FUTURESECOLOGY

Cushman and Wakefield

Wrexham Gateway

BAT SURVEY ADDENDUM REPORT

Report Reference Number: FE500/BSR01

June 2026

Please note that the report is likely to be valid for a period of 12 – 18 months[1]. Where specific protected species surveys are undertaken the validation period of these surveys differs and must be considered carefully when utilising the data present within this report. For example, bat nocturnal emergency surveys are likely to be valid for a period of two seasons (a season being May – September) to support a planning application though to apply for a European Protected Species Licence surveys must be up to date and should be conducted in the current or most recent optimal survey season.

Futures Ecology Ltd
Carrwood Park, Swillington Common Farm, Selby Rd, Leeds LS15 4LG

Company Number: 12125083

This report is the property of Futures Ecology Limited and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the written consent of Futures Ecology Limited.

This report may not be relied upon by any other party without the express written agreement of Futures Ecology Limited. The use of this report by unauthorised third parties is at their own risk and Futures Ecology Limited accepts no duty of care to any such third party.

Futures Ecology Limited assumes no liability for any loss resulting from errors, omissions or misrepresentation made by others. Any recommendation, opinion or finding stated in this report is based on conditions as they existed at the time that Futures Ecology Limited undertook the work. Nothing in this report constitutes legal opinion.

REV	Issue Status	Author or Reviewer	Name & Qualifications	Position	Date
-	Draft 1	Author	A. Eales BSc (Hons)	Ecology Director	20.05.2026
		Reviewer	J. Eales BSc	Managing Director	24.06.2026

[1] https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf

CONTENTS

1.0 EXECUTIVE SUMMARY 2
2.0 INTRODUCTION 2
3.0 METHODOLOGY 3
4.0 RESULTS 5
5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS 6

TABLES

Table 1: Bat Survey Conditions and Personnel Details

APPENDICES

Appendix A: Nocturnal Survey Results Bat Contacts
Appendix B: Night Visions Aid (NVA) Screenshots

FIGURES

Figure 1: Nocturnal Bat Survey Results – 6th May, 2026
Figure 2: Nocturnal Bat Survey Results – 20th May, 2026
Figure 3: Nocturnal Bat Survey Results – 10th June, 2026

1.0 EXECUTIVE SUMMARY

1.1 Initial baseline surveys were undertaken between January and April, 2025 to inform an Ecological Impact Assessment (EcIA) (Futures Ecology, July 2025 Ref: FE500/EcIA01). The EcIA was submitted in support of a planning application for a mixed-use development located in the centre of Wrexham, North Wales (grid reference: SJ33016 50805).

1.2 The Site comprises approximately 2.8ha in extent and comprises predominantly hard surfaces, buildings and active railway lines. A few scattered trees are present with small areas of modified grassland and formal landscaping.

1.3 The habitat and preliminary protected species surveys was undertaken in January with a follow-up survey in April, 2025. The survey identified potential bat roosting habitat in association with B1, B2 and B5 which are to be demolished as part of the proposals. Buildings B1 and B2 were classified as providing low bat roosting potential and B5 moderate inline with current industry guidance (Collins, 2023)[2] As such two nocturnal presence / absence surveys were recommended for B5 and one survey for B1 and B2.

1.4 The nocturnal presence / absence surveys were undertaken between May and June, 2026. From the completed surveys it was concluded that a bat roost was confirmed likely absent from the buildings. Recommendations were made that should site clearance works not be completed by July 2027 an update nocturnal survey should be undertaken to further confirm bat roost presence / absence.

2.0 INTRODUCTION

2.1 The following report has been prepared by Futures Ecology Ltd. on behalf of Cushman and Wakefield. It provides the results of bat nocturnal assessments undertaken on buildings at a site in the centre of Wrexham, North Wales (grid reference: SJ 33016 50805).

2.2 Baseline surveys confirmed the presence of potential bat roost habitat in association with buildings within the curtilage of the application site. A such, surveys were undertaken between May and June 2026 and comprised nocturnal bat presence / absence survey of three buildings (B1, B2 and B5).

2.3 This report should be read in conjunction with the following reports:

- Great Crested Newt Addendum Report (GCN), June, 2026, Futures Ecology Ltd. (FE500/GCN01),
- Ecological Impact Assessment (EcIA), July, 2025, Futures Ecology Ltd. (FE500/EcIA01),
- Biodiversity Impact Assessment (BIA), July, 2025, Futures Ecology Ltd. (FE500/BIA01).

[2] Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4rd edn).* The Bat Conservation Trust, London

SITE LOCATION AND CONTEXT

2.4 The Site is located in the north west of Wrexham city centre off Station Approach and encompasses Wrexham Train Station, railway lines and embankments, an area of vacant ground and commercial units. In the north wester corner is Wrexham District Scout and Girl Guide facilities. The Site boundary is shown in Figure 1 for reference.

DEVELOPMENT PROPOSALS

2.5 The proposals comprise the demolition of the Scout / Girl Guide facilities and retaining wall to facilitate the construction of a new four storey office building. An abandoned railway sidings structure will also be demolished as part of the proposals. New pedestrian links are proposed from Mold Road to the station platform and a new car park in the northern extent of Site.

3.0 METHODOLOGY

BAT NOCTURNAL PRESENCE / ABSENCE SURVEYS

3.1 During the visual assessments undertaken on 28th January and 3rd April, 2025, several potential roosting features were noted in association with the buildings. The number and extent of these features associated with B1 and B2 were consistent with a low potential roost classification and those in association with B5 were consistent with a moderate classification. As such, one nocturnal survey was recommended for B1 and B2 and two occasions recommended for B5 inline with the current industry guidance (Collins, 2023[3]).

3.2 Survey positions were determined to ensure coverage of the entirety of the buildings including any identified PRFs. Unmanned night vision aids (infra-red cameras) were paired with ultrasonic bat detectors, to aid with species identification where necessary. Wildlife Acoustics Inc. Echo Meter Touch Pro2®- bat detectors in conjunction with the Echo Meter Touch® app for the Apple Inc iPad® and Android were used during the survey with auto-Id enabled to assist surveyors. Each Echo Meter Touch is tested using the ultrasonic calibrator as per the manufacturer's guidelines[4]. All files (including noise files) were recorded.

3.3 Infra-red cameras (Canon XA60 and Nightfox Nova Night Vision Binoculars) as well as 850nm infra-red lights (IRL) (Night Fox XB5/XC5 or 20-850nm LED Irl Emitter) were used during the survey to assist with visibility. Recorded footage is analysed fully where unmanned or multiple cameras are located for a single surveyor; and analysis undertaken as necessary where a single camera is located per surveyor. Please note that survey 1 predominantly used Canon XA60 cameras, however, on survey 2, Nightfox Nova cameras were used. To ensure that all elevations were monitored appropriately and, given

[3] Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.
[4] https://www.wildlifeacoustics.com/uploads/user-guides/EMT-ANDROID-GUIDE-EN-12112023.pdf

potentially differing fields of view from the two camera types, significantly more cameras were used on survey 2 as a precaution, to ensure robust data.

3.4 Dusk emergence surveys were undertaken approximately 15 minutes prior to sunset and for a duration of 90-120 minutes following sunset.

3.5 Data collected, recorded bat calls, were analysed using Kaleidoscope© version 12 (Wildlife Acoustics Inc) software package where necessary, by taking measurements of the peak frequency, inter-pulse interval, call duration and end frequency. This method was used to confirm the species of bat recorded during the survey.

3.6 The surveys were undertaken during suitable weather conditions, when the ambient air temperature exceeded 10°C and there was little to no rain, Table 1 below provides a summary of the survey dates and weather conditions.

Survey Conditions, Dates and Personnel

3.7 The surveys were undertaken during suitable weather conditions, when the ambient air temperature exceeded 10°C and there was little or no rain or wind (Beaufort 3 or 5m/s). Surveyors were appropriately qualified for the surveys based on the CIEEM competencies for species surveys.

Table 1: Bat Survey Conditions and Personnel Details

Survey Date	Personnel	Target Building	Sunset	Survey Start / End Time	Temperature (°C) Start / End	Wind (Beaufort) Start / End	Rain (0-5) Start / End	Cloud Cover (Okta) Start / End
06.05.26	J. Eales (acc. S093698/1) C. Harwood J. Lally J. Lindsey N. Watson-Mill	B5	20.48	20.33 /22.48	11° / 9°	0.5 / 0.5	0 / 0	100 /100
20.05.26	J. Eales (acc. S093698/1) C. Cuddy J. Nash B. Tempest	B1 and B2	21.12	20.57 / 23.12	13° / 12°	1/1	0/0	10 / 10
10.06.26	J. Eales (acc. S093698/1) J. CunninghamA . French J. Ginn J. Lindsey	B5	21.36	21.20 / 23.03	12° / 11°	1/1	0/0	15/15

Survey Limitations

3.8 Surveys were undertaken during the appropriate time of year and during optimal weather conditions. All elevations of the buildings were either covered by a surveyor with NVA or

an unmanned infrared camera (with bat detector) that was recording for the duration of the survey. All camera footage was reviewed following the survey to ensure an accurate result. As such, no survey limitations are anticipated.

4.0 RESULTS

BAT NOCTURNAL PRESENCE / ABSENCE SURVEY

4.1 As a result of the preliminary roost assessment one nocturnal presence / absence survey was recommended for B1 and B2, with two survey occasions recommended for B5 which is in line with current guidance. A summary of the survey results is provided below. Refer to Figures 1, 2 and 3 for a summary of the results, including surveyor and camera positions. Tables showing the bat contacts recorded during the surveys are provided in Appendix A. Details regarding the personnel carrying out the surveys is provided in Table 1.

6th May, 2026: Dusk Emergence Survey 1 Building B5 (Figure 1)

4.2 The target building for this survey occasion was B5. The first bat contact was detected at 21.24 approximately 36 minutes following sunset (20.48) and was a common pipistrelle bat. The bat was not visually confirmed as such the direction of flight could not be determined. Given the surveyors location on the north eastern side of the target building, it was concluded that the call came from the trees lining the railway line to the west or the connected tree line to the rear of residential properties, on the Sites northern boundary. A further common pipistrelle bat was recorded from the same surveyor at 22.20 coming from a bat foraging near the trees to the west.

4.3 A noctule bat was recorded at 21.41 again the bat was not visually confirmed as such the direction of flight could not be determined. As the call was not particularly strong it was concluded that the bat was commuting some distance away from the surveyor, outside the Site boundary.

4.4 Overall, bat activity within the application site was considered very low. No bats were detected emerging / re-entering the building during the survey. Camera footage recorded during the survey from all camera positions was analysed and confirmed that no bat emerged from the building throughout the survey.

20th May, 2026: Dusk Emergence Survey 1 Buildings B1 and B2 (Figure 3)

4.5 The target buildings for this survey occasion were B1 and B2. The first bat contact was detected at 21.44 approximately (32 minutes after sunset) and was a common pipistrelle bat. The bat passed by the surveyor heading east across the Site. Further common pipistrelle bats were recorded from this location however these bats were recorded foraging and commuting across Site. Further, common pipistrelle bats were recorded from other surveyor positions passing through the Site or foraging at the boundaries. A noctule bat was recorded commuting close to site at 22.22 however this bat was not visually confirmed so the direction of travel was not determined.

4.6 Overall, bat activity within the application site was considered fairly moderate and not unexpected given the potential foraging habitats around the target buildings. No bats were detected emerging / re-entering the building during the survey. Camera footage recorded during the survey from all camera positions was analysed and confirmed that no bat emerged from the buildings throughout the survey.

10th June, 2026: Dusk Emergence Survey 2 Building B5

4.7 The target building for this survey occasion was B5. The first bat contact, a noctule, was detected at 22.19 approximately seventeen minutes before sunset (21.36) at survey position 9. This bat was not observed by any surveyors, as such, it was considered to have been commuting well outside the Site. A further common pipistrelle bat was recorded at 22.24 again this bat was not visually confirmed. However, it was considered that the bat was likely to have been commuting along the eastern elevation of offsite building B4, which is completely open at ground level, adjacent position 4.

4.8 Bat activity within the application site was considered low. No bats were detected emerging / re-entering the building during the survey. Camera footage recorded during the survey from all camera positions was analysed and confirmed that no bat emerged from the building throughout the survey.

Conclusion

4.9 From the results of the surveys undertaken it can be concluded that the Site offered both low and moderate bat roosting potential. It was later confirmed to be absent of a bat roost and as such, there is no impact to consider at this stage.

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 All UK bat species and their roosts are fully protected in the UK by the Wildlife & Countryside Act (WCA) 1981[5] (as amended) and at a European level by the Conservation of Habitats & Species Regulations 2017[6] (as amended). Several bat species are listed as Species of Principal Importance under Section 7 of the Environment (Wales) Act 2016[7].

5.2 From the initial preliminary roost assessment it was concluded that B1 and B2 offered low bat roosting potential and B5 offered moderate suitability. The nocturnal presence / absence surveys confirmed absence of bat roost within all three buildings

5.3 Given that the buildings offer inherent bat roosting potential should demolition operations not have been completed before May 2027 an update nocturnal survey should be undertaken to ensure statutory compliance.

[5] https://www.legislation.gov.uk/ukpga/1981/69
[6] https://www.legislation.gov.uk/uksi/2017/1012/contents
[7] https://www.gov.wales/section-7-habitats-and-species-principal-importance-maintaining-and-enhancing-biodiversity-html?utm_source=chatgpt.com

APPENDIX A – NOCTURNAL SURVEY RESULTS BAT CONTACTS

Time	Plan reference	Species	Behaviour	Passes
Survey 1: 06.05.2026				
Survey Position: 4				
21:24	N/A	Common pipistrelle	Non-Visual	1
22:20	N/A	Common pipistrelle	Non-Visual	1
Survey Position: 6				
21:41	N/A	Noctule	Non-Visual	1
Survey Position: 7				
22:40	N/A	Common pipistrelle	Non-Visual	1
Survey 2: 20.05.2026				
Survey Position: 1				
21:48	3	Common pipistrelle	Pass	1
22:00	N/A	Common pipistrelle	Non-Visual	1
Survey Position: 3				
21:44	1	Common pipistrelle	Pass	1
21:47	2	Common pipistrelle	Foraging	2
21:50	4	Common pipistrelle	Pass	1
21:51	5	Common pipistrelle	Pass	3
21:53	6	Common pipistrelle	Pass	1
21:58	6	Common pipistrelle	Pass	1
21:58	2	Common pipistrelle	Foraging	3
22:10	N/A	Common pipistrelle	Non-Visual	1
22:14	N/A	Common pipistrelle	Non-Visual	1

22:19	N/A	Common pipistrelle	Non-Visual	3
22:21	N/A	Common pipistrelle	Non-Visual	1
22:23	7	Common pipistrelle	Pass	2
22:23	N/A	Noctule	Non-Visual	1
22:31	N/A	Common pipistrelle	Non-Visual	3
22:32	6	Common pipistrelle	Pass	1
22:34	N/A	Common pipistrelle	Non-Visual	2
22:36	N/A	Common pipistrelle	Non-Visual	2
22:43	N/A	Soprano pipistrelle	Non-Visual	2
22:47	6	Common pipistrelle	Pass	Continuous
22:52	1	Common pipistrelle	Pass	Continuous
23:01	N/A	Common pipistrelle	Non-Visual	2
Survey position: 6				
22:22	N/A	Noctule	Non-Visual	1
Survey position: 11				
21:49	N/A	Common pipistrelle	Non-Visual	1
21:59	N/A	Common pipistrelle	Non-Visual	2
22:01	3	Common pipistrelle	Pass	1
22:11	N/A	Common pipistrelle	Non-Visual	2
22:16	N/A	Noctule	Non-Visual	1
22:20	N/A	Common pipistrelle	Non-Visual	2
22:24	3	Common pipistrelle	Non-Visual	1
22:59	N/A	Common pipistrelle	Non-Visual	1
Survey 3: 10.06.2026				

Survey position: 9				
22:19	N/A	Noctule	Non-Visual	1
22:24	N/A	Common pipistrelle	Non-Visual	1
Survey position: 11				
22:34	N/A	Common pipistrelle	Non-visual	1

APPENDIX B: SURVEY POSITION NVA STILLS

Please Note: Time stamps shown on the images below are not correct.

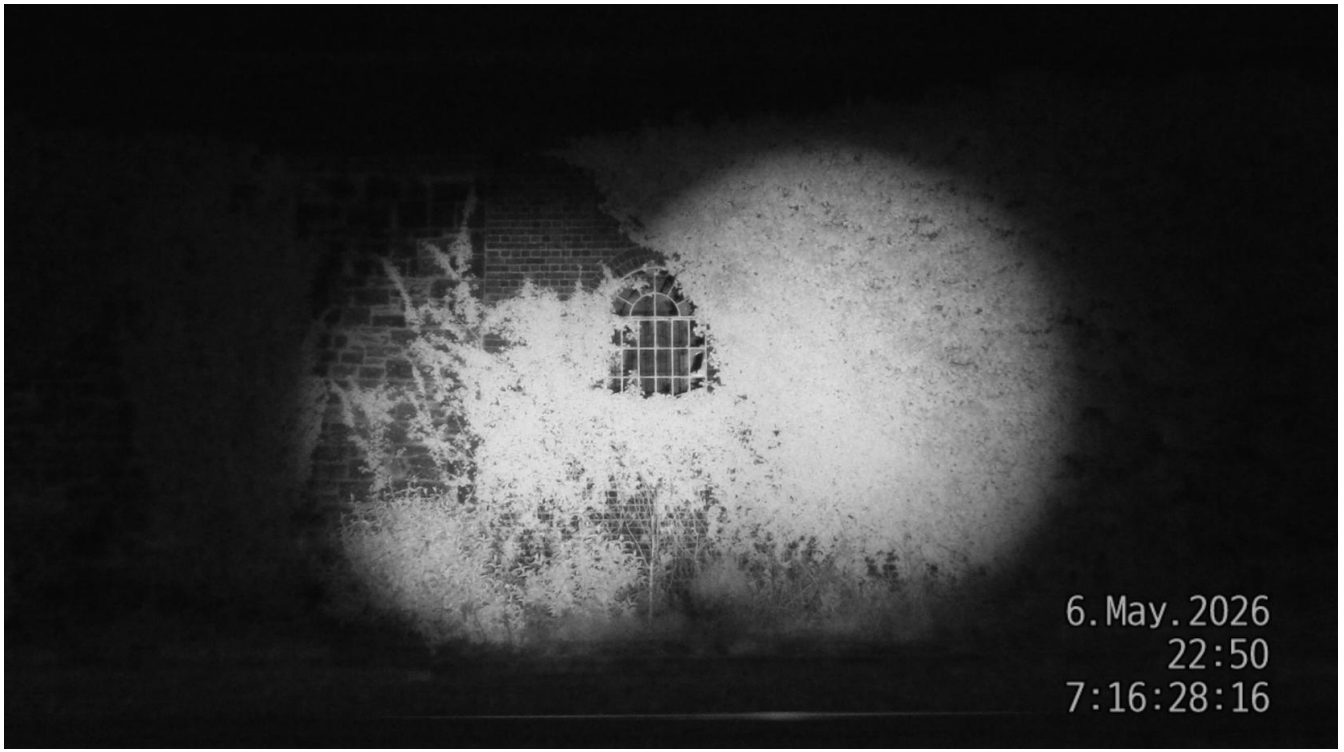
Survey Date	Survey Position	NVA Photograph
06/05/2026	1 **(LEEDSCAM02)**	

Survey Date	Survey Position	NVA Photograph
06/05/2026	2 (LEEDSCAM10)	

Survey Date	Survey Position	NVA Photograph
06/05/2026	3 (LEEDSCAM04)	

Survey Date	Survey Position	NVA Photograph
06/05/2026	4 (NW2)	

Survey Date	Survey Position	NVA Photograph
06/05/2026	5 (LEEDSCAM06)	

Survey Date	Survey Position	NVA Photograph
6/05/2026	6 (LEEDSCAM08)	

Survey Date	Survey Position	NVA Photograph
6/05/2026	6 (LEEDSCAM08)	

Survey Date	Survey Position	NVA Photograph
06/05/2026	7 (LEEDSCAM07)	

Survey Date	Survey Position	NVA Photograph
06/05/2026	7 (LEEDSCAM07)	

Survey Date	Survey Position	NVA Photograph
20/05/2026	1 LEEDSCAM06	

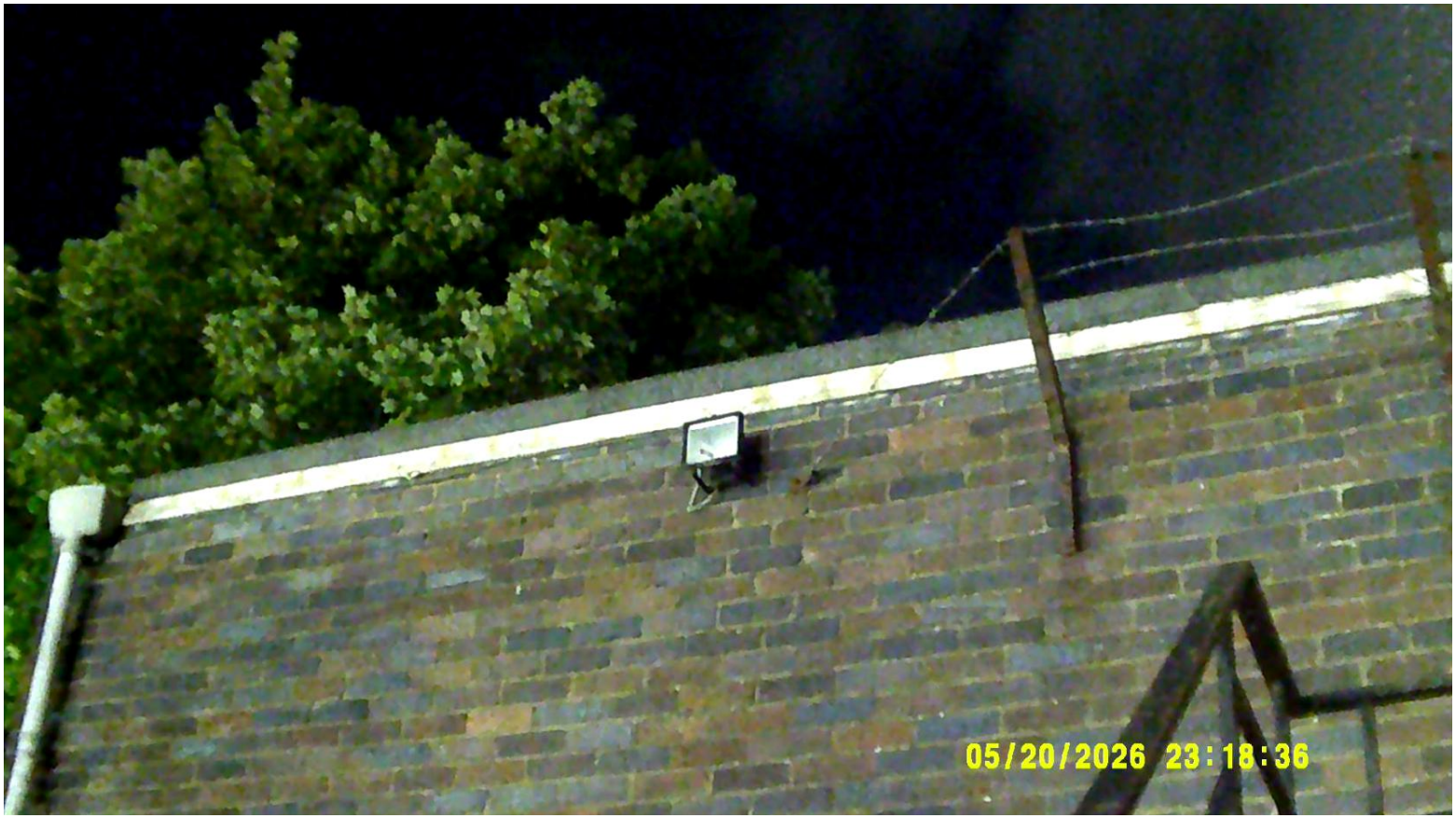
Survey Date	Survey Position	NVA Photograph
20/05/2026	2 LEEDsCAM04	

Survey Date	Survey Position	NVA Photograph
20/05/2026	3 LEEDSCAM03	

Survey Date	Survey Position	NVA Photograph
20/05/2026	4 Tm1	

Survey Date	Survey Position	NVA Photograph
20/05/2026	5 LC07	

Survey Date	Survey Position	NVA Photograph
20/05/2026	6 LC10	

Survey Date	Survey Position	NVA Photograph
20/05/2026	7 NW4	

Survey Date	Survey Position	NVA Photograph
20/05/2026	8 LC01?	

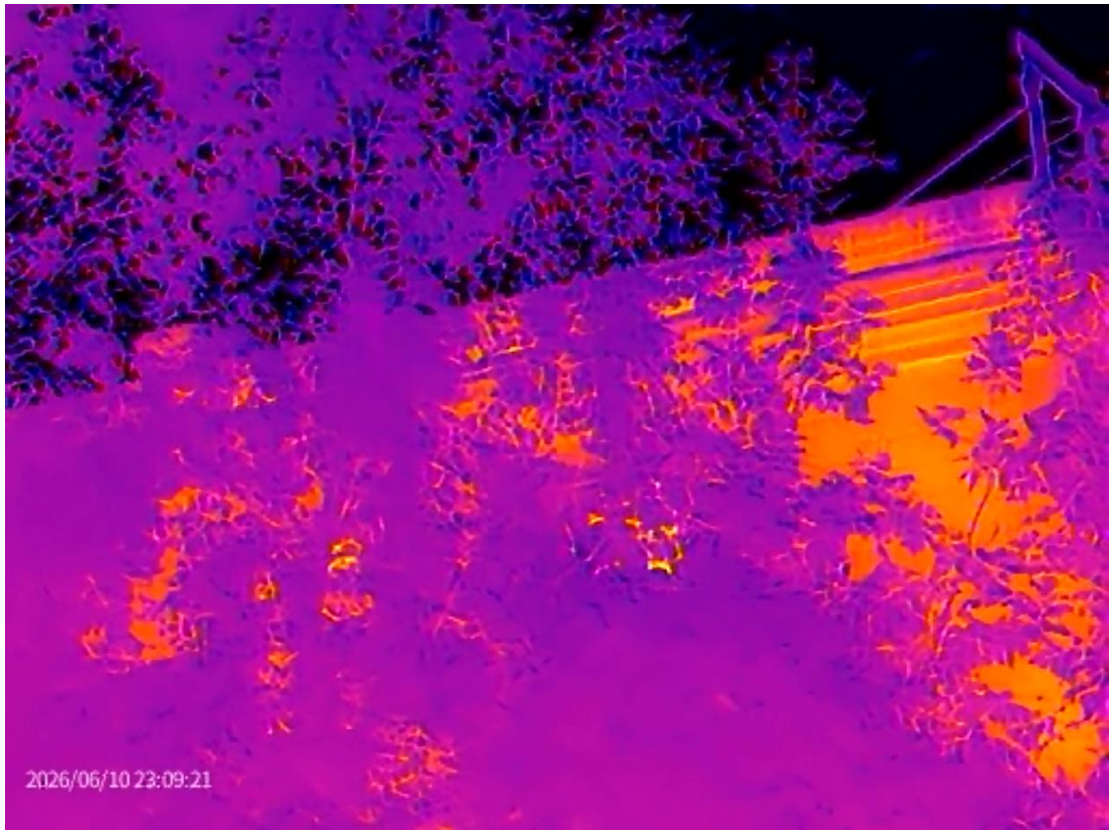
Survey Date	Survey Position	NVA Photograph
20/05/2026	9 LC08?	

Survey Date	Survey Position	NVA Photograph
20/05/2026	10 LC02	

Survey Date	Survey Position	NVA Photograph
20/05/2026	11 LC09	

Survey Date	Survey Position	NVA Photograph
20/05/2026	12 LC05	

Survey Date	Survey Position	NVA Photograph
20/05/2026	13 TM2	

Survey Date	Survey Position	NVA Photograph
10/06/2026	1 TM2 Start South	

Survey Date	Survey Position	NVA Photograph
10/06/2026	2 LEEDSCAM02	

Survey Date	Survey Position	NVA Photograph
10/06/2026	3 NOVA05	

Survey Date	Survey Position	NVA Photograph
10/06/2026	4 NOVA03	

Survey Date	Survey Position	NVA Photograph
10/06/2026	5 NOVA07	

Survey Date	Survey Position	NVA Photograph
10/06/2026	6 NOVA09	

Survey Date	Survey Position	NVA Photograph
10/06/2026	7 NOVA11	

Survey Date	Survey Position	NVA Photograph
10/06/2026	8 NOVA10	

Survey Date	Survey Position	NVA Photograph
10/06/2026	9 NOVA02 end North	

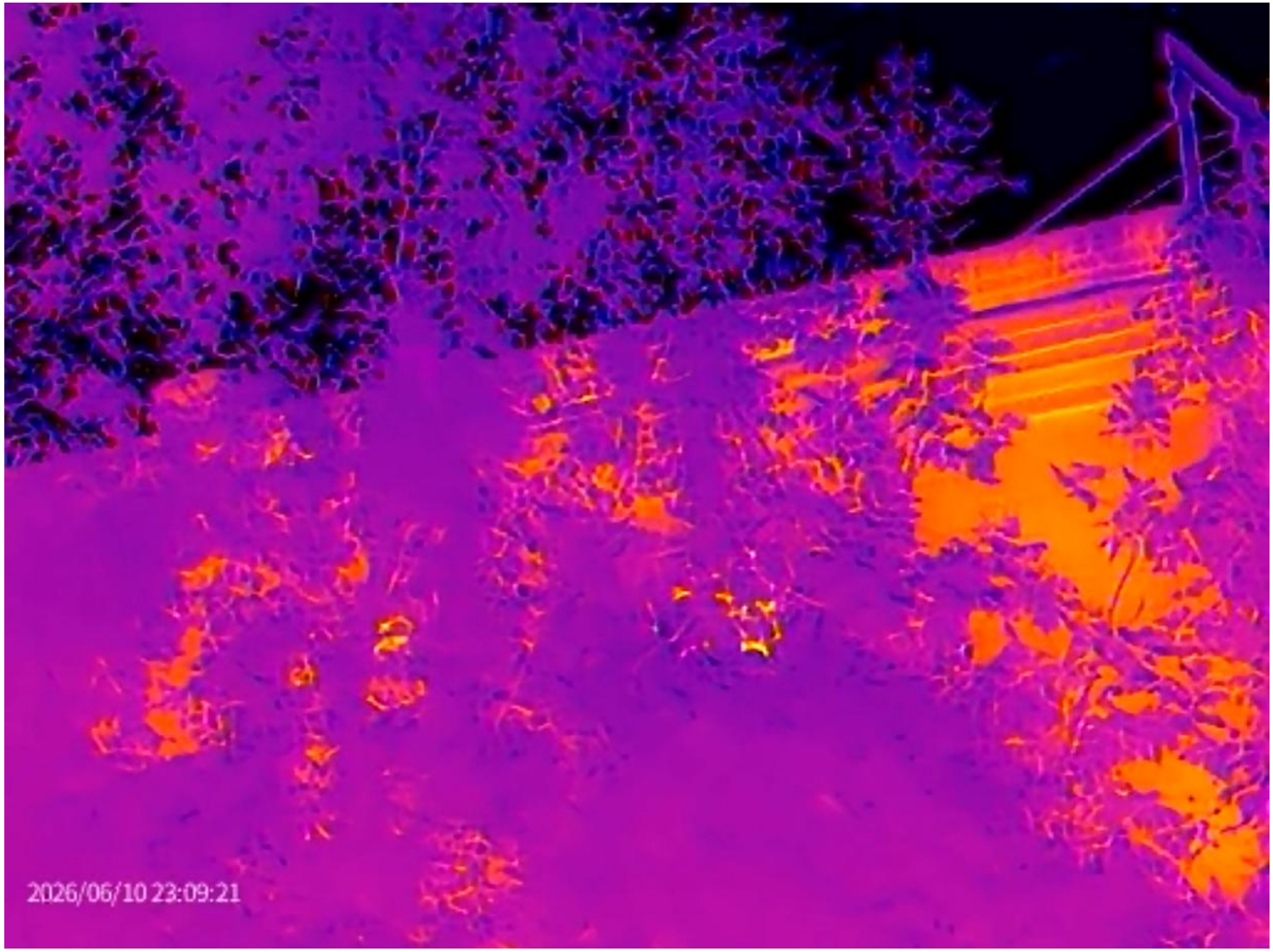
Survey Date	Survey Position	NVA Photograph
10/06/2026	10 JG NOVA04	

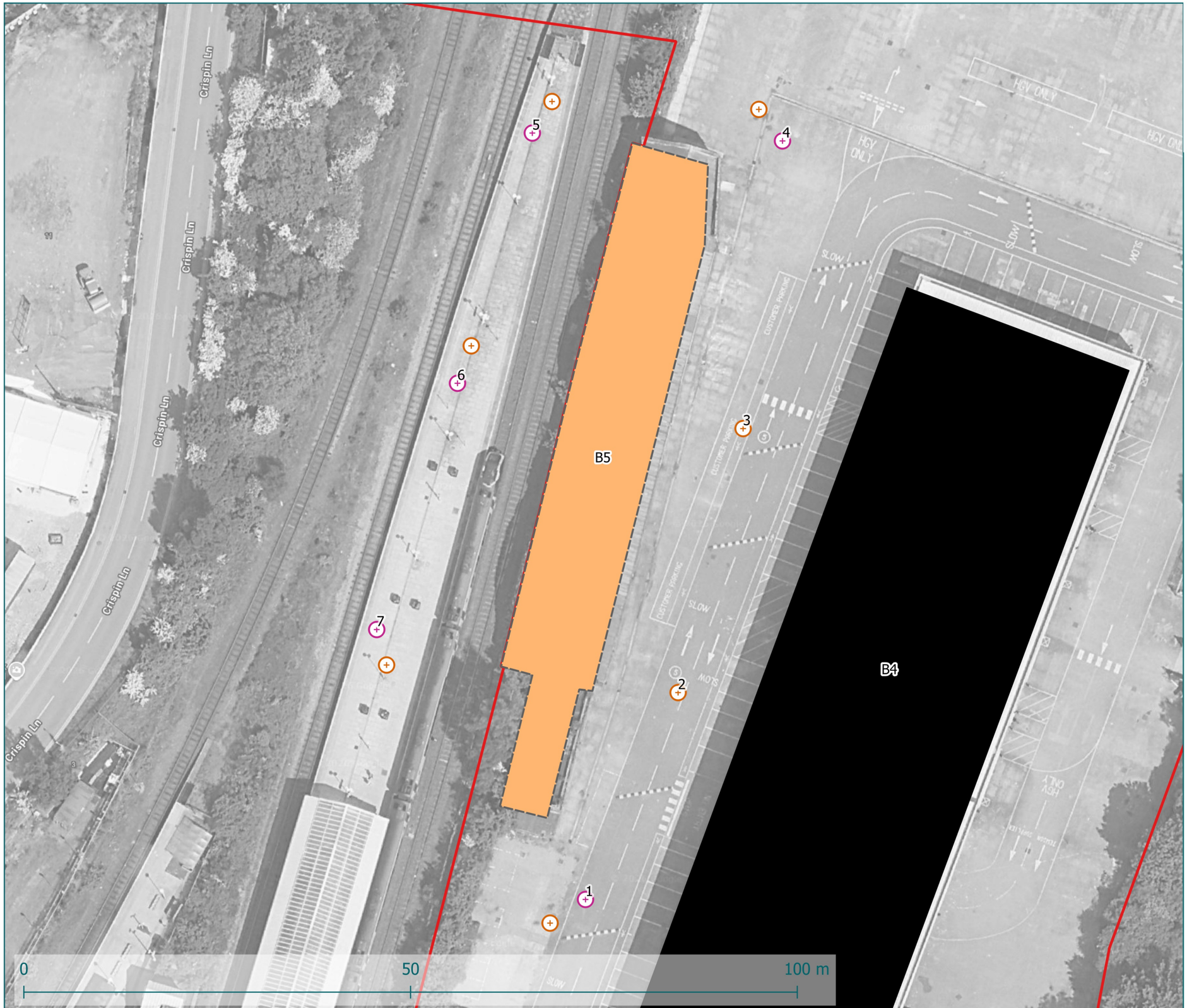
Survey Date	Survey Position	NVA Photograph
10/06/2026	11 JG NOVA08	

Survey Date	Survey Position	NVA Photograph
10/06/2026	12 JL NOVA01	

Survey Date	Survey Position	NVA Photograph
10/06/2026	13 JL NOVA06	

Survey Date	Survey Position	NVA Photograph
10/06/2026	14 AF CAM10	

Survey Date	Survey Position	NVA Photograph
10/06/2026	15 AF TM2	



FUTURESECOLOGY

Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Key

Site Boundary

Habitats

Buildings - no/negligible bat roost potential

Buildings - moderate bat roost potential

Surveyor locations

Camera

Surveyor

Client:	Cushmen and Wakefield	Plan Reference:	FE500_BSR01_01	Author:	CC
Project:	Wrexham Gateway	Project Reference:	FE500	Date:	15/6/2026
Title:	Figure 1 - Nocturnal Bat Survey Results – 6th May, 2026	Report Reference:	FE500/BSR01	Scale:	1:500

C:\Users\Charlie.Cuddy\Futures Ecology Ltd\James.Eales - Projects\FE500 Wrexham Gateway\QGIS\1_Plans\FE500_Bat Plan.qgs

Copyright © Futures Ecology
No dimensions are to be scaled from this drawing. All dimensions must be checked on site. Any measurements are for indicative pusposes.
This drawing may contain: © OpenStreetMap contributor or Map data © 2026 Google



FUTURESECOLOGY
Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Key

Site Boundary

Habitats

Buildings - low bat roost potential

Surveyor locations

Camera

Surveyor

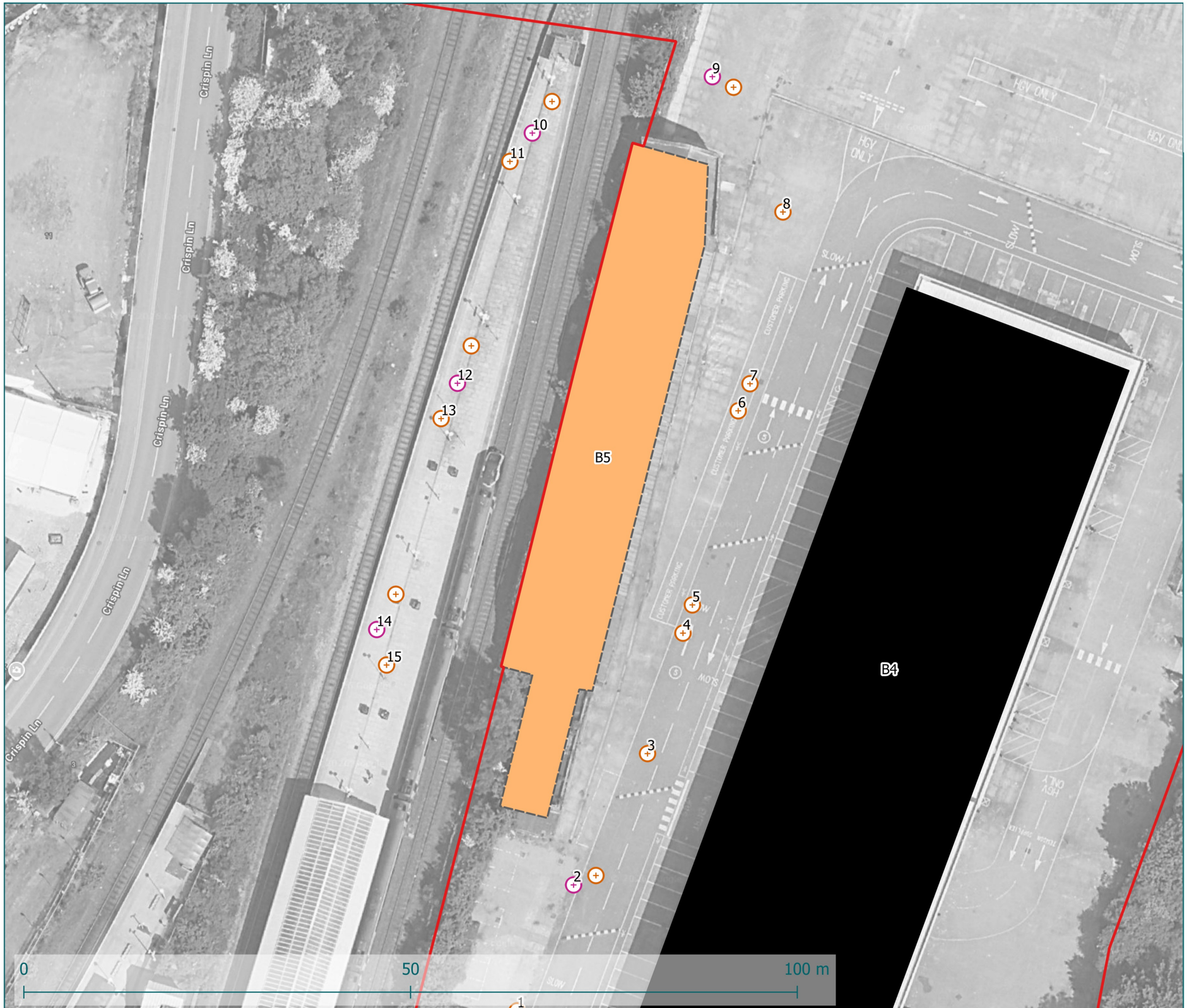
Bat contacts

Flight lines

Client:	Cushmen and Wakefield	Plan Reference:	FE500_BSR01_02	Author:	CC
Project:	Wrexham Gateway	Project Reference:	FE500	Date:	15/6/2026
Title:	Figure 2 - Nocturnal Bat Survey Results – 20th May, 2026	Report Reference:	FE500/BSR01	Scale:	1:250

C:\Users\Charlie.Cuddy\Futures Ecology Ltd\James.Eales - Projects\FE500 Wrexham Gateway\QGIS\1_Plans\FE500_Bat Plan.qgs

Copyright © Futures Ecology
No dimensions are to be scaled from this drawing. All dimensions must be checked on site. Any measurements are for indicative pusposes.
This drawing may contain: © OpenStreetMap contributor or Map data © 2026 Google



FUTURESECOLOGY

Carrwood Park, Swillington Common Farm, Selby Road, Leeds, LS15 4LG
Telephone: 01133 372185

Unit 9, The Tangent Business Hub, Weighbridge Road, Shirebrook, Mansfield, Derbyshire, NG20 8RX
Telephone: 01623 749709

Key

- Site Boundary

Habitats

- Buildings - no/negligible bat roost potential
- Buildings - moderate bat roost potential

Surveyor locations

- Camera
- Surveyor

Client:	Cushmen and Wakefield	Plan Reference:	FE500_BSR01_03	Author:	CC
Project:	Wrexham Gateway	Project Reference:	FE500	Date:	15/6/2026
Title:	Figure 3 - Nocturnal Bat Survey Results – 10th June, 2026	Report Reference:	FE500/BSR01	Scale:	1:500

C:\Users\Charlie.Cuddy\Futures Ecology Ltd\James.Eales - Projects\FE500 Wrexham Gateway\QGIS\1_Plans\FE500_Bat Plan.qgs

Copyright © Futures Ecology
No dimensions are to be scaled from this drawing. All dimensions must be checked on site. Any measurements are for indicative pusposes.
This drawing may contain: © OpenStreetMap contributor or Map data © 2026 Google