b
- Unvegetated garden
- Vegetated garden
- ◆ Tree 200

Do Not Use for Construction Detail

Figure 1: UK Habitat Classification

Site: The Stables, Bolney

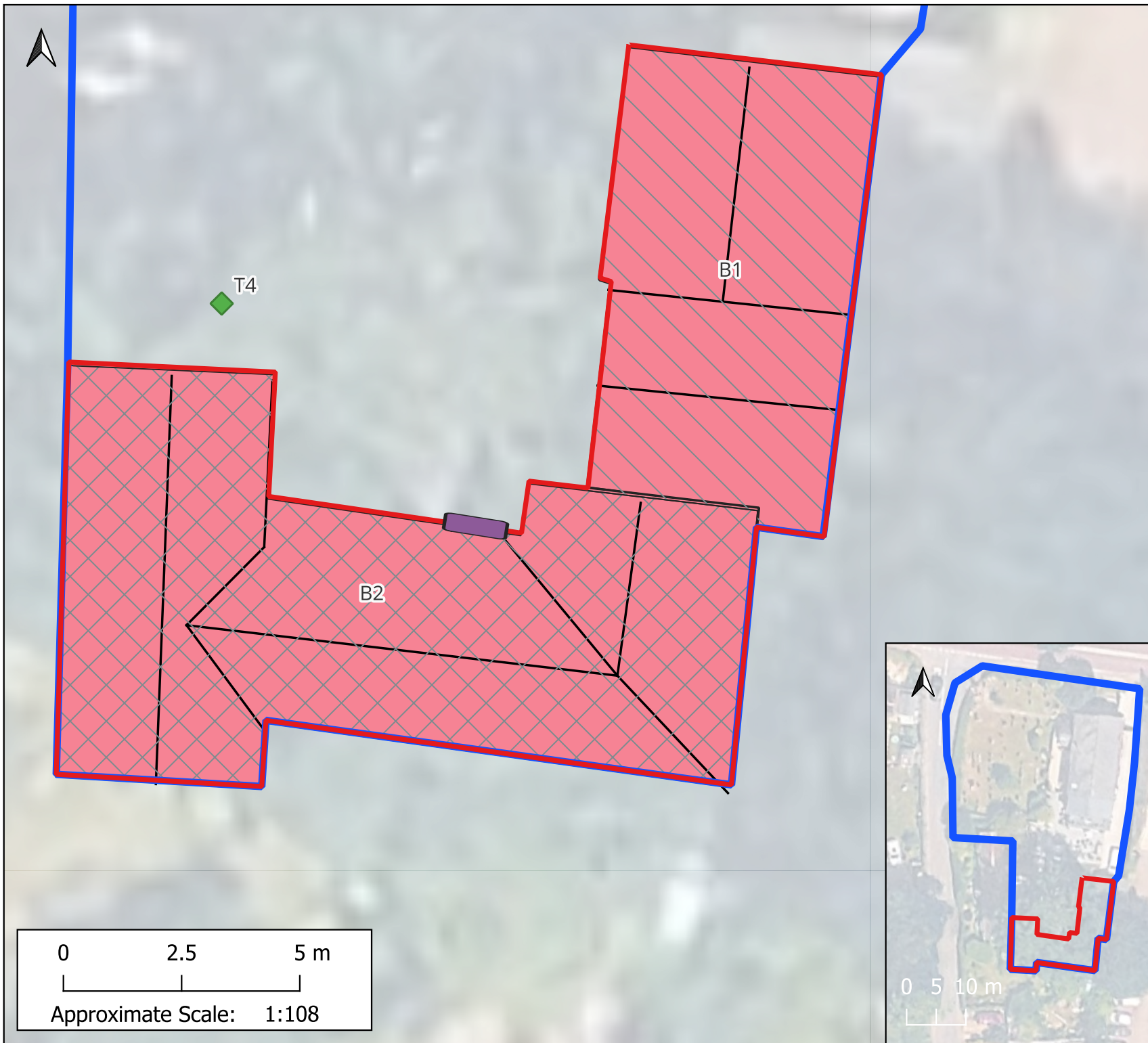
Date: June, 2026

Job: ES 816

Author/Reviewer: JP / GR

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Key

-  Ownership Boundary
-  Construction Footprint
-  Tree - Further Assessment Required

Potential Roost Features

-  Slate Tiling
-  Slate Tiling and Interior Joinery
-  Gap in Soffit
-  Buildings

Figure 2: Preliminary Roost Assessment

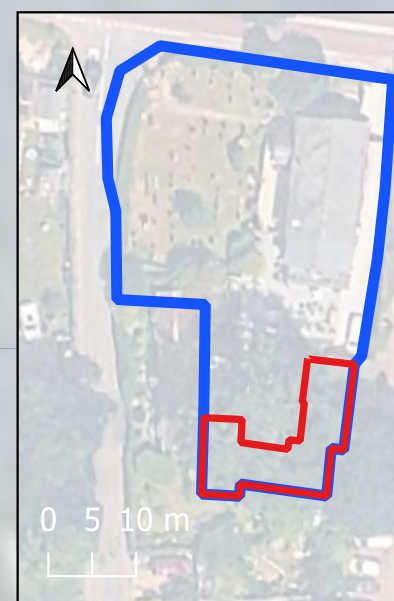
Site: The Stables, Bolney
Date: June, 2026
Job: ES 816
Author/Reviewer: JP / GR

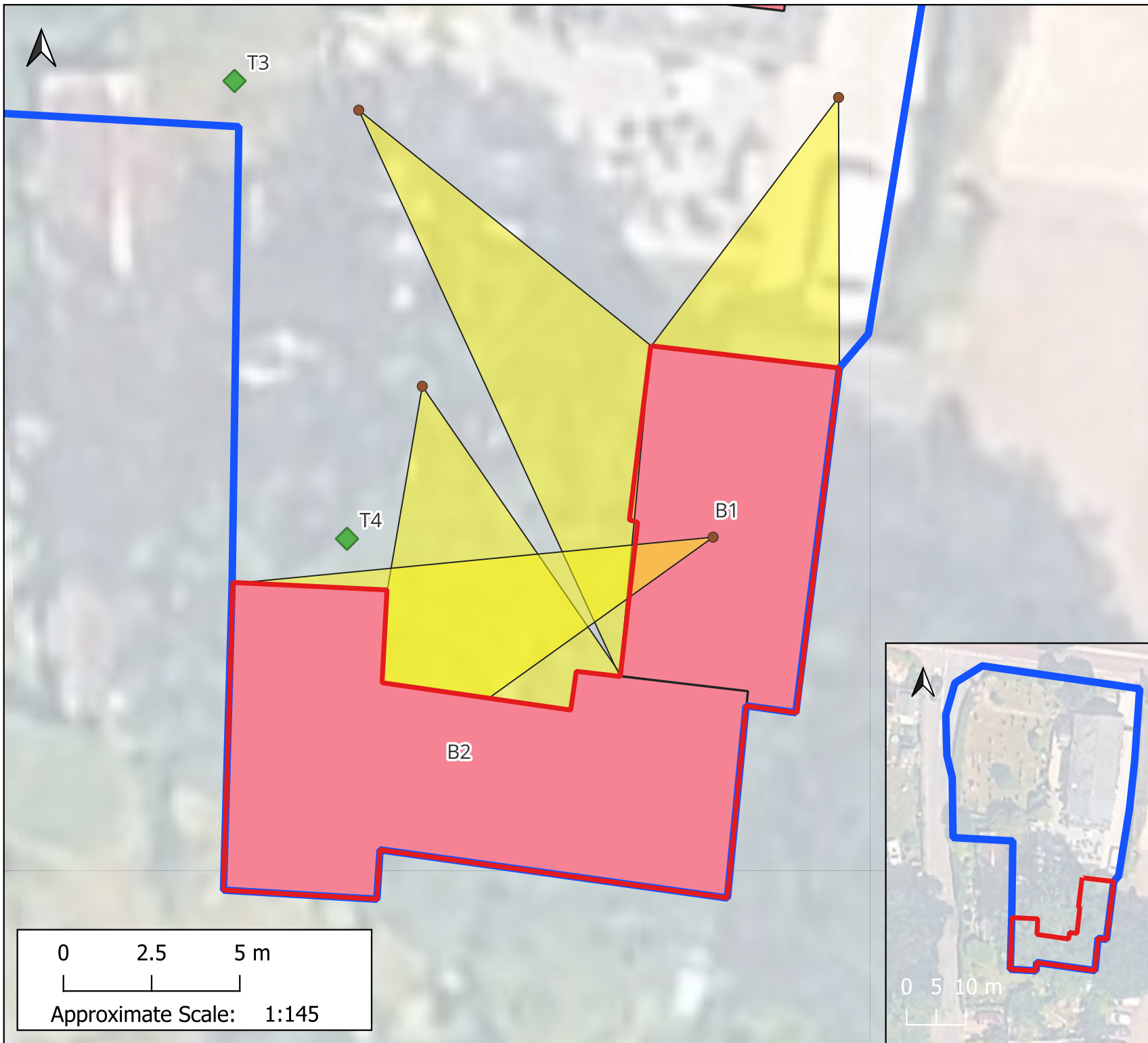
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Key

-  Ownership Boundary
-  Construction Footprint
-  Buildings
-  Tree - Further Assessment Required
-  Surveyor positions
-  Line of Vision

Figure 3: Emergence Survey Results

Site: The Stables, Bolney
Date: June 2026
Job: ES 816
Author/Reviewer: JP / GR

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Reason, P.F., Newson, S.E. and Jones, K.E. (2016). Recommendations for using automatic bat identification software with full spectrum recordings. Available from: <https://www.bats.org.uk/news/2016/04/recommendations-for-using-automatic-bat-identification-software> (Accessed August 2023)

Appendix 1. Relevant Protected Species Legislation

Species	Legal Protection
Bats	All British species of bats and their resting and breeding sites have legal protection under UK and European law (Wildlife and Countryside Act (WCA) 1981 (as amended), and the Conservation of Habitats and Species Regulations 2019 (Amendment) (EU Exit). It is an offence to: • capture, kill, disturb or injure • damage or destroy a breeding or resting place • obstruct access to their resting or sheltering places • possess, sell, control or transport live or dead individuals, or parts of them

Appendix 2. Site Photographs

Showing bat roost potential

Building 1





Building 2







Tree 4



