

Bat Emergence and Re-Entry Surveys (BERS)

Survey site:

Wickenden Manor, Chilling Street, East Grinstead, RH19 4JB

Client:

Netherhell Educational Association

Report date:

29/08/2025

Project:

This report is prepared to inform a planning application for the proposal described as:

The renovation and extension of the Manor House, the Lodge and the Stables.

This report is supplementary to the Preliminary Roost Assessment report completed by Arbtech Consulting Ltd (2025).

BERS survey methodology and legislation can be found in the Arbtech Supplement: [BERS Methodology and Legislation - 2025.](#)

This report is an addendum to and must be read in conjunction with the Preliminary Roost Assessment completed by Arbtech Consulting Limited (2025) for the same site address. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the consultant for advice.

Executive Summary

Report Validity: This report is valid for up to 18 months for the purposes of planning applications. For the purposes of bat licencing, the report is considered 'up to date' and suitable for licence application until the start of the following bat activity season. After those timeframes, some level of updated surveys will be required. The level of survey effort will depend on the specific circumstances of the site.

No works to the property that may block or remove potential roosting features and/or identified roosts should be carried out until the required licensing has been granted and a licensed ecologist is present. Undertaking such work beforehand could unlawfully affect bats if present and may compromise the validity of the surveys and hinder the planning application process.

Following extensive surveys by separate ecology teams in 2020 and 2025, the cumulative data has characterised the roosts on site as follows:

Building 1

- 1 × maternity roost comprising a mix of CP and SP bats with a total count of approximately 47 individuals. This maternity roost is making use of various spaces across the entire roof structure.
- 1 × day roost of brown long-eared bat (one individual). Accessed via a roof tile on the eastern hip of gable extension on north elevation.
- 1 x serotine day roost (two individuals). Accessed via a roof tile on southwestern elevation.

Building 2

- 1x day roost of common pipistrelle (one individual). Under a loose roof tile on the southwestern corner.
- 1x day roost of common pipistrelle (one individual). Under guttering/timber board on northeast elevation of B2.
- 1x day roost of common pipistrelle (one individual). Roof tile above dormer window on the southern elevation.

Results

Roost Access Point Number	Species and number	Roost type	Roost access point location	Impact
1	Common pipistrelle x 1	One overall Maternity roost making use of various access points/ locations across the entire roof of B1	B1: Hanging tile on the northern aspect of a dormer window on the south elevation.	Impact to roost – Destruction Level of impact – Site
1	Common and soprano pipistrelle x 47	As above	B1: Southwestern corner, under the eaves above the cluster of lead flashing on the southwestern corner.	Impact to roost – Destruction Level of impact – Local
3	Pipistrelle sp. x 1	As above	B1: Under a loose roof tile on the southwestern corner.	Impact to roost – Destruction Level of impact – Site
4	Common pipistrelle x 1	Day Roost	B2: Under guttering/timber board on northeast elevation of B2.	Impact to roost – Destruction Level of impact – Site
5	Common pipistrelle x 1	Day Roost	B2: Roof tile above dormer window on the southern elevation.	Impact to roost – Destruction Level of impact – Site

6	Common pipistrelle x 1	Day Roost	B2: Roof tile on the roof ridge along the eastern elevation.	Impact to roost – Destruction Level of impact – Site
7	Common pipistrelle x 1	Maternity roost making use of various access point/ locations across the entire roof of B1	B1: Loose roof tile on the southern end of the western elevation's roof.	Impact to roost – Destruction Level of impact – Site
8	Common pipistrelle x 1	As above	B1: Loose roof tile on the southern end of the western elevation's roof.	Impact to roost – Destruction Level of impact – Site
9	Common pipistrelle x 1	As above	B1: Loose roof tile on the southern end of the western elevation's roof.	Impact to roost – Destruction Level of impact – Site
10	Soprano pipistrelle x 1	As above	B1: Northern gable extension verge tile on the western elevation.	Impact to roost – Destruction Level of impact – Site
11	Common pipistrelle x 12	As above	B1: Ridge line roof tiles on the western elevation.	Impact to roost – Destruction Level of impact – Local

12	Soprano pipistrelle x 1	As above	B1: Gable end roof tile on the eastern elevation.	Impact to roost – Destruction Level of impact – Site
13	Soprano pipistrelle x 1	As above	B1: Roof tile on the southern gable end of the eastern elevation.	Impact to roost – Destruction Level of impact – Site
14	Common pipistrelle x 12	As above	B1: Clay tile on the dormer window on the south elevation.	Impact to roost – Destruction Level of impact – Site
15	Brown long-eared bat x 1	Day	B1: Roof tile on the eastern hip of gable extension on north elevation.	Impact to roost – Destruction Level of impact – Site
16	Common pipistrelle x 1	As above	B1: Hanging tile on the south-facing gable end on western elevation.	Impact to roost – Destruction Level of impact – Site
17	Serotine x 2	Day	B1: Roof tile on southwestern elevation.	Impact to roost – Destruction Level of impact – Local

A Bat Licence is required to legally permit the works. This requirement exists independently of the planning system and is required whether planning permission is needed or not, and whether this is listed as a condition of planning or not.

If the licence is not submitted by 20th November 2025 a material changes check will be required.

If the licence is not submitted by 1st May 2026 updated dusk surveys will be required.

The licence can be applied for once planning permission has been granted (where required), and within 3 months of the start of works. Any pre-commencement wildlife related planning conditions that require sign off from the council will need to be discharged prior to licence submission.

Background

2020

A Preliminary Ecological Appraisal and Roost Assessment (PEA/PRA) was undertaken by Urban Edge Environmental Consulting in 2020. B1 was assessed as a confirmed roost owing to the presence of 200+ droppings). B2 was also assessed as a confirmed roost owing to 100+ droppings present within the loft void.

Subsequent bat emergence surveys were carried out by Urban Edge Environmental Consulting in 2020. Two dusk emergence surveys and four dawn re-entry surveys were undertaken in June and July 2020. Findings:

- B1: 29 roosts supporting serotine, common pipistrelle, soprano pipistrelle, and brown long-eared bats were recorded during the surveys.
- B2: 7 roosts supporting common pipistrelle, soprano pipistrelle and brown long-eared bats were recorded during the surveys.

DNA testing was also carried out of the droppings found within the lofts and all returned as brown long-eared bat.

2025

PRA – Arbtech Consulting Limited (2025), B1 (Manor), B2 (Lodge), B3 (Stables), and B4.

Number of buildings on site – 8 buildings.

Number of buildings surveyed – 4 buildings.

Explanation of why not all buildings were surveyed – Only two buildings are subject to renovation works as part of the proposed development. all buildings on site were assessed for connectivity. The remaining buildings are a significant distance away from the impacted buildings.

Scope of works

The following buildings were subject to emergence/re-entry surveys:

B1 – High value – 3 surveys.

B2 – High value – 3 surveys.

Proposed development

Current use of building – B1: Educational and residential, B2: Residential.

Proposed use of building – No change.

Structural changes to building – Extension to B1, renovation to B2.

Type of permission required – Full planning permission.

The site surveys were designed and managed by Senior Ecologist Jamie-Lee Anderson, BSc (Hons), Consultant Ecologist, Class 2 Natural England Bat Licence Number: 2024-12356-CL18-BAT and BCT Competency Level 2.

See surveyor locations in the BERS plan in Appendix 1, Proposed Plans in Appendix 2.

Field Survey					
Dusk Emergence Survey 1					
Building B1					
<i>Building inspection prior to survey</i>	Updated internal inspection was deferred to the third survey.				
<i>Surveyor and position</i>	Surveyor Position	Name	BERS Experience / Bat Licence	BCT Competency	Elevation
	7	Isla Yarrow	1 Year	Level 1	NW
	8	Lia Hutchinson	3 Years	Level 1	N
	9	Arnold Lasagna	1 Year	Level 1	N
	10	Unmanned camera	N/A	N/A	N/NE
	11	Lucy Jacobs	4 Years	Level 2	E
	12 – Lead	Rachel Cole	2 Years	Level 1	S
	13	Oliver Wills	1 Year	Level 1	S
	14	Harry Keates	1 Year	Level 1	SW
	15	Grace Roberts	1 Years	Level 1	W

	16	Unmanned camera		N/A		N/A	SW
Weather (start/end)	Temperature (°C): 24.3 Relative humidity (%): 45.2 Cloud cover (%): 0 Wind (mph): 0 Rain: None				Temperature (°C): 17.5 Relative humidity (%): 60.4 Cloud cover (%): 0 Wind (mph): 0 Rain: None		
Equipment used	Equipment	Make		Model		Count	
	NVAs	Nightfox		Whisker		9	
	Additional Illumination	Nightfox		XB5 PRO		9	
	Bat Detector	Wildlife Acoustics		Echo Meter Touch 2		9	
	Two Way Radio	BAOFENG		FV-88E		9	
Results							
Date of survey				Sunset; Start - End			
10/07/2025				Sunset 21:13; 20:58 – 22:58			
Roost access point number	Species and numbers	Roost type	Structure reference	Roost location	Access point		Dimensions (for lofts/ internal voids)
1	Common pipistrelle x 1	One overall maternity roost making use of various access points/locations across the entire roof of B1	Hanging tile	Entirety of B1 main roof. Underneath a hanging tile on the northern aspect of a dormer window on the south elevation.	Hanging tile		N/A

2	Common and soprano pipistrelle x 47	Maternity	Under the eaves above the cluster of lead flashing	Southwestern corner of B1.	Eaves	N/A
3	Pipistrelle sp. x 1	Maternity	Under a loose roof tile	Southwestern corner of B1.	Roof tile	N/A

Surveyor observations

Surveyor 7	Emergences observed - None Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine, brown long-eared, myotis. Flight paths – north and south (both directions). Foraging areas – Constant foraging along northern treeline, garden area to the west of B1.	 Figure 1: Elevation view of Surveyor 7, Visit 1.
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<i>IR position 7</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing northwest elevation of B1 Emergences observed: None. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 2: Darkest point of IR position 7, Visit 1.
<i>Surveyor 8</i>	Emergences observed - None Summary of general activity: Species – Common pipistrelle and soprano pipistrelle. Flight paths – Occasional passes over B1. Foraging areas – Constant foraging in the garden to the north of B1.	 Figure 3: Elevation view of Surveyor 8, Visit 1.

<i>IR position 8</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 4: Darkest point of IR position 8, Visit 1.
<i>Surveyor 9</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, brown long-eared, soprano pipistrelle. Flight paths – Across courtyard, east to west and west to east. Foraging areas – Courtyard area in front of B1.	 Figure 5: Elevation view of Surveyor 9, Visit 1.

<i>IR position 9</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 6: Darkest point of IR position 9, Visit 1.
<i>Surveyor 10</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle. Flight paths – Frequent bat passes along the courtyard, from east to west and west to east. Foraging areas – N/A.	 Figure 7: Elevation view of Surveyor 10, Visit 1.

<i>IR position 10</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing northern elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 8: Darkest point of IR position 10, Visit 1.
<i>Surveyor 11</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, myotis, brown long-eared. Flight paths – Frequent bat passes along the trees to the east of B1. Foraging areas – Constant foraging in the trees to the east of B1.	 Figure 9: Elevation view of Surveyor 11, Visit 1.

<i>IR position 11</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing northeastern elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 10: Darkest point of IR position 11, Visit 1.
<i>Surveyor 12</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, brown long-eared, noctule, myotis. Flight paths – Frequent bat passes along the south to north, and along the trees to the east. Foraging areas – Constant foraging in the treeline to the east.	 Figure 11: Elevation view of Surveyor 12, Visit 1.

<i>IR position 12</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing south elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 12: Darkest point of IR position 12, Visit 1.
<i>Surveyor 13</i>	Emergences observed - None Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, myotis, brown long-eared, noctule. Flight paths – Frequent bat passes along the garden in front of B1. Foraging areas – Constant foraging in the garden in front of B1.	 Figure 13: Elevation view of Surveyor 13, Visit 1.

<i>IR position 13</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing southern elevation of B1 Emergences observed: Yes. Common pipistrelle maternity roost: Roost access point 1. Number: 1. Time: 21:51. Location of access point: Underneath a hanging tile on the north elevation of a dormer on the southern elevation. Direction of travel on emergence: Flew east. Species ID confirmed during IR review. The surveyor did not observe the emergence, and the emergence was confirmed in IR review.	 Figure 14: Darkest point of IR position 13, Visit 1.  Figure 15: Emergence point of common pipistrelle on visit 1.
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<i>Surveyor 14</i>	Emergences observed - Yes. Soprano and common pipistrelle maternity roost: Roost access point 2. Total Number of Emerging bats: 47. Time(s): First emergence recorded at 20:28, last emergence recorded at 21:37. Location of access point(s): Under the eaves above the cluster of lead flashing on the southwestern corner of B1. Direction(s) of travel on emergence: The majority of the bats emerging flew southwest towards the trees. Some flew eastwards. Species ID confirmed on site. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, emerging. Myotis, and brown long-eared bats recorded commuting and foraging. Flight paths – Southwest towards the trees. Frequent bat passes along the southern hedgerow. Foraging areas – Constant foraging in the garden in front of the southwestern elevation of B1. During survey set-up, early emerging bats were observed leaving the building prior to the official survey start time.	 Figure 16: Elevation view of Surveyor 14, Visit 1.  Figure 17: Emergence location.
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<i>IR position 14</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing southwestern elevation of B1. Emergences observed: Yes. The footage was in line with the observations of the surveyor with no additional activity. Maternity roost: Roost access point 1 confirmed. Number: 47. Time: First emergence recorded at 20:28, last emergence recorded at 21:37. Location of access point: Under the eaves above the cluster of lead flashing on the southwestern corner of B1. Direction(s) of travel on emergence: The majority of the bats emerging flew southwest towards the trees. Some flew eastwards. Species ID confirmed on site. Surveyor 1 observed the emergences. Late common pipistrelle foraging activity was observed around the roost area from 22:38 until 23:00. All other activity matched that was observed during the survey.	 Figure 18: Darkest point of IR position 14, Visit 1.
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<i>Surveyor 15</i>	Emergences observed - None Summary of general activity: Species – Soprano pipistrelle, common pipistrelle, myotis, brown long-eared, serotine, noctule. Flight paths – Frequent bat passes from south to north, over the building. Foraging areas – N/A.	 Figure 19: Elevation view of Surveyor 15, Visit 1.
<i>IR position 15</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing western elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 20: Darkest point of IR position 15, Visit 1.

<i>IR position 16</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing southwestern elevation of B1. Emergences observed: Yes. The footage was in line with the observations of the surveyor with no additional activity. Pipistrelle sp. Roost access point 3 Number: 1. Time: 21:31. Location of access point: Under a loose roof tile on the southwestern corner of B1. Direction(s) of travel on emergence: Flew south Species ID confirmed during IR review.	 Figure 21: Emergence point of pipistrelle sp.
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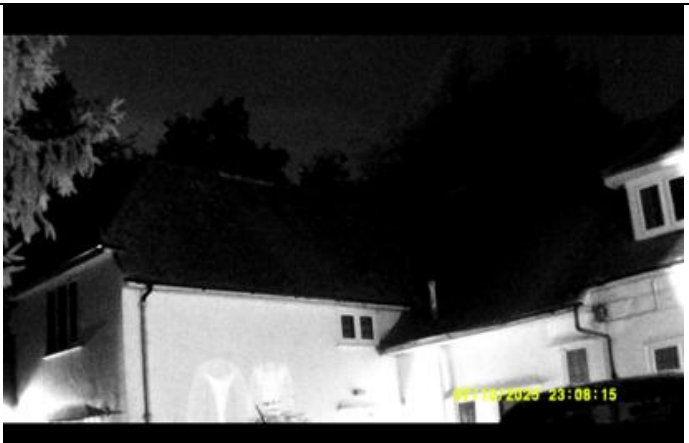
Field Survey					
Dusk Emergence Survey 1					
Building B2					
<i>Building inspection prior to survey</i>	Updated internal inspection was deferred to the third survey.				
<i>Surveyor and position</i>	Surveyor Position	Name	BERS Experience / Bat Licence	BCT Competency	Elevation
	1	Sophie Gullan	4 Years	Level 2	N
	2	Gary Ritson	1 Year	Level 1	NW/SW

	3	Jennifer Gibbons	2 Years	Level 1	E
	4	Robert Halcrow	4 Years	Level 2	N
	5	Elena Burroughs	1 Year	Level 1	S
	6	Liv Stubbington	2 Years	Level 1	SE
Weather (start/end)	Temperature (°C): 24.3 Relative humidity (%): 45.2 Cloud cover (%): 0 Wind (mph): 0 Rain: None			Temperature (°C): 17.5 Relative humidity (%): 60.4 Cloud cover (%): 0 Wind (mph): 0 Rain: None	
Equipment used	Equipment	Make	Model		Count
	NVAs	Nightfox	Whisker		6
	Additional Illumination	Nightfox	XB5 PRO		6
	Bat Detector	Wildlife Acoustics	Echo Meter Touch 2		6
	Two Way Radio	BAOFENG	FV-88E		6
Results					
Date of survey			Sunset; Start - End		
10/07/2025			Sunset 21:13; 20:58 – 22:58		
Surveyor observations					

<i>Surveyor 1</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine. Flight paths – North to south. Foraging areas – N/A.	 Figure 22: Elevation view of Surveyor 1, Visit 1.
<i>IR position 1 Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 23: Darkest point of IR position 1, Visit 1.

<i>Surveyor 2</i>	Emergences observed – None. Summary of general activity: Species – Soprano pipistrelle, common pipistrelle, serotine, myotis. Flight paths – N/A. Foraging areas – N/A.	 Figure 24: Elevation view of Surveyor 2, Visit 1.
<i>IR position 2 Nightfox Whisker and XB5 Pro</i>	Camera position: observing northwestern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 25: Darkest point of IR position 2, Visit 1.

<i>Surveyor 3</i>	Emergences observed – None. Summary of general activity: Species – Soprano pipistrelle and common pipistrelle. Flight paths – From west towards treeline to the east. Foraging areas – Constant foraging along the treeline.	 Figure 26: Elevation view of Surveyor 3, Visit 1.
<i>IR position 3</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing eastern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 27: Darkest point of IR position 3, Visit 1.

<i>Surveyor 4</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle and soprano pipistrelle. Flight paths – Passing west to east over the northeastern elevation. Foraging areas – N/A.	 Figure 28: Elevation view of Surveyor 4, Visit 1.
<i>IR position 4 Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 29: Darkest point of IR position 4, Visit 1.

<i>Surveyor 5</i>	Emergences observed – None. Summary of general activity: Species – Soprano pipistrelle, common pipistrelle, myotis. Flight paths – South to north over B2. Foraging areas – N/A.	 Figure 30: Elevation view of Surveyor 5, Visit 1.
<i>IR position 5 Nightfox Whisker and XB5 Pro</i>	Camera position: observing southern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 31: Darkest point of IR position 5, Visit 1.

<i>Surveyor 6</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine, and myotis. Flight paths – Frequent bat passes along the treelines. Foraging areas – Constant foraging in the woodland behind the surveyor.	 Figure 32: Elevation view of Surveyor 6, Visit 1.
<i>IR position 6</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing southeastern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 33: Darkest point of IR position 6, Visit 1.

Field Survey
Dusk Emergence Survey 2
Building B1

<i>Building inspection prior to survey</i>	Updated internal inspection was deferred to the third survey.				
<i>Surveyor and position</i>	Surveyor Position	Name	BERS Experience / Bat Licence	BCT Competency	Elevation
	7	Jolanta Jurpalova	3 Years	Level 1	NW
	8	Liz Hadland	3 Years	Level 1	N
	8a	Unmanned camera	N/A	N/A	N aspect of W elevation
	9	Annabel Yapp	3 Years	Level 1	N
	10	Will Malpas	3 Years	Level 1	N/NE
	11	Lucy Jacobs	4 Years	Level 2	E
	12 – Lead	Rachel Cole	2 Years	Level 1	S
	13	Abigail Louise Dodge	4 Years	Level 2	S
	14	Oliver Wills	1 Year	Level 1	SW
	15	Millie Gates	1 Year	Level 1	W
	16	Unmanned camera	N/A	N/A	SW
<i>Weather (start/end)</i>	Temperature (°C): 21.6 Relative humidity (%): 58.8 Cloud cover (%): 30 Wind (mph): 0.2 Rain: None		Temperature (°C): 18.6 Relative humidity (%): 68.3 Cloud cover (%): 20 Wind (mph): 1.3 Rain: None		
<i>Equipment used</i>	Equipment	Make	Model	Count	
	NVAs	Nightfox	Whisker	9	
	Additional Illumination	Nightfox	XB5 PRO	9	
	Bat Detector	Wildlife Acoustics	Echo Meter Touch 2	9	
	Two Way Radio	BAOFENG	FV-88E	9	

Results						
Date of survey				Sunset; Start - End		
30/07/2025				Sunset 20:49; 20:19 – 22:34		
Roost reference	Species and numbers	Roost type	Structure reference	Roost location	Access point	Dimensions (for lofts/ internal voids)
7	Common pipistrelle x 1	Maternity	West elevation	Southern end of west elevation roof	Loose roof tile	N/A
8	Common pipistrelle x 1	Maternity	West elevation	Southern end of west elevation roof	Loose roof tile	N/A
9	Common pipistrelle x 1	Maternity	West elevation	Southern end of west elevation roof	Loose roof tile	N/A
10	Soprano pipistrelle x 1	Maternity	West elevation	Northern gable extension	Verge tile	N/A
11	Common pipistrelle x 12	Maternity	Roof tiles on ridgeline	Ridge line on west elevation	Loose tiles	N/A
12	Soprano pipistrelle x 1	Maternity	East elevation	Close to southern gable end	Roof tile	N/A
13	Soprano pipistrelle x 1	Maternity	East elevation	Close to southern gable end	Roof tile	N/A
14	Common pipistrelle x 1	Maternity	South elevation	Dormer window	Clay tile	N/A
17	Serotine x 2	Day	Southwest elevation	Roof tile	Roof tile gap	N/A
Surveyor observations						

<i>Surveyor 7</i>	Emergences observed – None. Summary of general activity: Species – soprano pipistrelle, common pipistrelle, serotine, noctule. Flight paths – Flying over B1 heading east. Foraging areas – Intermittent foraging to the west of B1.	 Figure 34: Elevation view of Surveyor 7, Visit 2.
<i>IR position 7 Nightfox Whisker and XB5 Pro</i>	Camera position: observing northwest elevation of B1 No emergences were observed, and the footage was in line with the observations of surveyor 1 with no additional activity.	 Figure 35: Darkest point of IR position 7, Visit 2.

<i>Surveyor 8</i>	Emergences observed - None Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, myotis and noctule. Flight paths – Occasional passes over B1. Foraging areas – Constant foraging in the garden to the north of B1.	 Figure 36: Elevation view of Surveyor 8, Visit 2.
<i>IR position 8</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing northern elevation of B1 Emergences observed: Yes. Common pipistrelle maternity roosts. (Roost access points 7, 8 & 9) Common pipistrelle maternity roost: Roost access points 7, 8 and 9. Number: 3. Time(s): 20:57:22, 21:10 and 21:10. Location of access point: Loose roof tiles at the most southern end of the western elevation. Direction of travel on emergence: Flew south. Species ID confirmed during IR review.	 Figure 37: Darkest point of IR position 8, Visit 2.  Figure 38: Location of emergence points.

8a – Unmanned camera	One emergence observed during IR review, at 21:10, confirmed by Surveyor 8. Same emergence that was recorded as Roost 8. No additional observations.	 Figure 39: Elevation view of unmanned camera.  Figure 40: Darkest point of unmanned IR.
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<i>Surveyor 9</i>	Emergences observed – Soprano pipistrelle maternity roost: Roost access point 10. Number: 1. Time(s): 20:53. Location of access point(s): Verge tile on gable extension of B1. Direction(s) of travel on emergence: Flew northeast. Species ID confirmed on site. Summary of general activity: Species – Common pipistrelle, brown long-eared, soprano pipistrelle. Flight paths – Across courtyard, east to west and west to east. Foraging areas – Courtyard area in front of B1.	 Figure 41: Elevation view of Surveyor 9, Visit 2.  Figure 42: Location of emergence point.
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<i>IR position 9</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B1 Emergences observed: Yes. Emergence confirmed by IR review, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 43: Darkest point of IR position 9, Visit 2.
<i>Surveyor 10</i>	Emergences observed – Common pipistrelle maternity roost: Roost access point 11. Number: 12. Time(s): Between 20:43 and 21:11. Location of access point(s): Ridge along the apex of B1. Direction(s) of travel on emergence: Flew northwest. Species ID confirmed on site. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine. Flight paths – Frequent bat passes along the courtyard, from east to west and west to east. Foraging areas – In the courtyard in front of B1 and the treelines behind the surveyor.	 Figure 44: Elevation view of Surveyor 10, Visit 2.

<i>IR position 10</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B1 Emergences observed: Yes. IR review confirmed all 12 emergences. One re-entry was observed at 22:06:54. The remainder of the footage was in line with the observations of the surveyor.	 Figure 45: Darkest point of IR position 10, Visit 2.
<i>Surveyor 11</i>	Emergences observed – Soprano pipistrelle maternity roost: Roost access points 12 & 13. Number: 2. Time(s): 20:50:48 and 20:54:55. Location of access point(s): Under roof tiles on the eastern elevation close to eaves of the southern gable end. Direction(s) of travel on emergence: Flew east. Species ID confirmed on site. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine, brown long-eared. Flight paths – Frequent commuting and foraging use to the east of B1 adjacent to the treeline. Foraging areas – Constant foraging in the trees to the east of B1 and over the lawn to the west.	 Figure 46: Elevation view of Surveyor 11, Visit 2.

<i>IR position 11</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing northeastern elevation of B1 Emergences observed: Yes. Emergences were confirmed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 47: Darkest point of IR position 11, Visit 2.
<i>Surveyor 12</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, brown long-eared, noctule, myotis. Flight paths – Frequent bat passes along the west of B1 to southeast of B1. Foraging areas – South to east by the large oak tree.	 Figure 48: Elevation view of Surveyor 12, Visit 2.

<i>IR position 12</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing south elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 49: Darkest point of IR position 13, Visit 2.
<i>Surveyor 13</i>	Emergences observed – Soprano pipistrelle maternity roost (Roost access point 2 re-confirmed as per survey 1). Soprano pipistrelle maternity roost Number: 10 Time(s): 20:37 – 21:02 Location of access point(s): Eaves on southern end of southeast facing elevation, immediately next to terminal chimney stack. Direction(s) of travel on emergence: Flew in a south westerly direction. Species ID confirmed on site. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, myotis, brown long-eared, noctule. Flight paths – Frequent bat passes over B1 and along the lawn in front of B1.	 Figure 50: Elevation view of Surveyor 14, Visit 2.  Figure 51: Emergence point of maternity roost.

	Foraging areas – Constant foraging in the garden in front of B1.	
<i>IR position 13</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing southern elevation of B1 Emergences observed: Yes. Common pipistrelle maternity roost: Roost access point 1. Number: 1. Time: 21:51. Location of access point: Underneath a hanging tile on the north elevation of a dormer on the southern elevation. Direction of travel on emergence: Flew east. Species ID confirmed during IR review. The surveyor did not observe the emergence, and the emergence was confirmed in IR review.	 Figure 52: Darkest point of IR position 13, Visit 2.
<i>Surveyor 14</i>	Emergences observed - Yes. Soprano pipistrelle maternity roost: Roost access point 2 re-confirmed from Survey 1. Number: 29. Time(s): 20:19 – 21:02. Location of access point(s): Gap between pillar and roof on the southwest elevation. Direction(s) of travel on emergence: The majority of the bats emerging flew west towards the trees. Some flew eastwards. Species ID confirmed on site.	 Figure 53: Elevation view of Surveyor 14, Visit 2.

	Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, noctule, serotine, and brown long-eared bats. Flight paths – East along the southern elevation. Foraging areas – Constant foraging in the garden in front of the southwestern elevation of B1. It was observed that bats emerged from the building prior to the start time of the survey.	 Figure 54: Emergence location.
<i>IR position 14</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing southwestern elevation of B1. Emergences observed: Yes. The footage was in line with the observations of the surveyor.	 Figure 55: Darkest point of IR position 14, Visit 2.

<i>Surveyor 15</i>	Emergences observed - None Summary of general activity: Species – Soprano pipistrelle, common pipistrelle, serotine, noctule. Flight paths – Frequent bat passes from south to north, over the building. Foraging areas – N/A.	 Figure 56: Elevation view of Surveyor 15, Visit 2.
<i>IR position 15</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing western elevation of B1 Emergences observed: Yes. Maternity roost of common pipistrelle: Roost access point 14. One emergence was observed during IR review. The remainder of the footage was in line with the observations of the surveyor with no additional activity. Number: 1. Time(s): 22:27. Location of access point(s): Clay tile on dormer window. Direction(s) of travel on emergence: Flew south. Species ID confirmed during review using survey sheets and communication with surveyors.	 Figure 57: Darkest point of IR position 15, Visit 2.

		 Figure 58: Emergence point.
<i>IR position 16</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing southwestern elevation of B1. Emergences observed: Yes. Serotine day roost (Roost 17) Number: 2. Time(s): 21:19:10 and 21:28:00. Location of access point(s): Roof tile. Direction(s) of travel on emergence: Flew south. Species ID confirmed during review.	 Figure 59: Emergence point.

Field Survey**Dusk Emergence Survey 2****Building B2**

<i>Building inspection prior to survey</i>		Updated internal inspection was deferred to the third survey.					
<i>Surveyor and position</i>		Surveyor Position	Name	BERS Licence	Experience / Bat	BCT Competency	Elevation
		1	Andy Forse	1 Year		Level 1	N/NW
		2	Lily Harman	2 Years		Level 1	NW/SW
		3	Robert Halcrow	4 Years		Level 2	E
		4	Jennifer Gibbons	2 Years		Level 2	N
		5	Elena Burroughs	1 Year		Level 1	S
		6	Arnold Lasagna	2 Years		Level 1	SE
<i>Weather (start/end)</i>		Temperature (°C): 21.6 Relative humidity (%): 58.8 Cloud cover (%): 30 Wind (mph): 0.2 Rain: None			Temperature (°C): 18.6 Relative humidity (%): 68.3 Cloud cover (%): 20 Wind (mph): 1.3 Rain: None		
<i>Equipment used</i>		Equipment	Make	Model	Count		
		NVAs	Nightfox	Whisker	6		
		Additional Illumination	Nightfox	XB5 PRO	6		
		Bat Detector	Wildlife Acoustics	Echo Meter Touch 2	6		
		Two Way Radio	BAOFENG	FV-88E	6		
Results							
Date of survey				Sunset; Start - End			
30/07/2025				Sunset 20:49; 20:19 – 22:34			
Roost reference	Species and numbers	Roost type	Structure reference	Roost location	Access point	Dimensions (for lofts/ internal voids)	

4	Common pipistrelle x 1	Day	Under guttering/ timber board	Northeast elevation	Under guttering	N/A
5	Common pipistrelle x 1	Day	Above dormer window	South elevation	Roof tile	N/A
6	Common pipistrelle x 1	Day	Roof ridge	East elevation	Roof tile	N/A

Surveyor observations

Surveyor 1

Emergences observed – None.

Summary of general activity:

Species – Common pipistrelle, soprano pipistrelle, serotine.

Flight paths – Common pipistrelle and soprano pipistrelle commuting from northwest treeline over building to southeast and returning.

Foraging areas – Common pipistrelle and soprano pipistrelle foraging along the treeline to the north, west and east of B2.

Other activity – Regular common pipistrelle and soprano pipistrelle occurrences between 20:48 and 22:33 that were heard but not seen. A serotine was heard but not seen at 21:20.



Figure 60: Elevation view of Surveyor 1, Visit 2.

<i>IR position 1</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing north/northwest elevation of B2. No emergences were observed, and the footage was in line with the observations of surveyor 1 with no additional activity.	 Figure 61: Darkest point of IR position 1, Visit 2.
<i>Surveyor 2</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine. Flight paths – SW to NE Foraging areas – treeline near Surveyor 1. The first bat was a soprano pipistrelle, passing from the SW to the NE at 20:56. At 21:06, a common pipistrelle was observed passing in the same direction, over the building. Then, at 21:07 and 21:09, common pipistrelles were heard but not seen. At 21:10, a common pipistrelle was observed passing in the same direction as the other passes – SW to NE over the building. At 21:11. A common pipistrelle was observed foraging around the trees behind position 1. At 21:14, a common pipistrelle was heard but not seen. At 21:20, a serotine was observed passing from the NE to the SW, over the building. At	 Figure 62: Elevation view of Surveyor 2, Visit 2.

	21:25, a soprano pipistrelle was heard but not seen. Subsequently, common pipistrelles were heard but not seen from 21:29 until 22:25.	
<i>IR position 2</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing northwestern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 63: Darkest point of IR position 2, Visit 2.
<i>Surveyor 3</i>	Emergences observed – None. Summary of general activity: Species – Soprano pipistrelle, common pipistrelle, noctule, serotine. Flight paths – Over the building and along the treeline behind Surveyor 3. Foraging areas – Constant foraging along the treeline and in the carpark in front of B2.	 Figure 64: Elevation view of Surveyor 3, Visit 2.

<i>IR position 3</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing eastern elevation of B2 Emergences observed: Yes. Common pipistrelle day roost: Roost access point 4. Number: 1 Time: 21:46:49 Location of access point: Emerged from under guttering under left dormer window (northeast elevation). Direction of travel on emergence: Flew straight northeast The bat observed at emergence was identified as a common pipistrelle by the surveyor, based on flight path and behavioural characteristics. Although no echolocation calls were recorded, the individual emitted an audible squeak that was heard directly. In addition, a common pipistrelle was recorded foraging approximately one minute after the initial emergence, whereas soprano pipistrelles were not observed foraging until 21:15	 Figure 65: Darkest point of IR position 3, Visit 2.  Figure 66: Emergence point and direction of flight.
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<i>Surveyor 4</i>	Emergences observed – 2 no. common pipistrelles. Day roost: Access points 5 and 6. Common pipistrelle maternity roost Number: 2 Time: Emerged at 20:48 and 20:50 Location of access point: south elevation roof. Roost 5: above dormer window on south elevation. Roost 6: Roof ridge on east elevation. Direction of travel on emergence: Flew south towards the garden. Species ID confirmed on site. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, noctule, serotine, and brown long-eared. Flight paths – Over B2, north to south and west to east. Foraging areas – In the car park in front of B2.	 Figure 67: Elevation view of Surveyor 4, Visit 2.
<i>IR position 4 Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B2 Emergences observed: Yes. Common pipistrelle roost Number: 2 Times: emerged at 20:48 and 20:50 Location of access point(s): roof tile above dormer window on south elevation, and roof ridge on east elevation. Direction of travel on emergence: first bat flew south; second bat flew east into the trees.	 Figure 68: Darkest point of IR position 4, Visit 2.

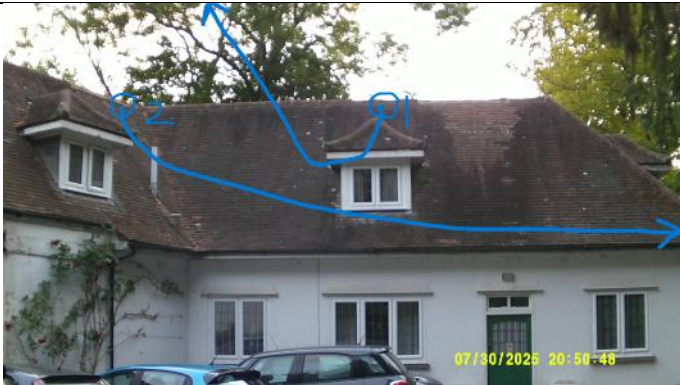
	Species ID confirmed on site.	
Surveyor 5	Emergences observed – None. Summary of general activity: Species – Soprano pipistrelle, common pipistrelle, serotine. Flight paths – N/A. Foraging areas – Briefly along treeline to the west of B2.	

Figure 69: Emergence points and direction of flight.

Figure 70: Elevation view of Surveyor 5, Visit 2.

<i>IR position 5</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing southern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 71: Darkest point of IR position 5, Visit 2.
<i>Surveyor 6</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine. Flight paths – Flying south over B2 and heading west. Foraging areas – N/A.	 Figure 72: Elevation view of Surveyor 6, Visit 2.

<i>IR position 6</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing southeastern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 73: Darkest point of IR position 6, Visit 2.
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Field Survey	
Dusk Emergence Survey 3	
Building B1	
<i>Building inspection</i> <i>prior to survey</i>	An updated internal inspection was carried out by Jamie-Lee Anderson, BSc (Hons), Senior Ecologist, Class 2 Natural England Bat Licence Number: 2024-12356-CL18-BAT. Bat droppings (~200) were found within the loft space, scattered uniformly throughout. The loft space was not fully boarded and was lined with mineral wool; therefore, additional droppings may have been missed. There was a concentration within the centre of the loft space of bat droppings on a ventilation pipe.



Figure 74: Droppings located ontop of the pipe within the loft space.



Figure 75: Bat droppings caught within a web above the pipe.

Surveyor and position	Surveyor Position	Name	BERS Licence	Experience / Bat	BCT Competency	Elevation
	7	Jolanta Jurpalova	3 Years		Level 2	NW
	8	Liz Hadland	1 Year		Level 1	N
	8a	Unmanned IR	N/A		N/A	S aspect of E elevation
	9	Annabel Yapp	3 Years		Level 2	N
	10	Will Malpas	3 Years		Level 2	N/NE
	11	Lucy Jacobs	4 Years		Level 2	E
	12 – Lead	Rachel Cole	2 Years		Level 1	S
	13	Arnold Lasagna	1 Year		Level 1	S
	14	Oliver Wills	1 Year		Level 1	SW
	15	Abigail Louise Dodge	5 Years		Level 2	W
	16	Unmanned camera	N/A		N/A	SW
Weather (start/end)			Temperature (°C): 22.3 Relative humidity (%): 54.1		Temperature (°C): 16.7 Relative humidity (%): 59.5	

	Cloud cover (%): 60 Wind (mph): 0.7 Rain: None			Cloud cover (%): 10 Wind (mph): 0.2 Rain: None		
Equipment used	Equipment	Make	Model		Count	
	NVAs	Nightfox	Whisker		9	
	Additional Illumination	Nightfox	XB5 PRO		9	
	Bat Detector	Wildlife Acoustics	Echo Meter Touch 2		9	
	Two Way Radio	BAOFENG	FV-88E		9	
Results						
Date of survey				Sunset; Start - End		
20/08/2025				Sunset 20:10; 19:40 – 21:55		
Roost reference	Species and numbers	Roost type	Structure reference	Roost location	Access point	Dimensions (for lofts/ internal voids)
7	Common pipistrelle x 1	Maternity	West elevation	Southern end of west elevation	Loose roof tile	N/A
8	Common pipistrelle x 1	Maternity	West elevation	Southern end of west elevation	Loose roof tile	N/A
10	Soprano pipistrelle x 1	Maternity	West elevation	Northern gable extension	Verge tile	N/A
11	Common pipistrelle x 12	Maternity	Roof tiles on ridgeline	Ridge line on west elevation	Loose tiles	N/A
12	Soprano pipistrelle x 1	Maternity	East elevation	Close to southern gable end	Roof tile	N/A
13	Soprano pipistrelle x 1	Maternity	East elevation	Close to southern gable end	Roof tile	N/A
15	Brown long-eared bat x 1	Maternity	North elevation	Eastern hip of gable extension	Roof tile	N/A
16	Common pipistrelle x 1	Maternity	West elevation	South facing gable end	Hanging tile	N/A

Surveyor observations		
Surveyor 7	Emergences observed – None. Summary of general activity: Species – common pipistrelle, soprano pipistrelle. Flight paths – East to west along the northern elevation of B1. Foraging areas – N/A.	 Figure 76: Elevation view of Surveyor 7, Visit 3.
<i>IR position 7</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing northwestern elevation of B1 No emergences were observed, and the footage was in line with the observations of surveyor 1 with no additional activity.	 Figure 77: Darkest point of IR position 7, Visit 3.

<i>Surveyor 8</i>	Emergences observed – Yes. Common pipistrelle maternity roost (re-confirmed roost access points 7 and 8). Common pipistrelle roost Number: 2 Times: emerged at 20:21 and 20:30 Location of access point(s): loose roof tiles on the northern section of the eastern elevation. Direction of travel on emergence: both flew north. Summary of general activity: Species – Common pipistrelle and soprano pipistrelle. Flight paths – Occasional passes over B1. Foraging areas – Constant foraging in the garden to the north of B1.	 Figure 78: Elevation view of Surveyor 8, Visit 3.
<i>IR position 8</i> <i>Nightfox Whisker and</i> <i>XB5 Pro</i>	Camera position: observing northern elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 79: Darkest point of IR position 8, Visit 3.

<i>8a – Unmanned IR</i>	No emergences or re-entries were observed upon IR review.	 Figure 80: Elevation view of IR.
<i>Surveyor 9</i>	Emergences observed – Yes, re-confirmed roost access point 10. Soprano pipistrelle roost Number: 1 Times: emerged at 20:06 Location of access point(s): Verge tile on gable extension of B1. Direction of travel on emergence: flew northeast. Summary of general activity: Species – Common pipistrelle, brown long-eared, soprano pipistrelle and serotine. Flight paths – Across courtyard, east to west and west to east.	 Figure 81: Elevation view of Surveyor 9, Visit 3.

	Foraging areas – Courtyard area in front of B, treelines to the west.	
<i>IR position 9 Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B1 Emergences observed: Yes. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 82: Darkest point of IR position 9, Visit 3.
<i>Surveyor 10</i>	Emergences observed – Yes. Re-confirmed Roost access point 11 and new roost access point 15. Common pipistrelle maternity roost (Roost access point 11) Number: 3 Times: 20:20 – 20:26 Location of access point(s): Same ridgeline as confirmed in survey 2 (roost 11). Direction of travel on emergence: flew northwest. Brown long-eared day roost (Roost access point 15) Number: 1 Times: emerged at 21:32 Location of access point(s): Verge tile on gable extension of B1.	 Figure 83: Elevation view of Surveyor 10, Visit 3.

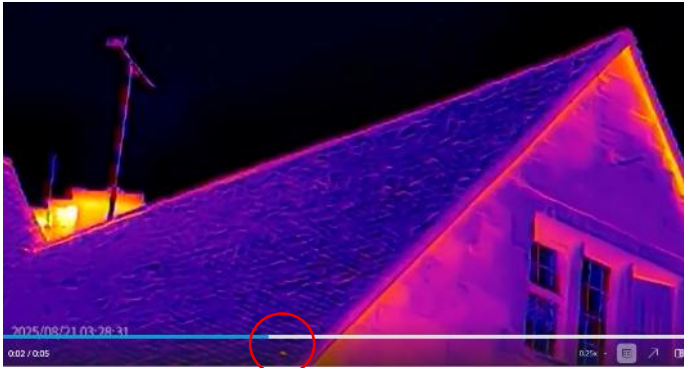
	Direction of travel on emergence flew northeast. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine, noctule, brown long eared bat. Flight paths – Frequent bat passes along the courtyard, from east to west and west to east. Foraging areas – along treelines and in carpark in front of B1.	
<i>IR position 10</i> <i>Nightfox Whisker and XB5 Pro and Thermal Camera</i>	Camera position: observing northern elevation of B1 Emergences observed: Yes. All three common pipistrelle emergences were confirmed via IR, and the footage was in line with the observations of the surveyor with no additional activity. The brown long-eared bat emergence was confirmed via thermal camera review.	 Figure 84: Darkest point of IR position 10, Visit 3. 

		Figure 85: Brown long-eared bat emergence point.
Surveyor 11	Emergences observed – Yes. Re-confirmed roost access points 12 and 13. Soprano pipistrelle: Number: 3 Time(s): 20:01, 20:20, 20:25 Location of access point(s): under roof tiles on the eastern elevation close to the eaves of the southern gable end Direction(s) of travel on emergence: northeast Species ID confirmed on site. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, brown long-eared. Flight paths – Frequent commuting and foraging use to the east of B1. Foraging areas – Constant foraging in the trees to the east of B1.	 Figure 86: Elevation view of Surveyor 11, Visit 3.

<i>IR position 11</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing northeastern elevation of B1 Emergences observed: yes. Three emergences were confirmed by IR, and the footage was in line with the observations of the surveyor with no additional activity.	 08/20/2025 21:54:20 Figure 87: Darkest point of IR position 11, Visit 3.
<i>Surveyor 12</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, brown long-eared, noctule, myotis, serotine. Flight paths – northwest to south, from tree line in the northwest to the oak tree in the south. Foraging areas – Constant foraging around the large oak tree and in the northwest-west treeline.	 Figure 88: Elevation view of Surveyor 12, Visit 3.

<i>IR position 12</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing south elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 89: Darkest point of IR position 13, Visit 3.
<i>Surveyor 13</i>	Emergences observed - None Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, myotis, brown long-eared, noctule. Flight paths – N/A. Foraging areas – South garden of B1.	 Figure 90: Elevation view of Surveyor 13, Visit 3.

<i>IR position 13</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing southern elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 91: Darkest point of IR position 13, Visit 3.
<i>Surveyor 14</i>	Emergences observed - None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, myotis, serotine, and brown long-eared bats. Flight paths – Infront of the lawn. Foraging areas – Over the garden to the southwest of B1.	 Figure 92: Elevation view of Surveyor 14, Visit 3.

<i>IR position 14</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing southwestern elevation of B1. Emergences observed: No. The footage was in line with the observations of the surveyor with no additional activity.	 Figure 93: Darkest point of IR position 14, Visit 3.
<i>Surveyor 15</i>	Emergences observed – Common pipistrelle roost: Roost access point 16. Common pipistrelle roost: Number: 1 Time(s): 20:18 Location of access point(s): Clay hanging tile on south/southeast facing gable end Direction(s) of travel on emergence: north Species ID confirmed on site. Summary of general activity: Species – Soprano pipistrelle, common pipistrelle. Flight paths – Frequent bat passes from south to north, over the building. Foraging areas – N/A.	 Figure 94: Elevation view of Surveyor 15, Visit 3.  Figure 95: Point of emergence.

<i>IR position 15</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing western elevation of B1 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 96: Darkest point of IR position 15, Visit 3.
<i>IR position 16</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing southwestern elevation of B1. Emergences observed: No. No emergence or re-entry activity was noted.	 Figure 97: Emergence point of pipistrelle sp. 

		Figure 98: Darkest point of IR position 16, visit 3.
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Field Survey					
Dusk Emergence Survey 3					
Building B2					
Building inspection prior to survey	An updated internal loft inspection was carried out by Jamie-Lee Anderson, BSc (Hons), Senior Ecologist, Class 2 Natural England Bat Licence Number: 2024-12356-CL18-BAT. Approximately 100 bat droppings were found scattered throughout the interior of the loft space.				
					
	Figure 99: Loft space within the interior of B2. Figure 100: Loft space within the interior of B2. No evidence of bat use was found. No droppings, feeding remains or urine staining was evident.				
Surveyor and position	Surveyor Position	Name	BERS Experience / Bat Licence	BCT Competency	Elevation
	1	Lily Harman	2 Years	Level 1	N
	2	Emerson Ventura	1 Year	Level 1	NW/SW
	3	Andy Forse	1 Year	Level 1	E
	4	Jennifer Gibbons	2 Years	Level 1	N

	5	Elena Burroughs		1 Year		Level 1	S
	6	Sophie Gullan		4 Years		Level 2	SE
Weather (start/end)	Temperature (°C): 22.3 Relative humidity (%): 54.1 Cloud cover (%): 60 Wind (mph): 0.7 Rain: None				Temperature (°C): 16.7 Relative humidity (%): 59.5 Cloud cover (%): 10 Wind (mph): 0.2 Rain: None		
Equipment used	Equipment		Make		Model		Count
	NVAs		Nightfox		Whisker		6
	Additional Illumination		Nightfox		XB5 PRO		6
	Bat Detector		Wildlife Acoustics		Echo Meter Touch 2		6
	Two Way Radio		BAOFENG		FV-88E		6
Results							
Date of survey				Sunset; Start - End			
20/08/2025				Sunset 20:10; 19:40 – 21:55			
Roost reference	Species and numbers	Roost type	Structure reference	Roost location		Access point	Dimensions (for lofts/ internal voids)
5	Common pipistrelle x 1	Day	Above dormer window	South elevation		Roof tile	N/A
6	Common pipistrelle x 1	Day	Roof ridge	East elevation		Roof tile	N/A
Surveyor observations							

<i>Surveyor 1</i>	Emergences observed – None. Summary of general activity: Species – common pipistrelle, serotine. Flight paths – N/A. Foraging areas – Infrequent foraging along the northwestern treeline.	 Figure 101: Elevation view of Surveyor 1, Visit 3.
<i>IR position 1 Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B1 No emergences were observed, and the footage was in line with the observations of surveyor 1 with no additional activity.	 Figure 102: Darkest point of IR position 1, Visit 3.

<i>Surveyor 2</i>	Emergences observed – None. Summary of general activity: Species – Soprano pipistrelle, common pipistrelle, serotine. Flight paths – N/A. Foraging areas – N/A.	 Figure 103: Elevation view of Surveyor 2, Visit 3.
<i>IR position 2 Nightfox Whisker and XB5 Pro</i>	Camera position: observing northwestern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 104: Darkest point of IR position 2, Visit 3.

<i>Surveyor 3</i>	Emergences observed – None. Summary of general activity: Species – Soprano pipistrelle, common pipistrelle, serotine and myotis. Flight paths – Serotine passed between the treelines that surround B2 then foraged within the trees. Foraging areas – Constant foraging along the treeline.	 Figure 105: Elevation view of Surveyor 3, Visit 3.
<i>IR position 3 Nightfox Whisker and XB5 Pro</i>	Camera position: observing eastern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 106: Darkest point of IR position 3, Visit 3.

<i>Surveyor 4</i>	Emergences observed – Common pipistrelle day roost (Roost access points 5 & 6 re-confirmed). Common pipistrelle day roost Number: 2. Time(s): 20:12 and 20:14 Location of access point(s): roof tiles below roof ridge on east facing side, and roof tiles on south facing side. Direction(s) of travel on emergence: all travelled east towards trees. Species ID confirmed on site. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine, brown long eared bat. Flight paths – Passing over B2 toward the tree lines. Foraging areas – N/A.	 Figure 107: Elevation view of Surveyor 4, Visit 3.
<i>IR position 4 Nightfox Whisker and XB5 Pro</i>	Camera position: observing northern elevation of B2 Emergences observed: Yes. 2 emergences as observed during the survey, as well as one additional re-entry. The re-entry was observed at 21:18:50 and occurred at the south facing elevation. These locations are the same as were previously observed and denoted as roosts 5 and 6.	 Figure 108: Darkest point of IR position 4, Visit 3.

<i>Surveyor 5</i>	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, brown long-eared. Flight paths – East to north over B2. Foraging areas – N/A.	 Figure 109: Elevation view of Surveyor 5, Visit 3.
<i>IR position 5 Nightfox Whisker and XB5 Pro</i>	Camera position: observing southern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 110: Darkest point of IR position 5, Visit 3.

Surveyor 6	Emergences observed – None. Summary of general activity: Species – Common pipistrelle, soprano pipistrelle, serotine. Flight paths – Frequent bat passes along the treelines. Foraging areas – Constant foraging in the woodland behind the surveyor.	 Figure 111: Elevation view of Surveyor 6, Visit 3.
<i>IR position 6</i> <i>Nightfox Whisker and XB5 Pro</i>	Camera position: observing southeastern elevation of B2 Emergences observed: No. No emergences were observed, and the footage was in line with the observations of the surveyor with no additional activity.	 Figure 112: Darkest point of IR position 6, Visit 3.

Conclusions, Impacts and Recommendations

Survey Results Summary	Roost number	Species and number	Roost type	Roost location	Impact	

	1	Common pipistrelle x 1	Maternity	B1: Hanging tile on the northern aspect of a dormer window on the south elevation.	Impact to roost – Destruction Level of impact – Site
	2	Common and soprano pipistrelle x 47	Maternity	B1: Southwestern corner, under the eaves above the cluster of lead flashing on the southwestern corner.	Impact to roost – Destruction Level of impact – Local
	3	Pipistrelle sp. x 1	Maternity	B1: Under a loose roof tile on the southwestern corner.	Impact to roost – Destruction Level of impact – Site
	4	Common pipistrelle x 1	Day	B2: Under guttering/timber board on northeast elevation of	Impact to roost – Destruction Level of impact – Site
	5	Common pipistrelle x 1	Day	B2: Roof tile above dormer window on the southern elevation.	Impact to roost – Destruction Level of impact – Site
	6	Common pipistrelle x 1	Day	B2: Roof tile on the roof ridge along the eastern elevation.	Impact to roost – Destruction Level of impact – Site
	7	Common pipistrelle x 1	Maternity	B1: Loose roof tile on the southern end of the western elevation's roof.	Impact to roost – Destruction Level of impact – Site
	8	Common pipistrelle x 1	Maternity	B1: Loose roof tile on the southern end of the western elevation's roof.	Impact to roost – Destruction Level of impact – Site

	9	Common pipistrelle x 1	Maternity	B1: Loose roof tile on the southern end of the western elevation's roof.	Impact to roost – Destruction Level of impact – Site
	10	Soprano pipistrelle x 1	Maternity	B1: Northern gable extension verge tile on the western elevation.	Impact to roost – Destruction Level of impact – Site
	11	Common pipistrelle x 12	Maternity	B1: Ridge line roof tiles on the western elevation.	Impact to roost – Destruction Level of impact – Local
	12	Soprano pipistrelle x 1	Maternity	B1: Gable end roof tile on the eastern elevation.	Impact to roost – Destruction Level of impact – Site
	13	Soprano pipistrelle x 1	Maternity	B1: Roof tile on the southern gable end of the eastern elevation.	Impact to roost – Destruction Level of impact – Site
	14	Common pipistrelle x 12	Maternity	B1: Clay tile on the dormer window on the south elevation.	Impact to roost – Destruction Level of impact – Site
	15	Brown long-eared bat x 1	Day	B1: Roof tile on the eastern hip of gable extension on north elevation.	Impact to roost – Destruction Level of impact – Site
	16	Common pipistrelle x 1	Maternity	B1: Hanging tile on the south-facing gable end on western elevation.	Impact to roost – Destruction Level of impact – Site

	17	Serotine x 2	Day	B1: Roof tile on southwestern elevation.	Impact to roost – Destruction Level of impact – Local
General bat activity on site: Key foraging areas Both B1 and B2 are surrounded by dense trees and woodland. The treelines surrounding both B1 and B2 were heavily used for foraging by bats. The area to the east of B2 (parking area) was used by foraging bats infrequently. The courtyard to the north and south of B1, and the lawn to the south of B1 were used by foraging bats. Key flight lines The wooded areas surrounding B1 and B2, as mentioned above, were used by commuting bats. These areas are heavily shaded and well protected from predators, and bats are likely to continuously use them for commuting and foraging. Species observed Soprano pipistrelle, common pipistrelle, serotine, noctule, myotis sp., and brown long-eared bat. Hibernation suitability: B1 does possess a cellar, which was surveyed during the updated internal inspection prior to V3. No evidence of bats was found, and no suitable ingress points were observed. There is some limited habitat in crevices in the remainder of the exterior features, however these do not offer the stable environment generally required for hibernation. No further surveys required. (Where possible, destructive works should be timed to take place in the ‘shoulder’ seasons, October–November or March–April, avoiding the breeding and hibernation periods for					

	bats. The extent to which this timing will be applied will form part of the mitigation strategy accompanying the licence application to Natural England, prior to works.) It is likely that the bats observed to be using the buildings (B1 and B2) are utilising the entirety of the main roof structures. There are extensive gaps, raised tiles and broken tiles. Bats could utilise the entirety of the roof structure once they have entered under a tile. It is highly likely that the roosts extend throughout whole roof structure between tiles and felt.
<i>Impact Assessment</i>	All roosts will be destroyed during construction works, which will require the removal of roof tiles. Any bats present on the building or between tiles and felt could be killed or injured. This applies to Building B1 and B2.
<i>Recommendations</i>	No works to the property that may block or remove potential roosting features and/or identified roosts should be carried out until the required licensing has been granted and a licensed ecologist is present. Undertaking such work beforehand could unlawfully affect bats if present and may compromise the validity of the surveys and hinder the planning application process. A Bat Licence from Natural England is required to legally permit the works. This requirement exists independently of the planning system and is required whether planning permission is needed or not, and whether this is listed as a condition of planning or not. Additional survey requirements: • If the licence is not submitted by the 20th of November 2025 a Material Changes Check will be required. • If the licence is not submitted by 1st of May 2026 updated dusk surveys will be required. The licence can be applied for once planning permission has been granted (where required), and within 3 months of the start of works. Any pre-commencement wildlife related planning conditions that require sign off from the council will need to be discharged prior to licence submission. A bat mitigation plan will be required to be produced by an experienced EPSL writer, to ensure that the LPA can have full confidence that the licence application would be successful, owing to the presence of maternity roosts.

	An EPSL application to Natural England will be required to legally permit the proposed works. The EPSL application requires that surveys have been undertaken within the most recent active bat season, and at a suitable time of year to fully characterise the roosts present. Planning permission must have been granted, and all relevant wildlife-related conditions have been discharged prior to submission, where possible to do so. A Material Changes Check will be required within three months of the EPSL submission, if no survey work has been undertaken within that period. The named ecologist on the EPSL will need to have visited the site, so a pre EPSL inspection may also be needed regardless of the passage of time between surveys and EPSL. The EPSL will detail any mitigation and compensation measures that will be required for the proposed development to comply with the standing advice and will be designed to reduce any impacts to an acceptably low level so as to maintain (or enhance) the Favourable Conservation Status (FCS) of the local bat population. The EPSL will include (but are not limited to) the following measures: ▪ Timing of works to avoid the maternity season (May to September) ▪ Where possible, destructive works should be timed to take place in the ‘shoulder’ seasons October-November or March-April. If this is not possible, a survey to rule out hibernating bats will be required; however fully mitigation design will accompany the license application to Natural England. Impacts to hibernating bats is never approved by Natural England, so any works within the hibernation period will need to demonstrate an absence of bats before commencing. • If destructive works are carried out in the March/April window and the roost will be unavailable for the maternity season that year, suitable replacement like for like maternity roost provision will need to be built prior to the start of destructive works. ▪ The installation of bat boxes or replacement bat roosts prior to work commencing to form a receptor site for any bats found during the works. Boxes may be installed on buildings or trees or can be pole mounted but must be in an undisturbed location and will need to be maintained in this location for post-development.
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	Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. ▪ The provision of a toolbox talk to contractors, by the Named Ecologist or an Accredited Agent, to inform them of the presence of bat roosts. ▪ A pre-commencement inspection of any roost features by the Named Ecologist or an Accredited Agent using a torch and an endoscope (this may be via ladders, scaffolding or a mobile elevated platform). ▪ The removal of all features used by bats including hanging tiles, cladding, roof tiles, lining and lead flashing by hand under the supervision of the Named Ecologist or an Accredited Agent. ▪ Avoiding the use of unnecessary lighting, particularly at night, or implementing a low impact lighting strategy to avoid illumination of retained or newly created roosts or roost features. ▪ Avoiding excessive noise or vibration disturbance e.g. from power tools or radios, within close proximity of retained or newly created roost or roost features. ▪ Like for like roost replacement is required on site ▪ Post development monitoring will be required in years 2 and 4 post development. This will involve a dusk emergence survey to cover all replaced roosts, and inspection of any bat roosts where possible. You must include a certificate that proves the roofing membrane has passed a 'snagging propensity test' if you're using a non-bitumen coated roofing membrane. A snagging propensity test checks that the membrane can stand the repeated snagging actions of roosting bats. To pass, a membrane must show no change in the average number of loops per cm² as rotations are increased from 0 to 1000. You do not need a certificate for bitumen 1F felt that has a non-woven, short fibre construction. If a BRM is being used instead of a type 1f bitumen, the installation of the membrane will need to be supervised by the ecologist to ensure everything is installed as per manufacturers specifications and no damage occurs. This is because if any damage occurs or if it is not installed correctly, the BRM is no longer 'bat safe' and therefore would no longer be permitted under the terms and conditions of the EPSL. Should timber treatment be required in bat roosts, this should follow guidance set out at the below link: https://www.gov.uk/government/publications/bat-roosts-insecticides-and-timber-treatments/timber-treatment-products-suitable-for-use-in-or-near-bat-roosts
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	The EPSL will only include the bat species, numbers and roost types listed above. If bats are found during periods of adverse weather conditions, these must be left undisturbed until weather conditions become more favourable to move bats to the receptor bat box. EPSLs do not allow for the disturbance of hibernating bats. Therefore, if any bats are found during the hibernation period or if any unexpected bat species or roost types are identified, works must cease and advice must be sought from the Named Ecologist regarding the possible requirement for timing restrictions for works, the completion of further bat surveys or a modification to the EPSL. Wildlife Sensitive Lighting Strategy A low impact lighting strategy will be adopted for the site during and post-development, and this should be designed in accordance with Guidance Note GN08/23 Bats and Artificial Lighting at Night (Institution of Lighting Professionals, 2023). The following measures could be included: ▪ Light spill on to the ponds or the woodland should be avoided. ▪ Use narrow spectrum light sources to lower the range of species affected by lighting. ▪ Use light sources that emit minimal ultra-violet light. ▪ Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. ▪ Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. ▪ Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. ▪ External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.
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	▪ Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.
<i>Enhancements</i>	The installation of six bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be integrated within the new build extension. Bat boxes should be positioned 3-5m above ground level (at the eaves of buildings), facing in a south or south-westerly direction (or facing vegetated areas/gardens), with a clear flight path to and from the entrance, away from and unlit by artificial light, and not above any windows. The bat boxes will be a specification suitable for crevice dwelling species such as Vivara Pro Build-In Woodstone Bat Tube (integrated), Ibstock Enclosed Bat Box 'C' (integrated), or a similar alternative brand.

Appendix 1a: BERS map – B1 – Showing All Roost Access Points (Nos. 1-17).



Appendix 1b: BERS map – B2 - Showing Roost Locations



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