

BAT SURVEY REPORT

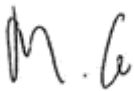
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17-47 Eastford Square,
Manchester,
M40 7QT

U R B A N
G R E E N



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NON-TECHNICAL EXECUTIVE SUMMARY

Manchester City Council are proposing to develop land at 17-47 Eastford Square in Manchester (hereafter referred to as ‘the site’). The proposals include the complete demolition of the building currently on site.

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 June 2022. Further surveys, in the form of nocturnal emergence and re-entry bat surveys were recommended to further assess the buildings suitability for roosting bats.

The surveys identified a total of one common pipistrelle bat roost (peak count of one bat) which was identified on the eastern aspect of the building within damaged roof cladding within a balcony.

The identified roost was assessed as comprising a non-breeding summer roost for common pipistrelle of “low conservation status”. The proposed demolition works will cause the destruction of this roost. This would cause an offence under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).

As such it is recommended that the works are carried out under a Natural England Bat Mitigation Class Licence as detailed within this report.

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1 Introduction

1.1 Background to the Scheme

Manchester City Council are proposing to develop land at 17-47 Eastford Square in Manchester (hereafter referred to as ‘the site’). The proposals include the complete demolition of the building currently on site.

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 June 2022.

The author of the report is Jake Healy, MSc, Qualifying CIEEM, Ecologist at Urban Green. Jake 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 SJ 85105 99738 and comprises a total area of approximately 0.1ha (see Figure 1).



Figure 1 – Site Extent

The site is located in a predominantly urban area of Manchester, approximately 2km from the City Centre. The site is bordered by residential and commercial properties to the south and east of the site and an urban park is present immediately adjacent the north and west of the site. The River Irk is present approximately 190m west of the site and Moss Brook approximately 210m north. A tram line passes by the site with the closest point in an underground tunnel approximately 10m east of the building. Rochdale Road (the A664), a main road, is present approximately 75m east of 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 Surveys

A PRA was completed at the site by Urban Green in June 2022 and is detailed within Report UG_1595_ECO_PRA_01 (Urban Green, 2022). One building (B1) was located within the site boundary and was subject to a PRA. Please refer to Table 1, which was extracted from the PRA report, summarising the assessment.

Table 1 - PRA Summary (UG_1595_ECO_PRA_01, 2022).

Building Reference	Description and evidence	Category of Suitability
Building (B) 1	The building that formed the site was an abandoned, disused three storey building, with a pitched, tiled roof. The ground floor comprised a total of 8 commercial dwellings, while the 2nd and 3rd floors were made up of 8 residential flats. The building was comprised of brick with rendered panels and a fascia board that ran around the entirety of the building. Various PRFs were identified on all aspects of the building relating mainly the lead flashing around the chimney, wooden fascia boards, and wooden boarded windows. Overall, the building has multiple suitable PRFs present on every aspect. The building is also located adjacent to suitable habitat that is scarce in the local area. As such, the building has been assessed as providing HIGH bat roosting potential.	High

As B1 was assessed as having high bat roosting potential, a minimum of three nocturnal emergence and re-entry bat surveys were recommended and are to follow 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.

Table 2 – Desk Study Sources of Information

Source	Date Consulted	Information Sought
Online aerial imagery	28/07/2022	Review of satellite imagery.
MAGIC website (www.magic.gov.uk)	28/07/2022	Locations of granted EPSL within 5km of the site.

3.2 Nocturnal Bat Surveys

Two emergence and one re-entry survey were undertaken following guidance set out in Collins (2016). All surveys were conducted by six suitability qualified ecologists, and under the guidance of Mark Blacker, Senior Ecologist at Urban Green who holds a Level 1 Class Licence for bats (2022-10353-CL17-BAT).

The surveys were conducted using handheld BatScanner bat detectors. Surveyors were positioned around the feature(s) to observe the Potential Roosting Features (PRF) identified during the PRA. The emergence survey(s) started at least 15 minutes before sunset and continued until approximately 1.5 to 2 hours after sunset. The re-entry surveys started approximately 1.5 to 2 hours before sunrise and continued until 15 minutes after sunrise.

Summary of the survey details are provided in Table 3. Surveyor survey results sheets are available upon request. Figure 2 provides a plan illustrating surveyor positions.

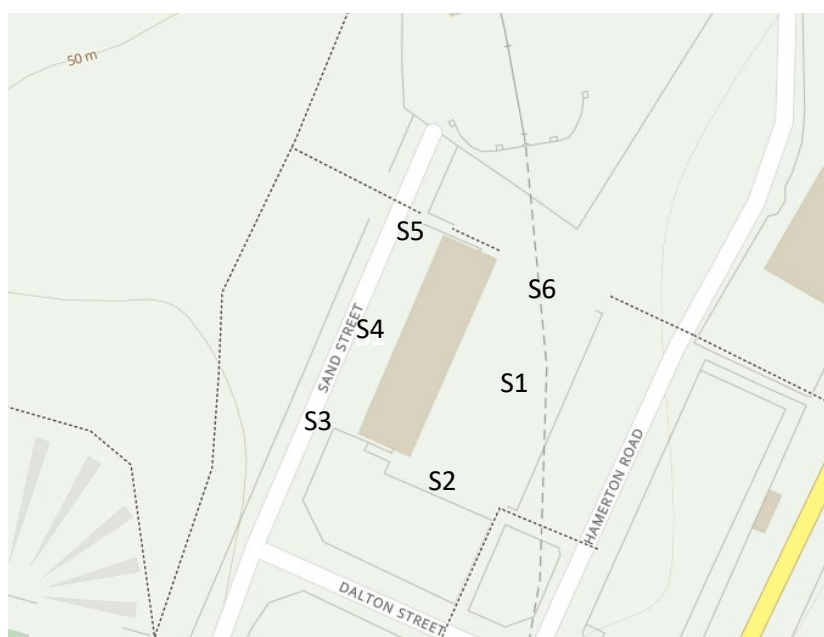


Figure 2 – Surveyor vantage points for B1

Table 3 - Emergence/Re-entry Survey Details

Date	Sunset/sunrise time	Survey time	Surveyors	Weather conditions at sunset
12/07/22	21:33	21:15 – 23:05	S1 – Mark Blacker S2 – Katy Ellen S3 – Toby Mills S4 – Max Grindle S5 – Jennie Furby S6 – Shannon Brady	Temp: 22°C Cloud cover: 2/8 oktas Wind: 1 Beaufort Precipitation (Ppt): None
26/07/22	21:16	21:01 – 22:46	S1 – Jake Healy S2 – Katy Ellen S3 – Toby Mills S4 – Max Grindle S5 – Gemma King S6 – Shannon Brady	Temp: 16°C Cloud cover: 3/8 oktas Wind: 1 Beaufort Precipitation (Ppt): None
13/09/2022	06:38	05:08 – 06:53	S1 – Max Grindle S2 – Katy Ellen S3 – Sarah Child S4 – Toby Mills S5 – Jessica Sibley S6 – Shannon Brady	Temp: 9°C Cloud cover: 0/8 oktas Wind: 1 Beaufort Precipitation (Ppt): None

Mark Blacker – senior ecologist with over four year’s bat survey experience. Level 1 Class Licence for bats (2022-10353-CL17-BAT).

Jake Healy – Ecologist with three year’s bat survey experience.

Shannon Brady – Biodiversity Net Gain Consultant with one year’s bat survey experience

Gemma King – Associate at Urban Green with one year’s bat survey experience

Max Grindle – Assistant Ecologist with one year’s bat survey experience

Katy Ellen – Seasonal ecologist with one year’s bat survey experience

Toby Mills – Seasonal ecologist with one year’s bat survey experience

Jennie Furby – Seasonal ecologist with one year’s bat survey experience

Sarah Child – Seasonal ecologist with one year’s 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. No surveyors were visually constrained during the survey, other than that of low light conditions, and all potential roosting features were observed throughout the survey time period.

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 12th July 2024). After this date, this assessment should be reviewed to determine whether any update surveys are required.

4 Results

4.1 Nocturnal Surveys

4.1.1 Survey 1 - Dusk Emergence – 12/07/2022

Bat activity was recorded throughout the survey, with only common pipistrelle (*Pipistrellus pipistrellus*), observed foraging or commuting in proximity of all vantage positions.

The first bat was recorded at 21:44 (approximately 11 minutes after sunset) by surveyors 1, 2, and 6 and was related to common pipistrelle activity, although it was heard and not seen. Foraging and commuting activity was regularly recorded by all surveyors from then on until the end of the survey. Surveyor 2 observed two re-entry's into a possible roost location on the eastern aspect of the building at 22:26 and 22:47 (approximately 53 and 74 minutes after sunset, respectively). The final pass was recorded by Surveyor 2 at 23:11 (approximately 88 minutes after sunset).

A peak count of 1 bat was recorded at any one time by all surveyors.

One possible roost was observed during the survey.

4.1.2 Survey 2 - Dusk Emergence – 26/07/2022

Bat activity was recorded throughout the survey, with common pipistrelle (*Pipistrellus pipistrellus*) comprising the majority of activity with and some noctule (*Nyctalus noctula*) activity also recorded.

The first bat was recorded at 21:43 (approximately 27 minutes after sunset) observed by surveyors 1, 2, and 6 and comprised an emergence of one common pipistrelle from the eastern aspect of the building, confirming the presence of the roost (Roost 1) noted during survey 1. Commuting and foraging activity was recorded occasionally throughout the survey by all surveyors. Surveyor 6 recorded the most activity related to foraging activity around the north/east of the building. Surveyor 2, 3, and 4 all recorded a commuting noctule at 22:22 (approximately 66 minutes after sunset). The final pass was recorded at 22:43 (approximately 87 minutes after sunset) by surveyor 2 and comprised on foraging common pipistrelle.

A peak count of 2 bats was observed by surveyor 6.

Roost 1 was confirmed present on the eastern aspect of the building within the second balcony from the south and appeared to emerge from the ceiling.

4.1.3 Survey 3 – Dawn Re-entry – 13/09/2022

No bat activity was recorded during the survey by any surveyors.

4.2 Assessment

Bat activity was recorded throughout the dusk emergence surveys, with no activity recorded during the dawn re-entry survey. Only common and widespread species were observed utilising the site mainly for commuting and foraging purposes.

One bat roost (Roost 1) was identified within the building located on the eastern aspect. The roost was situated in the in the roof of the balcony above the doorway, in a defect to the roof panelling.

The low numbers of bats recorded using this roost indicates that it is a non-breeding summer roost for low numbers of common and widespread species of bat.

5 Mitigation Recommendations

5.1 Proposals

Manchester City Council are proposing to develop land at 17-47 Eastford Square in Manchester (hereafter referred to as ‘the site’). The proposals include the complete demolition of the building currently on site.

5.2 Impact Assessment

5.2.1 Bat Roosts

During surveys undertaken in 2022, a total of one non-breeding summer roosts was identified supporting a single common pipistrelle. Bat activity was recorded, with only common and widespread species identified during the nocturnal surveys. Foraging and commuting was recorded mainly in association with the adjacent parkland habitat.

The proposed development works will include the complete demolition of the building. Therefore, the demolition of the building is considered to have a high probability of injuring and/or killing bats and destruction of a known bat roost as a result of the proposed works, without mitigation. As such, a Bat Mitigation Class Licence (BMCL) is required and is to be obtained prior to any works being completed on the building.

Development should not result in overall loss of bat roost sites and therefore a replacement roost site will need to be provided for each of the species affected. The Bat Mitigation Guidelines (Mitchell-Jones, 2004) state that avoiding damage or loss of existing roosts is the preferred option in all cases and wherever possible, replacement roost habitat should be on a “like for like” basis to replicate the existing conditions selected by the bats.

5.2.2 Habitat and Artificial Light

The proposed demolition activities are not anticipated to cause the loss of any high value foraging and commuting habitat, with the site comprising mostly buildings and hardstanding habitats of limited value for bats.

Artificial lighting is known to affect all bats (BCT & ILP, 2018). Bats have been recorded avoiding gaps that are well lit, thereby creating a barrier effect (BCT and ILP, 2018). However, more light tolerant species such as common pipistrelle can also opportunistically benefit from artificial lighting from foraging on light-trapped invertebrates (Rydell, 2005). It is recommended that any development proposed for the site post demolition does not introduce significant levels of artificial light.

Any artificial light that is implemented within any development on site should consider the surrounding habitat, namely the park habitat to the north and west of the site which is likely of highest value to local bat populations.

It is advised that a light mitigation plan is produced to assess the pre- and post-development changes in lighting and to advise on an appropriately sensitive lighting scheme as part of the development.

5.3 Mitigation

5.3.1 Bat Mitigation Class Licence

The roost identified supports common and widespread species and the roost identified are of “low conservation value” as non-breeding, summer roosts (English Nature, 2004).

A Bat Mitigation Class Licence (BMCL) is to be used for the building. It is applicable for the destruction of up to three “low conservation status roosts”. Such roosts include feeding; day; night; and transitional roosts. Demolition related consent must be granted with wildlife conditions discharged prior to the licence application.

The site will be registered under a BMCL of a suitably qualified ecologist. Alternatively, a standard Mitigation Licence can be completed for the site, which requires similar requirements to the BMCL. A Reasoned Statement is not required under the BMCL. A site visit by the registered ecologist would be required before the licence could be completed.

The roosts located on the building will be demolished under the supervision of the registered licenced bat ecologist under the Natural England BMCL. Please refer to Appendix 2 for the Bat Method Statement.

5.3.2 Bat Roost Compensation

The demolition of the building should not result in the overall loss of bat roosts. Therefore, a replacement roost site will need to be provided for the roost affected. The Bat Mitigation Guidelines (Mitchell-Jones, 2004) state that avoiding damage or loss of roosts is the preferred option. However, the works require the full demolition of the building, and this is not possible. As such, replacement roost provisions should be on a “like-for-like” basis to replace the existing conditions that will be lost.

To mitigate for the loss of bat roosts, a minimum of one multipurpose bat box will be installed prior to the demolition of the building. Table 4 provides further details of the bat box to be installed (alternative bat boxes of similar specifications may be used). The bat box is aimed at crevice-dwelling bats, such as common pipistrelle found to be roosting in the building.

This box will act as receptor sites should any live bats be found during the supervised destruction of the roost. The bat box is to be installed on to a retained tree within the surrounding habitat to the north of the site within the park. Permission will need to be sought from the relevant landowner prior to putting up the batbox. The box will ideally be positioned at a minimum height of 4m from the ground level. This will minimise the risk of them being damaged by vandalization or the bats being targeted by predators such as domestic cats. The boxes must remain in-situ for a minimum of five years post-development.

Table 4 – Bat Box Specification

Specification	Number	Image
Greenwood's Ecohabitats Two Crevice Bat Box <u>Specifications</u> External: 43cm x 21.5cm x 6.8cm Internal: 41cm x 16.5cm x 1.8cm Weight: 6.75kg	1	

5.3.3 Working Methods

Appendix 2 details the Method Statement to be undertaken under the BMCL.

5.3.4 Artificial Lighting

Commuting and foraging bats may be impacted by the proposed works on site. Construction lighting should not be directed towards offsite trees, with directional lighting to be achieved by angle and orientation of beam, use of a cowl, louvre or other light shield, or a combination of these.

An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered within the scheme during its condition, to minimise impacts of lighting. The recommendations are as follows:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Internal lighting should be positioned away from windows to minimise light spill.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres, and hoods, that effectively contain light spill from unintended areas.
- The use of hard landscaping features to block light and create dark corridors.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.
- Column heights of lighting can be considered to minimise light spill.

5.4 Derogation Tests

A licence to derogate from the statutory protection afforded to bats can be granted for a number of specified reasons or purposes as set out in Regulation 53 of the Conservation of Habitats and Species Regulations 2010 (as amended). These reasons are often referred to as the ‘three tests’. Consideration of the three tests is to be used to demonstrate that it is reasonable to assume that a Natural England licence will be granted in this case.

5.4.1 Test 1

Regulation 53(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”, typically referred to as the ‘Overriding Public Importance Test’.

The building currently on site has laid empty and disused for a number of years. In this time various anti-social behaviour has been associated with the building, with scorch marks as a result of arson still present around parts of the building. The residential flats on the first floor have broken windows and appear to have been broken into in the past.

Therefore, the demolition of the building meets this test through imperative reasons of over-riding public interest in the form of preserving public health and public safety.

5.4.2 Test 2

Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied “that there is no satisfactory alternative”, typically referred to as the ‘No Satisfactory Alternative’ test.

The demolition of the building is the most appropriate way forward for the site due to the unsafe nature of the building and the general state of disrepair making renovation unfeasible.

5.4.3 Test 3

Regulation 53(9)(b) states: the appropriate authority shall not grant a licence unless they are satisfied “that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range”, typically referred to as the ‘Favourable Conservation Status’ test.

Satisfaction of this test is demonstrated within this report.

6 Conclusion

The nocturnal bat surveys identified one non-breeding summer transitional roost for common pipistrelle. This is assessed to be of “low conservation status” (Mitchell-Jones, 2004). The proposed works will cause the destruction of this roost and a breach of legislation under the Wildlife and Countryside act 1981 (as amended) and the Conservation of Habitats and Species regulations 2017 (as amended) should no mitigation be applied.

As a result, the demolition works require a BMCL or a standard Mitigation Licence to be undertaken lawfully and minimise the risk of impacting roosting bats. Compensatory roost provisions will be implemented before any demolition works take place to provide compensatory habitat for the loss of the roosts. These compensatory roost provisions must be maintained within the site for a minimum of five years.

- The results of the nocturnal bat surveys are detailed in Section 4.1
- The impact assessment for bats is detailed in Section 5.2.
- Appropriate mitigation including the BMCL, roost provisions, and artificial lighting recommendations are detailed in Section 5.3.
- The method statement for the BMCL is detailed in Appendix 2.

7 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 (2022). Preliminary Roost Assessment of 17-47 Eastford Square. Ref: UG_1595_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 – BMCL Method Statement

Demolition of a building with known bat roosts present, causes an offence to be committed by the way of disturbance or damage to bats or their roosts under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (As amended) (refer to Appendix 1).

Therefore, demolition of the building on the site, which was assessed to support one non-breeding summer roost for common pipistrelle should be undertaken under a Natural England BMCL. In addition, the following Precautionary Working Methods (PWMs) are to be undertaken under the supervision of a registered bat ecologist to reduce the risk of killing or injuring any bats.

Pre-commencement works are as follows:

- Before demolition works can start, one general purpose bat box (see Section 5.3.2 for details of bat box specifications) will be fixed to a suitable location.
- The box is to be affixed onto a retained tree located within the park to the north/east of the site after seeking out permission from the landowner. The box must be positioned on a south-west or south-east-facing aspect, at a minimum of 4m from the ground, and must remain in situ for a minimum of 5 years.
- The registered ecologist will undertake a daylight inspection to assess the status of the site for bats prior to works commencing on site. The Registered ecologist will check for fresh droppings and accurately assess the levels of bat activity.
- The registered ecologist will attend site on the day of the scheduled demolition works to undertake a search for bats in the identified roost location' prior to the works commencing. The vertical tiles are to be removed by hand carefully under the supervision of the registered ecologist. Any bats found will be relocated into the roost provisions, already installed on site. The initial stages of the works will occur under the supervision of the registered ecologist.
- All contractors working on the site will be briefed with a Toolbox Talk by the registered ecologist, on the legal protection afforded to bats and their roosts, and on how to proceed if a bat is discovered during the course of the work.
- If bats are encountered during works, the registered ecologist will capture them, whilst wearing thin gloves. Any bats found that do not need to be taken into care will then be placed in one of the two bat boxes, which will act as receptor sites during demolition works.

Once the selected features have been removed under supervision, works can proceed in the absence of the registered ecologist, at their discretion. If a bat is discovered at any unsupervised time, work must cease immediately, and a licenced bat handler must be called for advice. This advice will include leaving the bat to disperse of its own accord or wait for the registered ecologist to move the bat. Builders and contractors are explicitly forbidden from handling bats except in the case of finding a trapped or injured bat. In which case the bat may be moved into a safe and secure place (e.g., a box) and the registered ecologist must be contacted immediately.