

Thickets, Ansty, West Sussex

Bat Survey and
Assessment

Mr. Harrowell

October 2025

Report ref.:
HWL101/R001V1

Sussex office

Partridge Green | West Sussex
t. 07557 519 118
e. sussex@babec.co.uk
w. www.babec.co.uk

Hertfordshire office

Furneux Pelham | Hertfordshire
t. 07468 598 295
e. hertfordshire@babec.co.uk
w. www.babec.co.uk

Document Control

Author	Jack Hughes BSc
Report title	Thickets, Ansty, West Sussex
Project number	HWL101
Report number	R001

Issue	Reviewed by	Approved by	Issue Date
Version 1	Tim Buckland BSc MSc MCIEEM	Jon Bannon BSc MSc MCIEEM	15 October 2025

Disclaimer

Babec Ltd has prepared this report for the sole use of the commissioning party in accordance with the agreement under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by Babec Ltd. This report is confidential and may not be disclosed by the commissioning party nor relied upon by any other party without the prior and express written agreement of Babec Ltd.

The recommendations made within this report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by Babec Ltd has not been independently verified by Babec Ltd, unless otherwise stated in this report. The methodology adopted and the sources of information used by Babec Ltd in providing its services are outlined in this report. The work described in this report is based upon the conditions encountered and the information available during the production of the report. The scope of this report and the services are accordingly factually limited by these circumstances.

Babec Ltd reserve the right not to undertake or be obligated to advise any person of any change in any matter affecting this report, which may come or be brought to Babec Ltd' attention after the final issue date of the report. Certain statements made in this report are not historical facts may constitute estimates, projections or other forward-looking statements and even though they are based on reasonable assumptions as of the date of this report, such forward-looking statements by their nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted. Babec Ltd specifically does not guarantee or warrant any estimate or projections contained in this report.

Copyright

© This report is the copyright of Babec Ltd.
Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

Contents

1. Summary	4
2. Introduction	6
3. Methods	7
4. Results and interpretation.....	11
5. Assessment.....	17
6. Recommendations.....	19
Appendix A Figures	22
Appendix B Screenshots from the Night Vision Aids (NVAs)	23
Appendix C DNA Analysis of Bat Droppings.....	25
Appendix D Results of the Static Monitoring.....	26
Appendix E Temperature and Humidity Results	31
 FIGURE 1	 LOCATION OF THE PROPERTY
FIGURE 2	RESULTS OF THE EXTERNAL BUILDING INSPECTION
FIGURE 3	RESULTS OF THE INTERNAL BUILDING INSPECTION
FIGURE 4	SURVEY LOCATIONS DURING THE EMERGENCE SURVEYS
FIGURE 5	RESULTS OF THE SECOND ROOST CHECK
FIGURE 6	RESULTS OF THE THIRD ROOST CHECK
FIGURE 7	MITIGATION AND ENHANCEMENT MEASURES
FIGURE 8	PHOTOGRAPHS

1. Summary

- 1.1.1** Mr Harrowell intends to apply for planning consent to alter and extend his property in Ansty, West Sussex. The proposed development comprises the conversion of an existing roof void into a habitable room and the installation of a flat-roof dormer on the rear elevation of the main property, altering an existing single-storey extension on the northern elevation of the property to a two-storey extension with a pitched roof, and the construction of a small roof over the front porchway.
- 1.1.2** It is understood that ecological advice was sought after a bat was seen flying in the roof void of the property by an architect on 19 June 2025.
- 1.1.3** Babec Ecological Consultants were commissioned in July 2025 to undertake a Preliminary Bat Roost Assessment (PBRA) and three emergence surveys of the property and provide a report detailing the findings. The brief was subsequently extended to include checks of the roof void for bats or evidence of bats, and the deployment of static monitoring devices within the roof void.
- 1.1.4** The aim of the surveys was to characterise the species and roost type of the known bat roost within the roof void and determine the presence or likely absence of further bat roosts within the property. The objective was to provide appropriate recommendations for mitigation to minimise the impact of the proposed development on roosting bats to allow the works to proceed in accordance with the relevant legislation and planning policy relating to roosting bats.
- 1.1.5** All surveys were undertaken by appropriately licensed and experienced ecologists between July and September 2025, following good practice guidelines¹. Following the initial building inspection, no further access to the neighbour's roof void was permitted. Permission was also refused to permit the southern gable end of the neighbour's property to be surveyed during the emergence surveys. No other limitations were recorded.
- 1.1.6** The results of the surveys indicate the presence of a brown long-eared bat day roost within the roof void of the property (Roost 1) and a brown long-eared bat maternity roost within the adjacent roof void in the neighbour's property (Roost 2). Roost 1 is considered to be of site value only, and Roost 2 is considered to be of local value².
- 1.1.7** All species of bat and their roosts are strictly protected by legislation, including the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Development affecting bats is also subject to a licensing procedure administered by Natural England.
- 1.1.8** Without mitigation and licensing, the proposed development would contravene the legislation set out above. This is because the proposed development would destroy a brown long-eared bat day roost located in the roof void of the property (Roost 1), could harm individual bats, and could disturb a brown long-eared bat maternity roost in the neighbour's roof void (Roost 2). However, by using established mitigation techniques, it should be possible to avoid harm to individual bats, minimise disturbance to brown long-eared bats within the maternity roost (Roost 2), and maintain the population of brown long-eared bats at a favourable conservation status.
- 1.1.9** Appropriate mitigation and licensing measures have been provided in Section 6 of this report, which include:

¹ Collins (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edn). The Bat Conservation Trust, London.
² Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield.

- Gaining a protected species licence from Natural England once planning permission has been granted.
 - The creation of a new roof void in the altered northern extension that will compensate for the loss of the brown long-eared bat day roost within the existing roof void of the property (Roost 1), which will measure at least 4.75m (l) x 4.75m (w) x 1.4m (h).
 - Incorporating at least four access points under the roof/ridge tiles on the altered northern extension and, if possible, one access point on the northern gable end of the altered northern extension, which leads into the new roof void.
 - Installing two bat boxes on nearby trees prior to works commencing.
 - Removing confirmed and suitable roosting features from the property outside of the bat hibernation and maternity period.
 - Providing a toolbox talk to contractors prior to work commencing.
 - Supervising the removal of confirmed and suitable roosting features from the property and moving any bats captured to one of the tree-mounted bat boxes.
 - Use of hessian-backed bituminous Type 1F felt (or a membrane that has a snagging propensity certificate) to line the roofs of the loft conversion, the altered northern extension, and the roof above the front porchway.
- 1.1.10** Providing these mitigation measures are fully adopted, the proposed development should be compliant with the relevant legislation relating to roosting bats.
- 1.1.11** Central and local government policy also encourages the incorporation of ecological enhancements into development proposals. Retaining the tree mounted bat boxes after the proposed development works have been completed would enhance the site for roosting bats in accordance with national and local policies.

2. Introduction

2.1 Development background

2.1.1 Mr Harrowell proposes to alter and extend his semi-detached property known as Thickets, which is hereafter referred to as the 'property'.

2.1.2 The proposed development comprises:

- the conversion of an existing roof void into a habitable room and the installation of a flat-roof dormer on the rear elevation on the main property (hereafter referred to as the 'loft conversion'),
- the alteration of an existing single-storey extension on the northern elevation of the property to a two-storey extension with a pitched roof (hereafter referred to as 'alterations to the northern extension'), and ,
- the construction of a small roof over the front porchway.

2.1.3 The proposals above are hereafter referred to as 'the proposed development'.

2.1.4 A detached timber garage, which is located to the northwest of the property, will be unaffected by the proposed development.

2.1.5 The property is located along Deaks Lane, in the village of Ansty in West Sussex (What3Words:///focus.humans.zebra), see Figure 1 in Appendix A.

2.1.6 It is understood that Mr Harrowell is in the process of preparing an application for planning permission for the proposed development for submission to Mid Sussex District Council.

2.1.7 It is also understood that ecological advice was sought after a bat was seen flying in the roof void of the property by an architect on 19 June 2025.

2.2 The brief and objectives

2.2.1 Babec Ecological Consultants were commissioned in July 2025 to undertake a Preliminary Bat Roost Assessment (PBRA) and three emergence surveys of the property and provide a report detailing the findings. The brief was subsequently extended in July 2025 to include additional checks of the roof void for bats or evidence of bats, and the deployment of static monitoring devices within the roof void.

2.2.2 The aim of the surveys was to characterise the species and roost type of the known bat roost within the roof void and determine the presence or likely absence of further bat roosts present within the property. The objective was to provide appropriate recommendations for avoidance and mitigation measures to minimise the impact of the proposed development on roosting bats to allow the works to proceed in accordance with the relevant legislation and planning policy relating to roosting bats.

3. Methods

3.1 Personnel

- 3.1.1** The Preliminary Bat Roost Assessment (PBRA), roost checks and analysis of static monitoring devices in the roof void were undertaken by Tim Buckland BSc MSc MCIEEM. The emergence surveys, assessment of Night Vision Aid (NVA) video footage and bat call analysis were undertaken by Tim with assistance from Jack Hughes BSc. Tim holds a Natural England level 2 class licence for bats (registration number 2015-11006-CLS-CLS), is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and has over 14 years' professional experience in conducting surveys and assessments for bats. Jack is a qualifying member of CIEEM and has two years' professional experience surveying for bats.
- 3.1.2** This report has been written by Jack and has been reviewed by both Tim Buckland and Jon Bannon BSc MSc MCIEEM. Tim and Jon both have over 14 years of experience undertaking these types of assessments.

3.2 Desk study

- 3.2.1** In the first instance, aerial photographs were examined to assist in understanding the local context of the property, in particular, to identify its connectivity with the surrounding habitat.
- 3.2.1** The Multi-Agency Geographical Information for the Countryside (MAGIC)³ interactive map was used to search for Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs) designated for bat species within a 5km radius of the property. In addition, records of granted protected species licences for bats within the last ten years were searched within a 2km radius of the property.
- 3.2.2** Records of bat roosts within a 2km radius of the property were obtained from the Sussex Biodiversity Records Centre⁴.

3.3 Building inspection

- 3.3.1** An internal and external inspection of the property and the semi-detached neighbour's property was undertaken on 2 July 2025 to look for bats or secondary evidence of bats, and to record the presence of potential roosting features (PRFs) and potential access points for bats. The property and the neighbour's property were then assessed and placed into a category (negligible, low, moderate, or high) for their level of potential to support roosting bats. The building inspection was undertaken in accordance with good practice guidelines⁵.

3.4 Emergence surveys

- 3.4.1** Three emergence surveys of the property were undertaken following the methods set out in the Bat Conservation Trust's good practice guidelines⁶.
- 3.4.2** During each survey visit, emergence surveys were conducted from two survey locations, which were carefully chosen to ensure a good view of all PRFs and access points on the property.

3 MAGIC (2025). Map and Geographic Information Centre Interactive Map Tool. <http://magic.gov.uk>. Accessed 16 September 2025.

4 Sussex Biodiversity Records Centre (2025). *Land at Thickets, Deaks Lane, Ansty + 2km radius. SxBRC/25/431*. Dated 1 September 2025.

5 Collins (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edn). The Bat Conservation Trust, London.

6 Collins (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edn). The Bat Conservation Trust, London.

- 3.4.3** Emergence surveys were conducted from each survey location by a surveyor with a night vision aid (NVA) paired with a full-spectrum Batlogger detector. NVAs comprised a Canon XA series video camera equipped with one or more infrared lamps and torches. An example of the equipment used during emergence surveys is provided in Photo 1, below.
- 3.4.4** Surveyors watched PRFs directly from the start of the survey until ambient light levels were too low for PRFs to be clearly visible, which was approximately 20 minutes after sunset. Surveyors then watched PRFs using a 7" high-definition screen attached to their NVA for the remainder of the survey. Surveyors captured an NVA screenshot at the start and end of each emergence survey (i.e., at the lightest and darkest point of the survey), which are presented in Appendix B.
- 3.4.5** Video footage was recorded for the full extent of each survey, and recorded footage was reviewed following each survey when considered appropriate, such as if a bat roost was recorded or if the surveyor suspected the possible presence of a roost. All bat echolocation calls were analysed using Elekon BatExplorer software.
- 3.4.6** All emergence surveys commenced 15 minutes before sunset and ended 90 minutes after sunset.



Photo 1. (1) Canon XA series video camera, (2) 7" high-definition screen attached to NVA (used at attended survey locations only), (3) Infrared floodlamp, (4) Batlogger-M, (5) Thermometer.

- 3.4.7** Weather conditions during each survey visit were recorded, including rain, wind strength, cloud cover, and maximum and minimum temperatures. The dates of the emergence surveys and weather conditions recorded during the surveys are provided in Table 1.

Table 1. Date of emergence surveys and weather conditions.

Visit No	Date	Temp (°C)		Cloud cover* (Start-End)	Rain	Wind** (Start-End)	Overall suitability for survey
		Min	Max				
1	02/07/2025	16.3	19.7	0-0	None	1-1	Optimal
2	07/08/2025	18.0	19.0	8-8	None	0-3	Optimal
3	09/09/2025	14.1	17.5	6-4	None	0-0	Optimal

*Measured in Oktas.

**Measured on the Beaufort scale

3.5 Roost checks and static monitoring

- 3.5.1** Seven checks of the roof void within the property were undertaken between July and September 2025 to check for the presence of roosting bats and for fresh bat droppings. To aid in the detection of fresh bat droppings, a large plastic sheet ('tell-tale') was deployed in the roof void during the first roost check and inspected during the subsequent roost checks. After each roof void check, any fresh droppings were removed from the tell-tale and any areas not covered by the tell-tale so that fresh bat droppings could be identified on future checks.
- 3.5.2** To gather additional information on the level of bat activity and thermal conditions within the roof void, static monitoring devices were installed throughout the monitoring period. These included an Elekon Batlogger A+ static monitoring detector, a Spypoint Force Dark trail camera and an EL-USB-2-LCD EasyLog Temperature and Humidity data logger.
- 3.5.3** The Batlogger A+ was deployed on six occasions between 24 July and 1 September and programmed to continuously record bat calls automatically (using the 'Crest Adv' algorithm) throughout the day over five consecutive nights. All echolocation calls recorded by the Batlogger A+ were analysed using Elekon Batexplorer software.
- 3.5.4** The trail camera was deployed between 24 July and 9 September and set to high sensitivity and programmed to record continuously when movement was detected. Videos from the trail camera were analysed for bat activity.
- 3.5.5** The EL-USB-2-LCD EasyLog Temperature and Humidity data logger was deployed between 24 July and 9 September to monitor the temperature and humidity throughout the roost checks.

3.6 Limitations of survey methods

- 3.6.1** Species data collated during the desk study is mainly derived from records submitted by consultants, members of the public and ad-hoc surveys undertaken by volunteers. Therefore, it should not be taken as a definitive list of the protected species that may occur in the local area.
- 3.6.2** Following the initial inspection of the neighbour's roof void, further access to the void was refused by the neighbour. Therefore, no further checks of the neighbour's roof void could be completed. Furthermore, access permission to survey the southern gable end of the neighbour's property was

also refused so this was not included in the emergence surveys. Although the roof tiles on the neighbour's property were visible, the southern gable end was not and so it was not possible to confirm the number of bats emerging from the property (Roost 2). While the neighbouring property will not be directly affected by the proposed development, this is considered to be a limitation to the surveys. Measures to mitigate indirect effects on bat roosts within the neighbouring property have therefore been included in the recommendation section of this report.

- 3.6.3** The trail camera deployed in the property during the static monitoring could only be positioned to face one end of the roof void; therefore, small sections of the roof void could be viewed. This is not considered to have been a significant limitation as only a small number of fresh droppings were recorded during the roost checks, indicating a low number of bats were roosting in the void during the monitoring period, which correlates with the video footage recorded by the trail camera.
- 3.6.4** It should be noted that whilst every effort has been made to provide a comprehensive assessment of the use of the property by roosting bats, no investigation can ensure the complete characterisation and prediction of the natural environment. The results of the surveys will become less reliable as time progresses. As a general rule, the results of the surveys should not be relied upon after 18 months from the date of the last bat survey.

4. Results and interpretation

4.1 Desk study

4.1.1 Thickets is located along Deaks Lane, in the rural village of Ansty in West Sussex. The surrounding landscape consists of a mosaic of arable and pasture with blocks of woodland that are well connected by hedgerows. The property is bordered by other residential properties with amenity gardens and trees connecting to a large woodland block (Inholms Wood) to the west. Overall, the habitat surrounding the property is assessed as being of high quality for foraging and commuting bats.

4.1.2 No SACs or SSSIs designated for bat species were identified within 5km of the property⁷, however, one record of a Natural England granted protected species licence for bats was identified within 2km of the property, detailed in Table 2 below.

Table 2. Granted Natural England Protected Species Licences for bats within 2km of the property⁸.

Natural England Licence reference	Bat species listed on the licence	Activities listed on the licence	Licensing period	Minimum distance to the property (km)	Bearing
2020-44929-EPS-MIT	Brown long-eared (<i>Plecotus auritus</i>) Common pipistrelle (<i>Pipistrellus pipistrellus</i>) Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	Destruction of a resting place	01/03/2020 – 30/04/2026	2.0	2022

4.1.3 Sussex Biodiversity Records Centre hold no records of bat roosts within the property; however, they do hold records of bat roosts within 2km of the property⁹, as shown in Table 3. These include a brown long-eared bat maternity roost in the roof of a house 30m to the southeast. Note that only records from the last ten years have been included, and where multiple records for the same location exist, these have been combined into a single entry.

Table 3. Bat roost records within 2km of the property¹⁰.

Species	Detail	Location	Approx. distance to property (km)	Year
Brown long-eared bat (<i>Plecotus auritus</i>)	Two roost visits, one in 1994 and the other in 2015 recorded a dead infant and droppings in the building (maternity roost).	4 Lavender Cottages, Ansty	0.03	1994 and 2015

⁷ MAGIC (2025). Map and Geographic Information Centre Interactive Map Tool. <http://magic.gov.uk>. Accessed 16 September 2025.

⁸ MAGIC (2025). Map and Geographic Information Centre Interactive Map Tool. <http://magic.gov.uk>. Accessed 16 September 2025.

⁹ Sussex Biodiversity Records Centre (2025). *Land at Thickets, Deaks Lane, Ansty + 2km radius. SxBRC/25/431*. Dated 1 September 2025.

¹⁰ Sussex Biodiversity Records Centre (2025). *Land at Thickets, Deaks Lane, Ansty + 2km radius. SxBRC/25/431*. Dated 1 September 2025.

Species	Detail	Location	Approx. distance to property (km)	Year
Common pipistrelle (<i>Pipistrellus pipistrellus</i>) Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>) Myotis sp. (<i>Myotis sp.</i>)	Pipistrelle and myotis bat droppings were recorded during a building inspection and three bat roosts were recorded during bat surveys (unspecified roosts).	Brew House, Ansty	1.20	2019
Brown long-eared Natterer's bat (<i>Myotis nattereri</i>)	Four brown long-eared bats and one Natterer's bat were recorded during a bat box check in 2015 and 2020, respectively (unspecified roosts).	Pond Lye, Ansty	1.90	2015 and 2020
Brown long-eared	One bat was recorded during a building inspection (unspecified roost).	Pond Lye, Ansty	1.90	2017

4.2 Building inspection

4.2.1 The results of the building inspection are provided below and are illustrated in Figures 2 and 3 in Appendix A. Photographs of the property are shown in Figure 8 in Appendix A.

Property

4.2.2 The property is a semi-detached cottage built circa 1920s and features single-storey extensions on the northern and eastern elevations. The northern extension comprises a room-in-roof, while the eastern extension comprises a flat roof which connects to a single-storey outbuilding. The roofs of the property, northern extension and outbuilding are pitched, clad with clay tiles and lined with bitumen felt. A roof void is present above the main the property that measures approximately 6m (l) x 6m (w) x 2.75m (h) and is separated from a similarly sized roof void in the neighbour's property by a brick party wall and chimney stack. The ceiling joists are insulated with fibreglass insulation and are partially boarded.

4.2.3 No bats were recorded within the roof void during the building inspection; however, approximately 60 bat droppings were recorded scattered on the floor below the ridge, mostly at the party wall and gable end wall.

4.2.4 Several high-quality PRFs were recorded, including gaps under roof tiles of the cottage and outbuilding, gaps under ridge tiles on the cottage, and a gap between the wall and barge board on the northern gable end of the cottage. Inside the roof void, suitable access points for bats are present between the blockwork and the roof on the northern gable end.

4.2.5 Overall, the property was confirmed as a bat roost (Roost 1) and was assessed as having high potential to support a maternity roost and further day or transitional roosts, and low potential to hibernation, feeding or night roosts.

Neighbour's roof void

4.2.6 A roof void is present within the neighbour's property that measures approximately 6m (l) x 6m (w) x 2.75m (h), which is separated from the roof void in Thickets by a brick party wall and chimney stack. The ceiling joists are insulated with fibreglass insulation and are partially boarded.

Spray foam insulation is present between the rafters of the void and in gaps above the party wall between the Thickets property, blocking access to bats moving between the roof voids.

- 4.2.7** At least eight brown long-eared bats were clustered along the ridge at the centre of the void, and at least two brown long-eared bats were clustered along the ridge at the southern gable end of the void, confirming the neighbour's roof void as a brown long-eared bat maternity roost (Roost 2). Between 100-150 fresh bat droppings were recorded scattered on the floor below the ridge, which were confirmed by DNA analysis to comprise brown long-eared bat droppings (Roost 2, see Appendix C).
- 4.2.8** Gaps under the roof tiles are present which provide suitable roosting crevices for bats between the roof tiles and bitumen felt, however, access to the roof void from these gaps is not possible as spray foam insulation is located onto the bitumen felt. There is a gap between the wall and barge board on the exterior of the southern gable end, however, spray foam insulation on the interior of the roof void mostly blocks bats accessing the void through this gap. A small circular hole (4cm x 4cm) in the spray foam insulation is located at the southern gable end which is considered likely to provide access for bats into and out of the roof void. The circular hole is shown as an orange triangle in Figure 3 in Appendix A.

4.3 Emergence surveys

- 4.3.1** No bats were recorded emerging from the property during any of the emergence surveys; however, long-eared bats were observed flying from the southern gable end of the neighbouring property to the trees to the north on all three survey visits.
- 4.3.2** Incidentally recorded bat activity was predominantly from commuting and foraging common pipistrelles, though occasional activity from soprano pipistrelles, long-eared bats (*Plecotus sp.*), serotine (*Eptesicus serotinus*) and Myotis bats (*Myotis sp.*) was also recorded.
- 4.3.3** The survey locations during the emergence surveys are shown in Figure 4 in Appendix A.

4.4 Roost checks and static monitoring

Roost checks

- 4.4.1** Of the seven roost checks undertaken of the roof void within the property, bats were only recorded on checks 2 and 3.
- 4.4.2** During the second roost check on 30 July 2025, three brown long-eared bats were recorded roosting together along the ridge at the centre of the void. Approximately 30 fresh bat droppings were recorded on the tell-tale at the base of the chimney stack, and an additional 30 fresh bat droppings were recorded on the floor at the northern gable end of the void. Dropping samples collected were confirmed by DNA analysis to comprise brown long-eared bat droppings (Roost 1, see Appendix C). Fresh urine stains were also recorded on plastic sheeting near the chimney stack. The results of the second roost check are shown in Figure 5 in Appendix A.
- 4.4.3** During the third roost check on 7 August 2025, six fresh long-eared bat droppings were recorded beneath the ridge at the gable end, and four fresh long-eared bat droppings were scattered on the tell-tale. The results of the third roost check are shown in Figure 6 in Appendix A.

Static monitoring

- 4.4.4** Brown long-eared bats were recorded on the trail camera roosting and flying in the roof void of the property between 26 and 31 July 2025, and on 5 August 2025. Brown long-eared bats were observed roosting and grooming on the felt, along the ridge beam and on the chimney stack. The

peak count was six brown long-eared bats roosting separately within the roof void on 26 July 2025. Although the precise egress point from the void was not recorded on the trail camera, bats were frequently seen flying along the ridge from the northern gable end, where a suitable access gap for bats is located between the blockwork and roof, and fresh droppings were located on the floor at this area.

4.4.5 The Batlogger A+ recorded 112 calls from brown long-eared bats, including echolocation and Type C social calls on the 25, 26, 30 and 31 July. A peak count of 94 Type C social calls was recorded on 31 July 2025. No calls from other bat species were recorded.

4.4.6 The mean temperature recorded during the static monitoring period was 22.2°C (standard deviation = 3.9°C). Minimum and maximum temperatures were 14.5°C and 37.5°C, while 95% of the recorded temperatures were between 16.0°C and 31.5°C. Minimum and maximum relative humidity were 42.5% and 75.0%, while 95% of recorded humidity levels were between 47% and 72%.

4.4.7 The results of the static monitoring are shown in Appendices D and E.

4.5 Interpretation of bat roosts

4.5.1 Our interpretation of bat roosts recorded during the surveys is provided in Table 4.

Table 4. Interpretation of recorded bat roosts.

Bat species	Roost number and description	Roosting location	Egress/ access points	Roost value*	Interpretation of species, roost type and numbers of bats
Brown long-eared bat	Roost 1 Approximately 60 fresh bat droppings were recorded within the roof void during the building inspection. Three brown long-eared bats were recorded at the ridge of the roof void (it was not possible to catch the bats to confirm their age or sexual status) and 60 fresh brown long-eared bat droppings (confirmed by DNA analysis) were recorded on the floor during the second roost check on 30 July 2025. An additional ten fresh bat droppings were recorded on the floor of the roof void during the third roost check on 7 August 2025. Static monitoring devices recorded brown long-eared bats roosting and flying within the roof void between 25 July and 5 August 2025 with a peak count of six bats recorded at 21:28 on 26 July.	On roofing felt, along ridge beam, rafters and on chimney stack .	No brown long-eared bats emerged during the emergence surveys. The most likely access/egress point used by brown long-eared to access the roof void of the property is considered to be gaps between the blockwork and roof on the northern gable end (shown in Photograph 2 on Figure 3 in Appendix A), which leads to a gap between the wall and barge board on the outside of the property.	Site	The results of the surveys indicate the presence of a brown long-eared bat day roost used on an occasional basis by low numbers (likely ≤ 7) of brown long-eared bats. The building inspection, first emergence survey, a week of static monitoring and three roost checks were undertaken during the maternity period. While possible for maternity roosts to comprise low numbers of bats, the peak number of six bats recorded in the roof void is smaller than expected for a maternity roost of this species (typically 10-20 bats)¹¹. Furthermore, no clusters of bats were captured on video and all bats observed within the void or captured on video were large and/or capable flyers, so are considered likely to be adults. Although research on the preferred temperature of maternity roosting sites for brown long-eared bats is limited, it is considered that maternity sites require warm stable temperatures. The temperature recorded in the roof void during the static monitoring reached suitable levels but fluctuated during the maternity period indicating that the void is likely to provide sub-optimal conditions for maternity roosts. As no surveys have been carried out during the bat hibernation period, the presence of a hibernation roost of this species cannot be ruled out.

¹¹ Greenaway, F. and Hutson, A.M. (1990) *A field guide to British bats*. Bruce Coleman Books.

Bat species	Roost number and description	Roosting location	Egress/ access points	Roost value*	Interpretation of species, roost type and numbers of bats
	Roost 2 A cluster of at least eight brown long-eared bats was recorded along the ridge at the centre of the neighbour's roof void and another cluster of at least two brown long-eared bats was recorded along the ridge at the southern gable end of the void during the building inspection (it was not possible to catch the bats to confirm their age or sexual status). Between 100 and 150 brown long-eared bat droppings (confirmed via DNA analysis) were recorded on the floor of the neighbour's roof void during the building inspection. No bats were recorded to emerge from the western or eastern elevations of the neighbour's property; however, multiple long-eared bats were recorded flying from the southern end of the neighbour's property to trees to the north on all three survey visits.	On spray foam and along rafters of the neighbour's roof void.	Spray foam insulation on the inside of the roof void blocks bats from accessing the gap between the wall and barge board; however, a circular hole in the spray foam insulation located at the southern gable end of the void is considered likely to provide access for bats. Spray foam insulation present in gaps above the party wall between the Thickets property block access to bats moving between the roof voids.	Local	The results of the surveys indicate the presence of a brown long-eared bat maternity roost within the neighbour's roof void. Brown long-eared bat maternity roosts consist of female and occasionally male bats, where the females each give birth to single young from early June to mid-July. Most maternity roosts tend to disperse soon after the young are weaned, meaning that maternity roosts are generally occupied between mid-April and Mid-September. Larger numbers of droppings are typically present in maternity roosts but due to the installation of spray insulation, it is likely that bats have only recently been able to access the void again through the small gap in the foam insulation. As no surveys have been carried out during the bat hibernation period, the presence of a hibernation roost of this species cannot be ruled out.

* Roost value: in accordance with Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

5. Assessment

5.1 Roosting bats

5.1.1 All species of bat and their roosts are strictly protected by the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Taken together, these make it an offence to:

- Deliberately capture, injure, kill or disturb a bat.
- Deliberately disturb a bat in such a way as to be likely to:
 - Impair its ability to survive, or reproduce, or to rear or nurture its young.
 - Impair its ability to hibernate or migrate.
 - Affect significantly the local distribution or abundance of the species to which they belong.
- Damage or destroy a breeding site or resting place of a bat.
- Disturb a roosting bat or obstruct access to a roost or place of shelter.

5.1.2 Development affecting bats and their roosts is also subject to a licensing procedure administered by Natural England.

5.1.3 In addition to the legislation above, the National Planning Policy Framework¹² states that “*“if significant harm to biodiversity resulting from a development cannot be avoided..., adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused...”*. This is reinforced in Policy DP 38 of Mid Sussex District Council’s District Plan, which states that “*Biodiversity will be protected and enhanced by ensuring development... Protects existing biodiversity... Appropriate measures should be taken to avoid and reduce disturbance to sensitive habitats and species. Unavoidable damage to biodiversity must be offset through ecological enhancements and mitigation measures (or compensation measures in exceptional circumstances)...*”¹³.

5.1.4 Brown long-eared bat is listed as a Species of Principal Importance (SPI) under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, which places a duty on Mid Sussex Council to have regard for this species when determining a planning application.

5.1.5 Without mitigation and licensing, the proposed development would contravene the legislation and planning policy set out above. This is because the proposed development would result in the destruction of a brown long-eared bat day roost within the roof void of the property (Roost 1) and could harm individual bats or disturb a brown long-eared bat maternity roost in the neighbour’s roof void (Roost 2).

5.1.6 By using established mitigation techniques. It should be possible to avoid harm to individual bats, minimise disturbance to brown long-eared bats within the maternity roost (Roost 2), and maintain the populations of brown long-eared bats at a favourable conservation status, allowing the proposed development to proceed in line with the relevant legislation and planning policy with respect to roosting bats. The recommendations outlined in Section 6 set out how this may be achieved.

¹² Ministry of Housing, Communities & Local Government (2024). *National Planning Policy Framework*.

¹³ Mid Sussex District Council (2018). *Mid Sussex District Plan 2014 – 2031* (adopted March 2018).

5.1.7 As set out in Section 4.2, the property has low potential to support hibernating bats. Bat hibernation surveys of buildings with low potential to support hibernation roosts are generally not required if precautionary avoidance measures can be employed¹⁴. As such, precautionary avoidance measures for hibernating bats are set out in Section 6 of this report. Providing these measures are followed, then the proposed development should be compliant with the relevant legislation and policy relating to hibernating bats.

5.2 Ecological enhancements

5.2.1 Central government and local policy also encourage the incorporation of ecological enhancements into development proposals. For example, Paragraph 193d of the National Planning Policy Framework (2024) states that ‘... *opportunities to improve biodiversity in and around developments should be integrated as part of their design...*’. A recommendation for a suitable ecological enhancement in accordance with this policy has also been provided in Section 6 of this report.

¹⁴ Collins (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edn). The Bat Conservation Trust, London.

6. Recommendations

6.1 Licensing and mitigation

6.1.1 Once full planning permission has been granted and any conditions relating to roosting bats discharged, it will be necessary to obtain a protected species licence from Natural England to allow the proposed development to lawfully proceed. Licence applications for works affecting bats are subject to close scrutiny and must satisfy regulations set out in the Conservation of Habitats and Species Regulations 2017 (as amended) that:

- The actions are essential for ‘*imperative reasons of overriding public interest*’;
- ‘*There is no satisfactory alternative*’; and
- ‘*The action authorised will not be detrimental to the maintenance of the population of the species conserved at a favourable conservation status in their natural range*’.

6.1.2 The licence application must demonstrate compliance with these regulations and must be accompanied by a detailed method statement which includes a mitigation strategy to ensure the proposed development will not be detrimental to the favourable conservation status of brown long-eared bats and common pipistrelles in their natural range.

6.1.3 Licensable works may only commence upon receipt of a protected species licence from Natural England and must only be undertaken in strict accordance with the licence documents.

6.2 Avoidance and mitigation measures for roosting bats

6.2.1 To avoid harm to individual bats and maintain the populations of brown long-eared bats at a favourable conservation status, the following mitigation measures, detailed below will need to be adopted. These measures¹⁵ will be incorporated into the protected species licence application to Natural England:

Provision of alternative roosting opportunities for bats

6.2.2 Prior to the commencement of any works, two cavity bat boxes will be installed on suitable trees within the curtilage of the property to provide alternative roosts for any displaced bats. The bat boxes will be installed at least 3m from ground level (where possible) with the entrances free from obstruction and not lit by external lighting. Suggested locations for the boxes are shown in Figure 7 in Appendix A.

Timing of removal of roosting features

6.2.3 As a precautionary measure, roosting features (roof tiles and bitumen felt) from the property will only be removed outside of the bat hibernation period, which is generally taken to be between 1 December and 28 February, when bats are most vulnerable to harm and disturbance.

6.2.4 To minimise disturbance to the brown long-eared bat maternity roost in the neighbour’s roof void (Roost 2), roosting features from the property will only be removed outside of the bat maternity period, which is generally taken to be between 15 April and 15 September. Therefore, taking both timing constraints into account, roosting features should only be removed between 1 March and 14 April or between 16 September and 30 November. If roosting features have not been removed by 14 April 2026, an additional roost check of the roof void by the named ecologist or an accredited agent during the maternity period will be completed to provide updated information on the status

¹⁵ These measures may be slightly amended, if required by Natural England in order for them to grant a bat mitigation licence.

of the roost. In addition, roosting features will only be removed in suitable weather conditions (no heavy rain or high winds) and once overnight temperatures have been above 8°C for at least four consecutive nights.

Toolbox talk

- 6.2.5** All contractors involved in the removal of roosting features will be given a toolbox talk by the named ecologist under the licence, or an accredited agent, prior to these works commencing. The toolbox talk will include a discussion of the presence of bat roosts, the location of roosts, the protection afforded to bats, what to do if a bat is found and a suitable working approach.

Removal of roosting features

- 6.2.6** The following avoidance and mitigation measures will be adopted during the removal of roof tiles from the property:
- During the installation of scaffold, care must be taken not to block the access point to the brown long-eared bat day roost (Roost 1), which comprises gaps between the brickwork and barge board on the northern gable end.
 - Should a 'tin hat' be required on the scaffold prior to roosting features being removed, then at least two large gaps should be left in each side of the scaffold at roof level (each at least 2m x 2m).
 - The named ecologist or an accredited agent will supervise the careful removal of all known and suitable roosting features from the property, including (but not limited to) roof tiles and bitumen felt. If possible, any bats encountered during this 'soft-strip' will be captured and placed into one of the newly installed tree mounted bat boxes.
 - Once all known and suitable roosting features have been removed from the roof of the property, any gaps created in the side of the temporary roof may be closed and works can proceed without further timing constraint.
 - In the unlikely event that a bat is seen while the named ecologist on the licence (or an accredited agent) is not present on site then all works will stop, and the ecologist will be contacted to determine an appropriate course of action.

Construction works

- 6.2.7** The following mitigation measures will be adopted during the loft conversion, the alterations to the northern extension, and the construction of a roof over the front porchway:
- Following the alterations to the northern extension, a new roof void will be created that will measure at least 4.75m (l) x 4.75m (w) x 1.4m (h). This new roof void will compensate for the loss of the brown long-eared bat day roost within the existing roof void of the property (Roost 1). The new roof void should remain uncluttered to allow bats to fly within the void and so it should not be used for storage. Should access to the loft void be necessary, the installed loft hatch will be restricted in size to 50cm x 50cm. Furthermore, the installation of lighting within the roof void should be avoided to avoid disturbing roosting bats.
 - Four access points will be incorporated in the roof of the northern extension to provide bats access to the new roof void. These access points will be created under the supervision of a licensed bat worker and will comprise lifting a roof or ridge tile by approximately 25mm to enable brown long-eared bats to access the crevice between the roof/ridge tile and roofing felt. Access gaps of at least 80mm x 80mm within the roofing felt will be incorporated on the

underside of these lifted tiles to allow brown long-eared bats access into the roof void. Indicative locations for the access points are shown in Figure 7 in Appendix A.

- Where possible, an additional access point to the new roof void will be incorporated to the side of the chimney stack on the northern gable end of the northern extension. The access point will measure at least 25mm x 60mm and provide brown long-eared bats access through the brickwork to the roof void. An indicative location for the access point is shown in Figure 7 in Appendix A.
- The use of non-bitumen coated membranes (formerly known as breathable roofing membranes) to line any of the new roofs will need to be avoided, as bats can get tangled in these and die. In the first instance, wooden boarding or hessian-backed bituminous Type 1F felt, that is a non-woven short fibre construction, should be used. Where this is not possible, then only a material that has passed Natural England's 'snagging propensity test' may be used.
- If required, only approved timber treatment products suitable for use in or near bat roosts may be used to treat roof timbers. A list of approved products can be found on the gov.uk website¹⁶.
- Any external lighting that is required in the proximity of the extended property will be located below roof level and will point away from the access points and potential roosting features for bats.

6.3 Ecological enhancements

- 6.3.1** Retaining the tree mounted bat boxes after the proposed development works have been completed would enhance the site for roosting bats in accordance with national and local policies.

¹⁶ <https://www.gov.uk/government/publications/bat-roosts-insecticides-and-timber-treatments/timber-treatment-products-suitable-for-use-in-or-near-bat-roosts>.

Appendix A | Figures

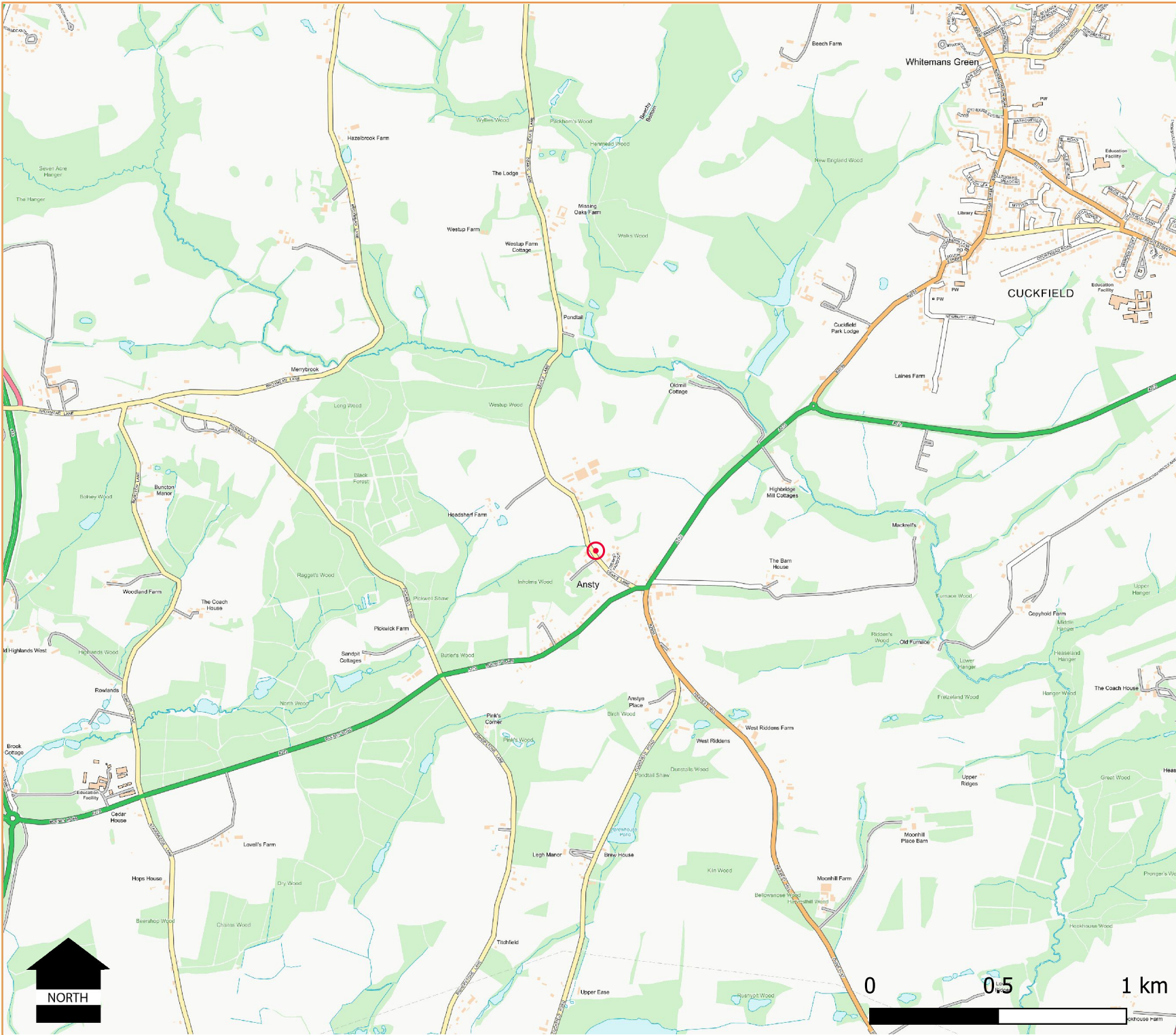


Figure 1.
Location of the property

- Legend**
- Property location

Date of survey	N/A	
Date of issue	15 October 2025	
Job reference	HWL101	
Drawn by	JH	Checked by TB/JB
Status	Final	

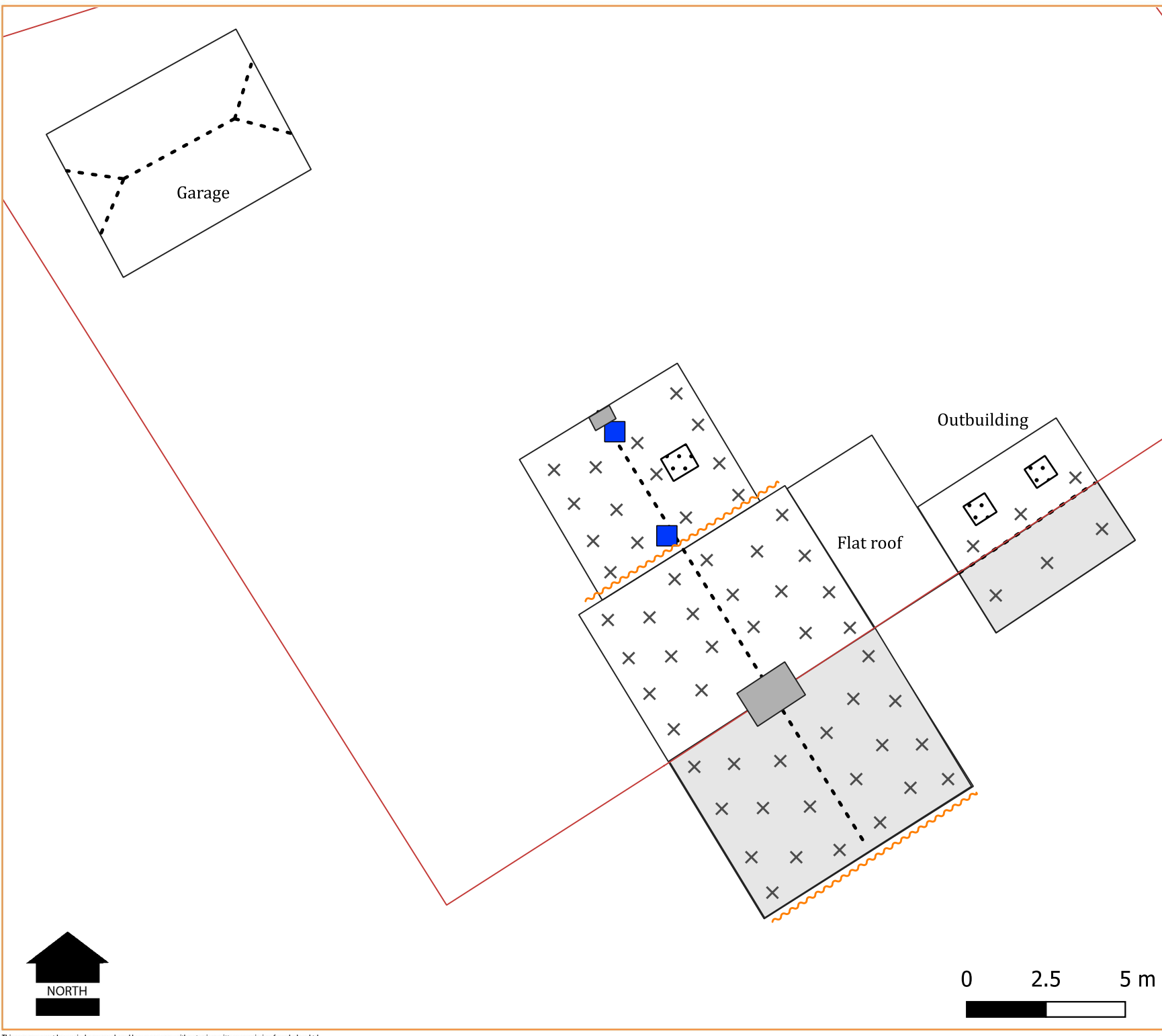


Figure 2.

Results of the external building inspection

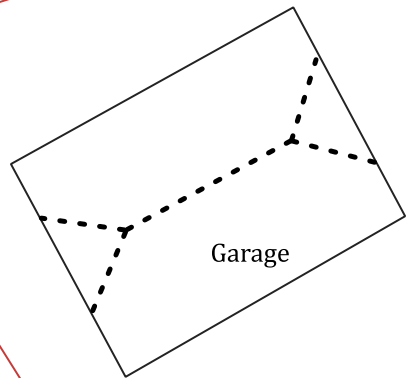
Legend

- Indicative property boundary
- Chimney
- Velux window
- Neighbouring property

Results of the external building inspection

- × Gaps under roof tiles
- Gap under ridge tiles
- Gap between wall and barge board

Date of survey	2 July 2025	
Date of issue	15 October 2025	
Job reference	HWL101	
Drawn by	JH	Checked by TB/JB
Status	Final	



Photograph 2. Approximately 20 bat droppings recorded on the gable end wall within the roof void of the property.

Approximately 60 brown long-eared bat droppings scattered on the floor below the ridge



Photograph 1. Cluster of eight brown long-eared bats roosting at the ridge in the roof void of the neighbour's property.

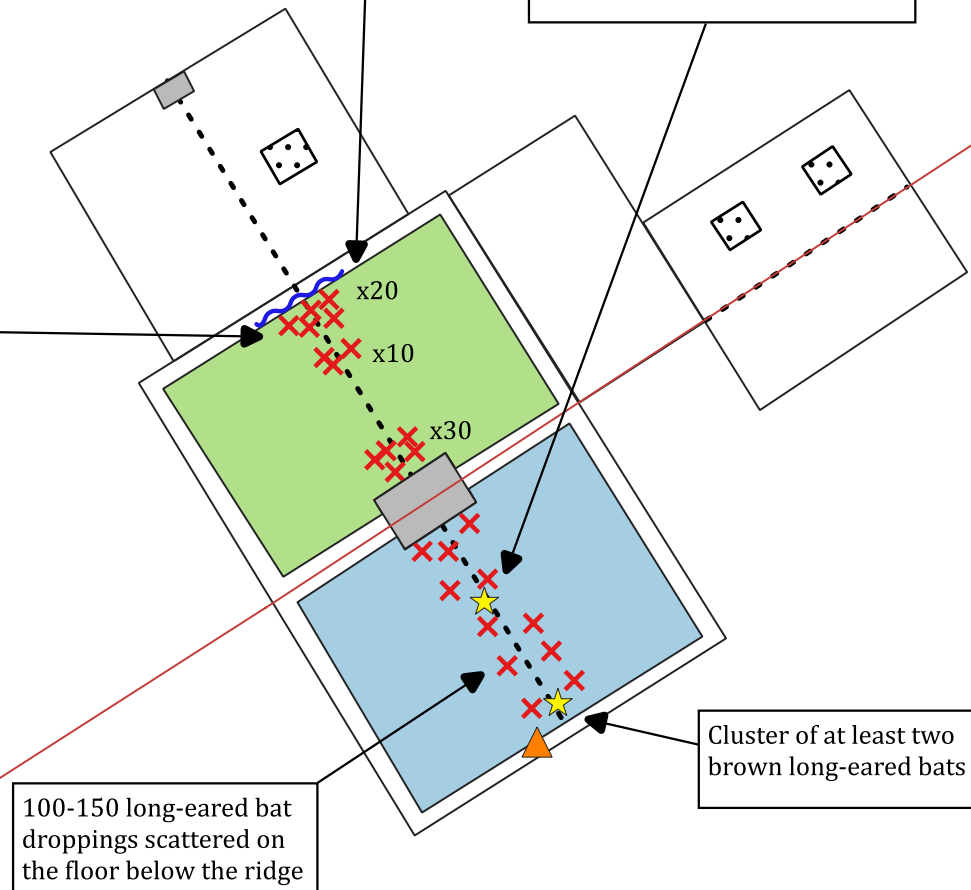


Figure 3.

Results of the internal building inspection

Legend

— Indicative property boundary

Chimney

Velux window

Adjacent roof void in the neighbour's property

Roof void within the property

Access points for bats

Gap between blockwork and roof

Gap in spray-foam insulation

Evidence of bats

★ Brown long-eared bats

✕ Bat droppings

Date of survey 2 July 2025

Date of issue 15 October 2025

Job reference HWL101

Drawn by JH

Checked by TB/JB

Status Final

babec Ltd
Ecological Consultants



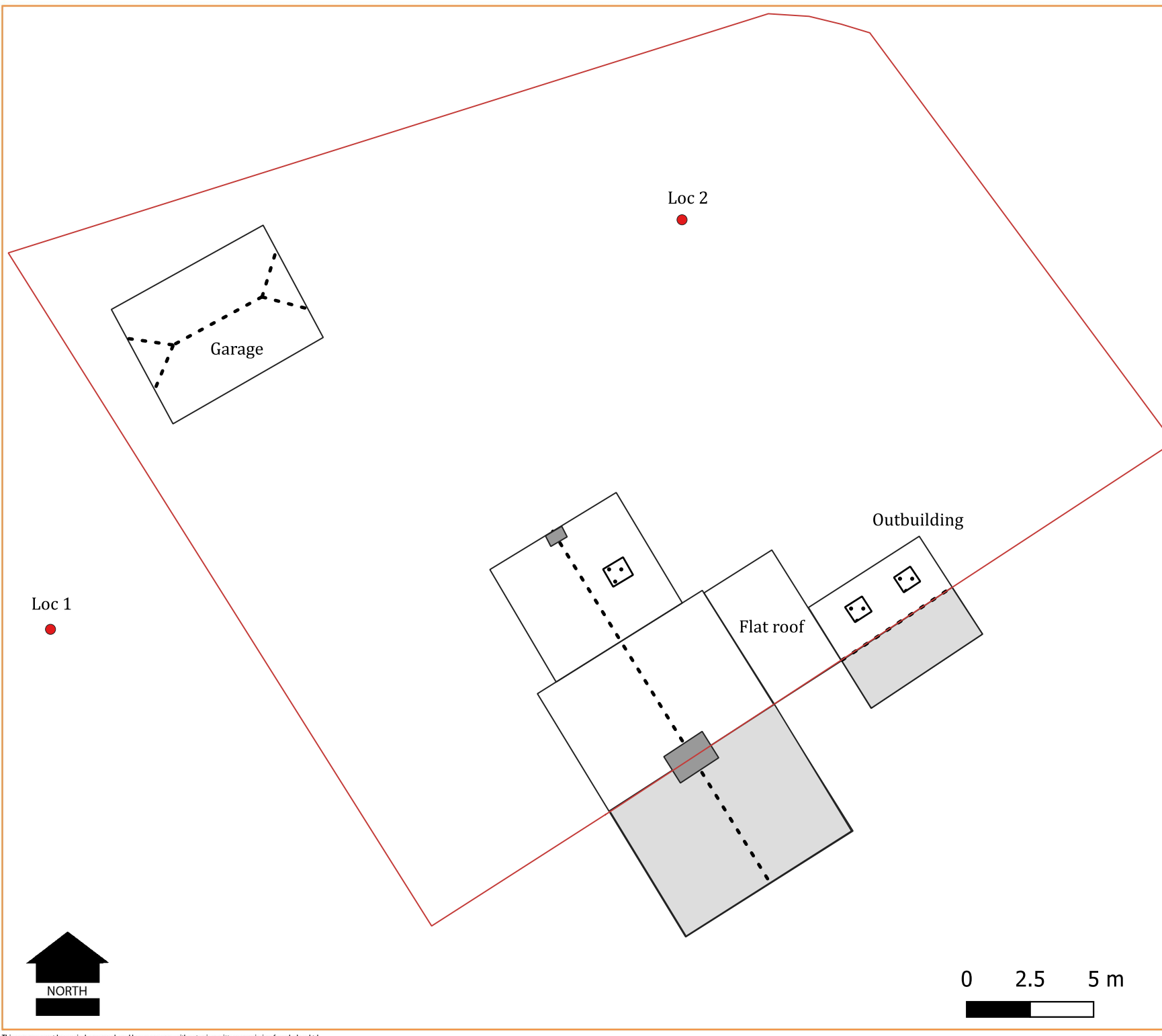


Figure 4.

Survey locations during the emergence surveys

Legend

- Indicative property boundary
- Chimney
- Velux window
- Neighbouring property that was not surveyed
- Survey locations

Date of survey July - September 2025

Date of issue 15 October 2025

Job reference HWL101

Drawn by JH Checked by TB/JB

Status Final

babec Ltd
Ecological Consultants



Photograph 1. Three brown long-eared bats roosting at the ridge of the roof void within the property.



Photograph 2. Approximately 30 fresh brown long-eared bat droppings scattered on the tell tale next to the chimney stack.



Figure 5.

Results of the second roost check

Legend

- Indicative property boundary
- Chimney
- Velux window
- Roof void within the property
- Tell tale
- ▲ Location of the trail camera, Batlogger A+ and Easylog datalogger
- ▨ Neighbour's roof void that was not surveyed

Results of the third roost check

- ★ Brown long-eared bats
- × Fresh bat droppings
- ◆ Urine stains

Date of survey 30 July 2025

Date of issue 15 October 2025

Job reference HWL101

Drawn by JH

Checked by TB/JB

Status Final



Photograph 1. Six bat droppings visibly identified as long eared bat droppings on the floor under the ridge.



Photograph 2. Two long eared bats were recorded roosting at the ridge of the roof void between the third and fourth roost check.

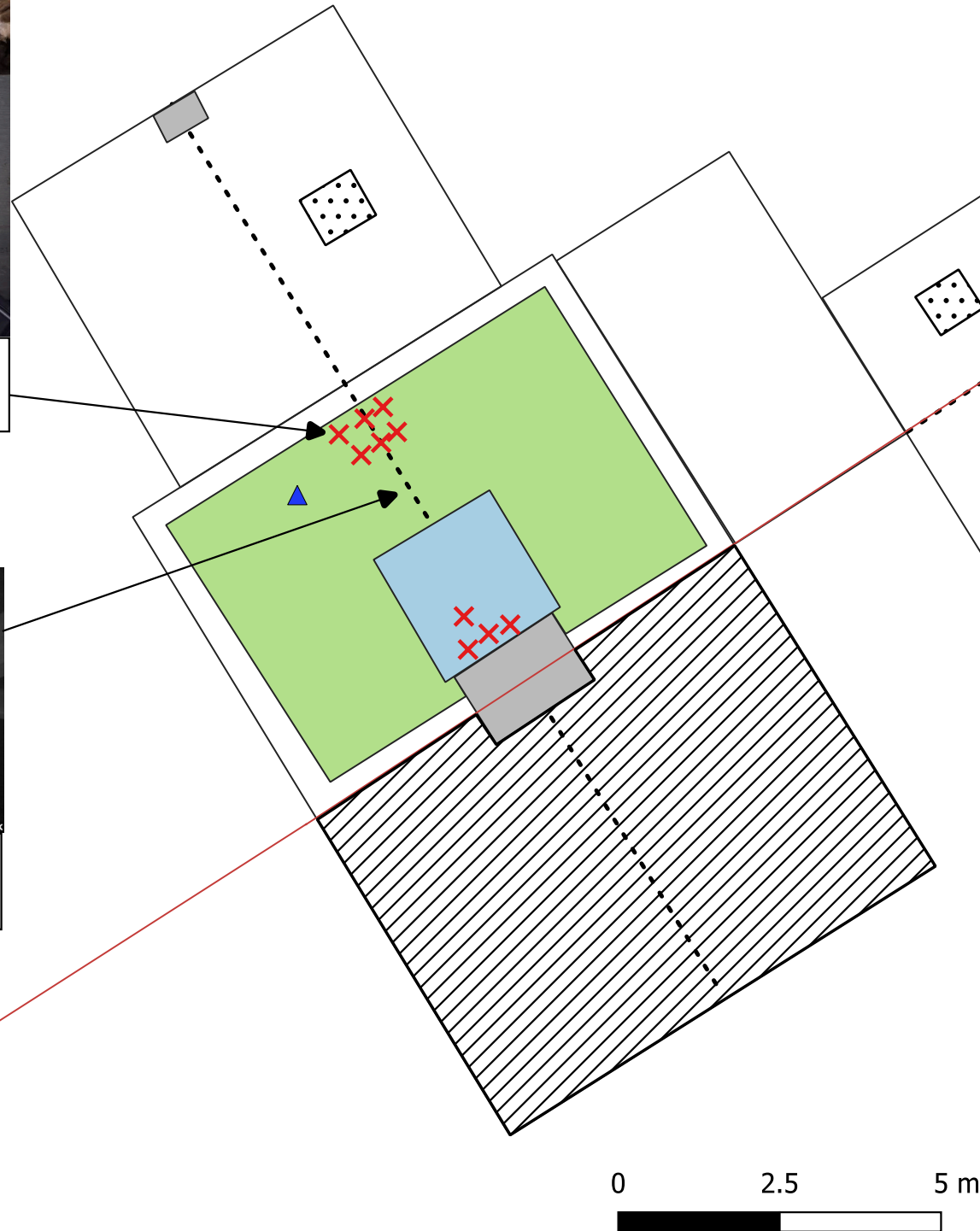


Figure 6.

Results of the third roost check

Legend

- Indicative property boundary
- Chimney
- ▤ Velux window
- Roof void within the property
- Tell tale
- ▲ Location of the trail camera, Batlogger A+ and Easylog datalogger
- ▨ Neighbour's roof void that was not surveyed

Results of the fourth roost check

- ✕ Fresh bat droppings

Date of survey 7 August 2025

Date of issue 15 October 2025

Job reference HWL101

Drawn by JH Checked by TB/JB

Status Final

babec Ltd
Ecological Consultants

Non-bitumen coated membranes (breathable roofing membranes) will not be used to line the roof of the extension as bats can get tangled in these and die. Only hessian-backed bituminous Type 1F felt or another material that passes Natural England's 'snagging propensity test' will be used.



Figure 7.
Mitigation and enhancement measures

- Legend**
- Indicative property boundary
 - Proposed development*
 - Extension and porchway roof
 - Flat roof
 - Brown long-eared bat maternity roost (Roost 2) not directly affected
 - Destroyed bat roost*
 - Brown long-eared bat day roost (Roost 1)
 - Mitigation measures*
 - New roof void
 - Indicative location for the access gap to the roof void at the northern gable end
 - Indicative locations for the access gap to the roof void under roof and ridge tiles
 - Enhancement measures*
 - Indicative locations for the tree mounted bat boxes

Date of survey	N/A	
Date of issue	15 October 2025	
Job reference	HWL101	
Drawn by	JH	Checked by TB/JB
Status	Final	



Photograph 1. Northern and western elevations of the property.



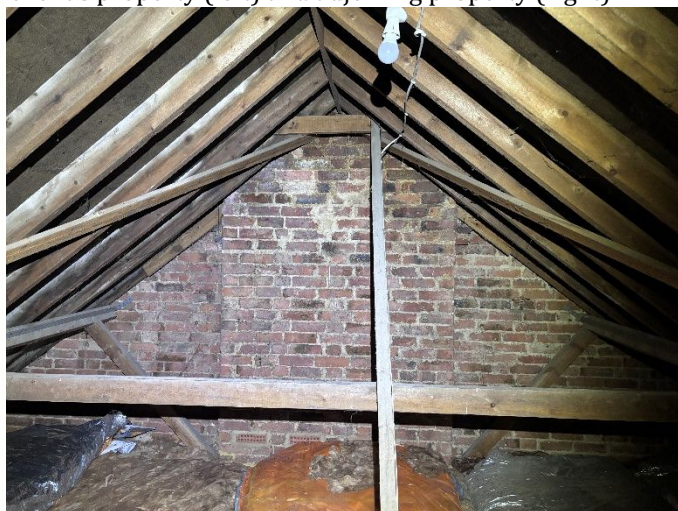
Photograph 2. Northern and eastern elevations of the property.



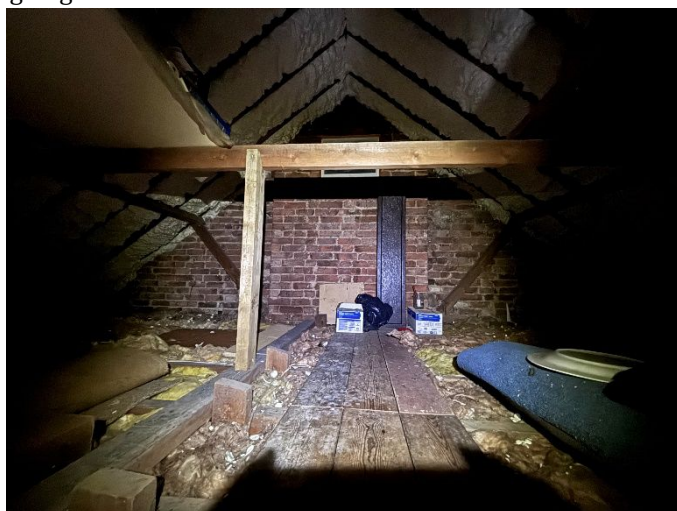
Photograph 3. Southern western elevation of the client's property (left) and adjoining property (right).



Photograph 4. Western and southern elevations of the garage.



Photograph 5. Roof void of the property.



Photograph 6. Adjacent roof void in neighbour's property.

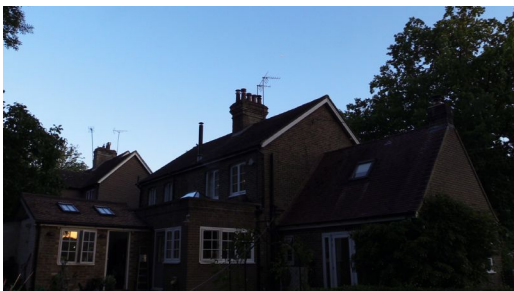
Figure 8.
Photographs

Date of survey	N/A	
Date of issue	15 October 2025	
Job reference	HWL101	
Drawn by	JH	Checked by TB/JB
Status	Final	

babec Ltd
Ecological Consultants

Appendix B | Screenshots from the Night Vision Aids (NVAs)

Table 1. Screenshots taken from NVAs at each survey location during survey visits 1, 2 and 3.

Surveyor location	Visit no.	Start of survey screenshot	End of survey screenshot
1	1		
	2		
	3		
2	1		

Surveyor location	Visit no.	Start of survey screenshot	End of survey screenshot
	2		
	3		

Appendix C | DNA Analysis of Bat Droppings

Samples submitted

Sample Code	Multi-species?	Sample Type	Date Sample Found	Species Group	Site postcode/ post town /grid ref	Site description / comments (Optional)	Suspected identity of species
SEL-3721-1	No	Faecal	02/07/2025	C. Bats	RH17 5AS	Semi-detached cottage on edge of small leafy hamlet.	Brown long- eared bat in neighbour's roof void
SEL-3721-2	No	Faecal	30/07/2025	C. Bats	RH17 5AS		Brown long- eared bat in clients roof void

Analysis Results

Sample Code	DNA Extraction Code	Species Identified	ID Method	Ct value	% match
SEL-3721-1	EG-2025-1833	Plecotus auritus (Brown long-eared bat)	qPCR	19	
SEL-3721-2	EG-2025-1834	Plecotus auritus (Brown long-eared bat)	qPCR	19	

What do my results mean?

DNA extraction code - this identifies the DNA extraction sample within our laboratory so that it can be revisited if necessary. We keep these extractions for a minimum of 3 months.

ID method: qPCR - These results are obtained using species specific qPCR tests. A positive result indicates the presence of DNA from the species reported.

ID method: DNA sequencing - where qPCR fails or is not possible, standard DNA sequencing will be performed. Sequences are then matched against a database.

Ct value - This is a relative measurement of the amount of species DNA in the sample, derived from the qPCR data. The lower the value the more DNA present in the reaction. This helps to predict the abundance of one species relative to another **in the sample**. Note: this relative abundance is not directly transferable to the site the samples were collected from.

% match - this value is the percentage match of sequences derived from DNA sequencing compared to the database. Due to differences in DNA sequence between individuals within a species this match may not always be exactly 100%.

Appendix D | Results of the Static Monitoring

Table 1. Results of the static monitoring.

Check no.	Date	Roost check	Batlogger A+ results	Camera analysis
1	24/07/2025	No bats in roof void.	No bat calls were recorded on 24 July. First LE call recorded at 02:50 on 25 July. A further three calls then recorded up to 02:55. Type C social calls. Eleven LE calls recorded on 26 July between 01:52 and 04:40. Type C social calls. No bat calls recorded on 27 or 28 July.	A Spyypoint trail camera was deployed in the roof void between 24 July and 9 September. The device was set to high sensitivity and programmed to continuously monitor for bat activity. 25 July 02:55. 1x BLE flying below ridge beam and 1x BLE grooming on bitumen felt. 26 July 01:52. 1x BLE on ridge beam and one on bitumen felt. 26 July 02:11. 1x BLE roosting on chimney stack and then flying in void 26 July 14:24. 1x BLE grooming on chimney stack 26 July 18:19. 2x BLE flying around roof void 26 July 18:21. 3x BLE flying around roof void 26 July 18:24. 2x BLE flying around roof void 26 July 18:33. 1x BLE flying around roof void 26 July 20:26. 1x BLE flying around roof void 26 July 21:00. 1x BLE flying around roof void and 2x on bitumen felt 26 July 21:02. 1x BLE flying around roof void and 2x on bitumen felt 26 July 21:28. 6x BLE roosting separately on bitumen felt, 2 then fly 27 July 04:49. 2x BLE on chimney stack and then flying around void 27 July 04:54. 2x BLE flying around void and then on chimney stack 27 July 04:56. 2x BLE flying around void and then on chimney stack 27 July 04:59. 3x BLE alongside ridge and then flying around void 27 July 05:01. 3x BLE flying around roof void 27 July 05:03. 3x BLE alongside ridge and then flying around void 27 July 05:58. No bats on video clip 27 July 14:25. 2x BLE alongside ridge and then flying around void

Check no.	Date	Roost check	Batlogger A+ results	Camera analysis
				27 July 20:20. 1x BLE flying around roof void 27 July 20:29. 1x BLE grooming on chimney stack 27 July 21:14. 1x BLE flying around roof void 27 July 21:17. 2x BLE flying around and landing on various rafters 28 July 04:44. 4x BLE flying around void. Social interactions. 28 July 04:46. 2x BLE flying around void. 28 July 04:49. No bats on video clip 28 July 04:51. 2x BLE flying around void. 28 July 04:55. No bats on video clip 28 July 06:13. 1x BLE roosting on chimney stack 28 July 11:27. 1x BLE flying between various rafters 28 July 21:25. 1x BLE flying around void 28 July 21:34. 2x BLE on chimney stack/rafters and flying around 29 July 02:20. No bats on video clip 29 July 02:48. 2x BLE on bitumen felt / flying around void 29 July 02:50. 1x BLE flying around void. 29 July 04:33. 1x BLE flying around void. 29 July 04:55. 2x BLE flying around void. 29 July 20:56. No bats on video clip 29 July 21:18. 1x BLE grooming behaviour on ridge beam 29 July 21:21. 2x BLE warming up pre-emergence behaviour 30 July 02:30. 1x BLE flying around void. 30 July 04:36. 1x BLE flying around void. 30 July 04:40. 1x BLE flying around void and lands on bitumen felt 30 July 09:17. No bats.

Check no.	Date	Roost check	Batlogger A+ results	Camera analysis
2	30/07/2025	Three BLE clustered alongside ridge in centre of roof void. Approx 30 fresh droppings at base of chimney stack, urine stains on insulation sheeting towards chimney stack, and 30 fresh droppings at gable end. Droppings likely to be from bats recorded using void between 25 and 30 July.	Three Type C BLE social calls recorded on 30 July between 13:35 and 13:36. A total of 94 Type C BLE social calls recorded between 02:58 and 18:38 on 31 July.	Camera moved to location cover the area above where most of the bat droppings previously at gable end. View limited to two rafter spans but does cover egress route to gable apex. 30 July 11:49. 2x BLE fly along ridge and 1 starts grooming on beam 30 July 11:51. 1 x BLE flying below ridge beam 30 July 11:54. 3x BLE fly along ridge / roosting on ridge beam 30 July 11:56. 1-2x BLE roosting along ridge beam 30 July 12:00. 1-2x BLE roosting along ridge beam 30 July 12:35. 1-2x BLE roosting along ridge beam and 1x flying 30 July 12:54. 1 x BLE flying below ridge beam 30 July 15:41. 1-2x BLE roosting along ridge beam 30 July 18:11. 1-2x BLE roosting along ridge beam 30 July 18:24. 1-2x BLE roosting along ridge beam 30 July 18:37. 1-2x BLE roosting along ridge beam 30 July 20:54. 1-2x BLE roosting along ridge beam 30 July 21:04. No bats on video clip 31 July 00:23. No bats on video clip 31 July 02:56. At least 1x BLE roosting on ridge beam 31 July 02:58. 2x BLE roosting along ridge beam 31 July 03:34. 1-2x BLE roosting along ridge beam 31 July 03:39. No bats on video clip 31 July 04:33. 1-2x BLE roosting along ridge beam 31 July 04:53. No bats on video clip

Check no.	Date	Roost check	Batlogger A+ results	Camera analysis
				31 July 04:59. 1-2x BLE roosting along ridge beam 31 July 05:05. 1-2x BLE roosting along ridge beam 31 July 05:15. No bats on video clip 31 July 05:21. 1-2x BLE roosting along ridge beam 31 July 05:28. 1 x BLE flying below ridge beam 31 July 05:33. 1-2x BLE roosting along ridge beam 31 July 06:26. No bats on video clip 31 July 06:30. 1-2x BLE roosting along ridge beam 31 July 13:26. No bats on video clip 31 July 21:21. 1 x BLE flying below ridge beam 5 August 05:15. 1 x BLE flying below ridge beam
3	07/08/2025	No bats recorded in roof void. Six fresh droppings beneath ridge by water tank (previous high use area) and four scattered on tell tale, all likely to be from bats recorded using void on 30 and 31 July.	No bat calls recorded.	No bats recorded.
4	18/08/2025	No bats or bat droppings recorded.	No bat calls recorded.	No bats recorded.
5	26/08/2025	No bats or bat droppings recorded.	No bat calls recorded.	No bats recorded.
6	01/09/2025	No bats or bat droppings recorded.	No bat calls recorded.	No bats recorded.
7	09/09/2025	No bats or bat droppings recorded.	NA	No bats recorded.

BLE = Brown long-eared bat

Red = Peak counts of bats

Figure 1. Screenshot from the Spypoint trail camera on 26 July 2025 21:28 showing six brown long-eared bats roosting separately on bitumen felt (red circles).



Figure 2. Screenshot from the Spypoint trail camera on 30 July 2025 11:54 showing two brown long-eared bats roosting along the ridge beam and another hidden bat behind the rafter (red circles).



Appendix E | Temperature and Humidity Results

EL

Summary Report

Serial Number010119371

Logger NameBabec 4

First Reading14:44:25 24/07/2025

Last Reading11:44:25 10/09/2025

Elapsed Time47d, 21h

Total Readings1150

AlarmNot Set

Logging Rate1 Hour

Celsius	Low Alarm	Not Set	High Alarm	Not Set
Minimum 14.5°C 06:44:25 05/09/2025	Alarm Occurrences N/A	●	Alarm Occurrences N/A	●
Maximum 37.5°C 15:44:25 12/08/2025	Total time in alarm N/A		Total time in alarm N/A	
Average Reading 22.15°C	First Alarm Triggered N/A		First Alarm Triggered N/A	
Mean Kinetic Temperature 22.10°C (ΔH83.14472)	Longest Alarm N/A		Longest Alarm N/A	
Standard Deviation 3.93°C				
Humidity	Low Alarm	Not Set	High Alarm	Not Set
Minimum 42.5%rh 16:44:25 12/08/2025	Alarm Occurrences N/A	●	Alarm Occurrences N/A	●
Maximum 75.0%rh 10:44:25 03/09/2025	Total time in alarm N/A		Total time in alarm N/A	
Average Reading 59.72%rh	First Alarm Triggered N/A		First Alarm Triggered N/A	
Standard Deviation 6.63%rh	Longest Alarm N/A		Longest Alarm N/A	
Dew Point				
Minimum 8.4°C 06:44:25 22/08/2025	Maximum 23.0°C 15:44:25 12/08/2025			
Average Reading 13.82°C	Standard Deviation 2.40°C			

