

BAT SURVEY REPORT

JUNE 2023

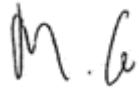
The Rock, Bury

137 The Rock,
Bury
BL9 0ND

U R B A N
G R E E N



QUALITY MANAGEMENT

Project No.:	UG1947			
Project:	The Rock, Bury			
Location:	137 The Rock, Bury, BL9 0ND			
Title:	Bat Survey Report			
Document Type:	BSR	Issue No.:	01	
Date:	09/06/2023			
Prepared By:	Max Grindle	Signature:		Qualifications: Assistant Ecologist, BSc, QCIEEM
Checked By:	Barnaby Indio Gardner	Signature:		Qualifications: Assistant Ecologist, MEnv, BSc, QCIEEM
Checked By:	Jake Healy	Signature:		Qualifications: Ecologist, MSc, QCIEEM
Revision Status				
Rev	Date	Comment	Prepared	Checked

NON-TECHNICAL EXECUTIVE SUMMARY

21 Living are proposing to develop land at The Rock in Bury (hereafter referred to as 'the site'). The proposals include the redevelopment of the onsite building, including associated demolition, to facilitate the development of 13 residential units with associated hard and soft landscaping.

Urban Green have been appointed to complete Bat Surveys and a Report of the site. A Preliminary Roost Assessment was conducted at the site in February 2023. Further surveys, in the form of nocturnal emergence and re-entry bat surveys, were recommended to further assess the buildings suitability for roosting bats.

Two nocturnal emergence surveys were undertaken at B1 to assess the presence or likely absence of bat roosts within, following good practice guidance set out in Collins (2016).

No evidence of a bat roost was identified within B1. As such, no further surveys or mitigation considerations in relation to roosting bats are necessary for the development to proceed, however further lighting mitigation and site enhancement recommendations have been detailed due to the presence of commuting and foraging bats onsite.

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1 Introduction

1.1 Background to the Scheme

21 Living are proposing to develop land at The Rock in Bury (hereafter referred to as ‘the site’). The proposals include the redevelopment of the onsite building, including associated demolition, to facilitate the development of 13 residential units with associated hard and soft landscaping. The works are to be mainly constrained to existing hardstanding.

Urban Green have been appointed to undertake further Nocturnal Bat Surveys following recommendations outlined within a Preliminary Roost Assessment (PRA), undertaken at the site by Urban Green in February 2023.

The author of the report is Max Grindle QCIEEM, Assistant Ecologist at Urban Green. Max has experience providing ecological consulting services for a range of development schemes across the UK, including residential and commercial schemes.

1.2 Site Context

The site is located at National Grid Reference SD 80736 11028 and comprises a total area of approximately 0.036ha (see Figure 1).



Figure 1 – Site Extent

The site is located in a dense urban zone within Bury town centre, approximately 550m northeast of Bury Bolton Street train station, for which the associated railway runs to the north and south. The site is bound on all sides by commercial and residential developments, with a road present adjacent to the south. A

churchyard featuring a parcel of broadleaved woodland is present approximately 200m west of the site, connected to broadleaved woodland bordering the northern and southern aspects of Peel Way. The River Irwell is present approximately 735m to the northwest, with a large expanse of open grassland/broadleaved woodland mosaic adjacent to the river at its closest point to the site.

1.3 Purpose of this Report

This report has been produced to demonstrate the results of nocturnal bat surveys which were completed at the site. The surveys were conducted to confirm likely absence or presence of roosting bats. Appropriate mitigation and suitable roost replacement (compensation) are detailed (if required). The report has been produced in support of the proposed planning application.

Relevant UK legislation of the protection of all UK bats are detailed in Appendix 1.

2 Previous Survey

A PRA was completed at the site by Urban Green in February 2023 and is detailed within Report UG_1947_ECO_PRA_01 (Urban Green, 2023). One building (B1) was located onsite and was subject to a PRA. Please refer to Table 1, extracted from the PRA, summarising the assessment.

Table 1 - PRA Summary (UG_1947_ECO_PRA_01, 2023).

Building Reference	Description and evidence	Category of Suitability
B1	The building (B1) comprised a disused commercial property with an associated rear courtyard. The building featured variable building materials on the outer walls, along with slate tiles across all roofs. The property featured pitched roofing, layered over three separate floors, and an underpass from which the rear courtyard can be accessed. Overall, the building provided suitable features that could support a bat roost, including damaged tiling, lifted lead flashing, gaps within eaves, and deteriorated wooden panelling. Where the northern aspect of the building featured all the identified PRFs and relatively low disturbance by artificial lighting, the southern aspect was well sealed and surrounded by streetlights. The nearest suitable commuting and foraging habitat within the wider area was located 200m west of B1. This area featured good connectivity to a railway line, large areas of urban woodland, green space, and the River Irwell. There was minimal suitable habitat for bats in all other directions from site. Due to the limited number of suitable PRFs located within the building, with no features situated along the southern aspect, where there is extensive street lighting, as well as the building's location nearby little suitable foraging and commuting habitat, B1 was assessed as having low bat roosting potential.	Low

As B1 was assessed as having low bat roosting potential, a minimum of one nocturnal emergence bat survey was recommended, following guidance set out in Collins (2016).

3 Methods

3.1 Desk Study

Sources of information used in the desk study are presented in Table 2. See the PRA (Urban Green, 2023) for the full desk study.

Table 2 – Desk Study Sources of Information

Source	Date Consulted	Information Sought
Online aerial imagery	15/02/2023	Review of satellite imagery.
MAGIC website (www.magic.gov.uk)	15/02/2023	Locations of granted EPSL within 5km of the site.

3.2 Nocturnal Bat Surveys

Although a minimum of one emergence survey was recommended within the PRA, due to a lack of full site access during survey one (See Section 3.3) a second was also undertaken following guidance set out in Collins (2016). All surveys were conducted by three suitability qualified ecologists.

The surveys were conducted using a range of full-spectrum and heterodyne technologies, namely the Titley Scientific Anabat Scout, Wildlife Acoustics Echo Meter Touch Pro, and Elekon Batscanner. Surveyors were positioned around B1 to observe the Potential Roosting Features (PRF) identified during the PRA. Both surveys started 15 minutes before sunset until approximately 1 hour 45 minutes after sunset.

Summary of the survey details are provided in Table 2. Surveyor survey results are located within Appendix 2. Figures 2, 3 provide a plan illustrating surveyor positions.

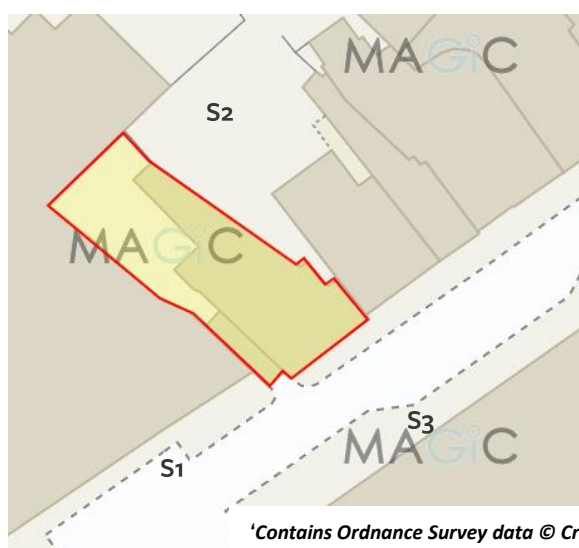


Figure 2 – Surveyor vantage points, 9th May 2023

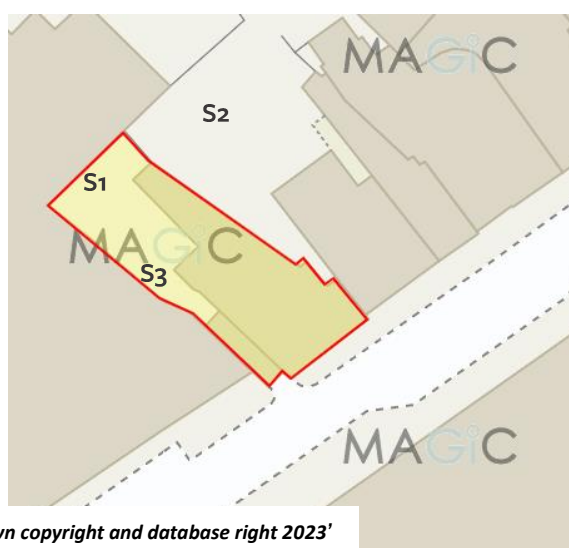


Figure 3 – Surveyor vantage points, 23rd May 2023

Table 2 – Survey Details

Date	Sunset	Survey time	Surveyors	Weather conditions at sunset
09/05/2023	20:52	20:37 – 22:37	S1 – Barney Gardner S2 – Sarah Child S3 – Zack Maskill	Temp: 13°C Cloud cover: 1/8 oktas Wind: 2 Beaufort Precipitation (Ppt): None
23/05/2023	21:16	21:01 – 23:01	S1 – Max Grindle S2 – Sarah Child S3 – Zack Maskill	Temp: 14°C Cloud cover: 4/8 oktas Wind: 1 Beaufort Precipitation (Ppt): None

Max Grindle – Assistant Ecologist with two years’ bat survey experience.

Barney Gardner – Assistant Ecologist with two years’ bat survey experience.

Sarah Child – Biodiversity Net Gain Consultant with two years’ bat survey experience.

Zack Maskill – Seasonal Ecologist within their first year of bat survey experience.

3.3 Constraints to the Survey

Due to the surveys being conducted by observation during low light conditions, this may cause constraint of visual assessments. All potential roosting features were nevertheless observed throughout the survey period.

Surveyors were unable to obtain access to the northern site courtyard during the first emergence survey, restricting the view of a number of suitable PRFs and constituting a major constraint to the survey effort. A second survey with full site access was undertaken at a later date, as to overcome this constraint.

3.4 Lifespan of Reports

In accordance with the BCT guidance (Collins, 2016)), the details of this report will remain valid for a period of **24 months** from the date of the first survey (i.e. until 9th May 2025). After this date, or if the site and/or proposed works change before this date, this assessment should be reviewed to determine whether any update surveys are required.

4 Results

4.1 Nocturnal Emergence Surveys

4.1.1 9th May 2023

Bat activity was limited throughout the survey, with S2 recording four passes of foraging or commuting common pipistrelle (*Pipistrellus pipistrellus*) in proximity of the northern site courtyard and S1 & S3 recording no passes.

The first bats were recorded at 21:15 (approximately 23 minutes after sunset), with the observation concerning two common pipistrelle foraging within the northern site courtyard for approximately 11 minutes before commuting out of the site. These bats were not observed entering the site.

A second common pipistrelle was observed foraging within the courtyard at 21:37 for approximately 11 minutes, with two more short passes, likely attributable to commuting common pipistrelle, observed at 22:14 and 22:21, with the latter constituting the final pass of the evening. All passes were observed by S2.

No bat activity was recorded in relation to B1 or any of the visible PRFs, however due to a lack of access into the northern courtyard not all PRFs were able to be surveyed.

4.1.2 23rd May 2023

Bat activity was present throughout the survey, with all surveyors observing multiple passes of foraging common pipistrelle in proximity of the northern site courtyard, as well as commuting common pipistrelle along the site boundaries.

The first pass concerned one common pipistrelle at ~21:31 (approximately 15 minutes after sunset), entering the site from the southeast and foraging within the northern site courtyard for approximately eight minutes before departing southeast. Passes throughout the evening mainly concerned foraging common pipistrelle within the courtyard, with a maximum of two bats foraging at any one time. Observed commuting corridors onsite included from the east/southeast and from the north, with bats departing in similar directions. Most passes were observed by all surveyors, as was the case with the final pass, which concerned commuting common pipistrelle heard not seen at 22:41.

No bat activity was recorded in relation to the building or any of the potential roosting features surveyed.

4.2 Assessment

No emerging bats were recorded at the site; therefore, it has been deemed unlikely that B1 supports a bat roost.

During both surveys a small number of common pipistrelle were recorded mainly foraging within the northern site courtyard, commuting in and out of the site from all directions.

It is anticipated that the site is used solely for commuting and foraging purposes.

5 Mitigation Recommendations

5.1 Impact Assessment

No emerging bats were recorded during the nocturnal surveys for the site; therefore, it has been assessed that B1 does not support a bat roost. As such, no further surveys or mitigation relating to bats is required to facilitate the development.

However, bats were recorded using the site for commuting and foraging purposes, and construction activities may impact bats through increased levels of artificial lighting. All bats are sensitive to artificial lighting and may be impacted by the proposed development should no mitigation for lighting be considered.

5.2 Lighting Mitigation

All bats have some degree of sensitivity to artificial, night-time lighting. Introducing artificial lighting to areas that are not currently illuminated may sever important bat flight lines and discourage bats from using important foraging resources.

Lighting mitigation should follow the guidance outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) and BCT’s “Bats and Artificial Lighting in the UK” (2018).

Construction lighting and proposed external lighting should not be directed towards the northern site courtyard, which has value as a foraging feature for bat species and is due to be partially retained as a courtyard within the development plans. The lighting may impact bats which are sensitive to light. Directional lighting will be achieved by angle and orientation of beam, use of a cowl, louvre or other light shield, or a combination of these.

5.3 Opportunities for Enhancement

There is opportunity to enhance the site for the provision of roosting bats via the integration of bat boxes within the development plans for the site, such as including integrated bat boxes in the proposed redevelopment of B1 and the proposed new residential units in the northern section of the site. This can be facilitated by the production of a bat box plan, which will detail bat roost features to be incorporated within the site.

6 References

Bat Conservation Trust (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (Third Edition). The Bat Conservation Trust, London.

CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM.

English Nature (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Hutson A. M. (1993). Action Plan for Conservation of Bats in the United Kingdom. The Bat Conservation Trust, London.

Joint Nature Conservation Committee (2004). Bat Workers Manual. JNCC, Peterborough.

Urban Green (2023). Preliminary Roost Assessment: The Rock, Bury. Ref: UG_1947_ECO_PRA_01.

Appendix 1 – Relevant Legislation

Legislation relating to European Protected Species (e.g. bats)

European Protected Species and their resting places (e.g. bat roosts) are protected under the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CROW) Act 2000, and the Conservation of Habitats and Species Regulations 2017.

The Conservation of Habitats and Species Regulations 2017 transpose the European Union's 'Habitats Directive' (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) into UK law. The Regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' (EPS), and the adaptation of planning and other controls for the protection of European Sites. EPS are listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

Appendix 2 – Survey Sheets

Emergence – 9th May 2023

Bat Passes			
Surveyor	Time	Species	Activity
S3	21:15	Common pipistrelle	Foraging inside courtyard approx. 11 minutes
	21:37	Common pipistrelle	Foraging inside courtyard approx. 11 minutes
	22:14	Common pipistrelle	Heard not seen
	22:21	Common pipistrelle	Heard not seen

Emergence – 23rd May 2023

Bat Passes			
Surveyor	Time	Species	Activity
S1	21:31	Common pipistrelle	Foraging inside courtyard approx. 8 minutes
	21:38	Common pipistrelle	Foraging inside courtyard approx. 4 minutes
	21:38	Common pipistrelle	Commuting north
	21:45	Common pipistrelle	Foraging inside courtyard approx. 2 minutes
	22:04	Common pipistrelle	Foraging inside courtyard approx. 2 minutes
	22:18	Common pipistrelle	Foraging inside courtyard approx. 5 minutes
	22:41	Common pipistrelle	Commuting, heard not seen
S2	21:31	Common pipistrelle	Foraging inside courtyard approx. 8 minutes
	21:38	Common pipistrelle	Foraging inside courtyard approx. 4 minutes
	21:44	Common pipistrelle	Foraging inside courtyard approx. 2 minutes
	22:05	Common pipistrelle	Foraging inside courtyard approx. 2 minutes
	22:17	Common pipistrelle	Foraging inside courtyard approx. 5 minutes
	22:40	Common pipistrelle	Foraging inside courtyard <1 minute
S3	21:32	Common pipistrelle	Foraging inside courtyard approx. 8 minutes
	21:39	Common pipistrelle	Foraging inside courtyard approx. 4 minutes
	21:44	Common pipistrelle	Foraging inside courtyard approx. 1 minute
	22:05	Common pipistrelle	Foraging inside courtyard approx. 1 minute
	22:18	Common pipistrelle	Foraging inside courtyard approx. 6 minutes
	22:41	Common pipistrelle	Heard not seen