

BRIDGEWATER HOUSE DEANSGATE

Bat Emergence Survey Report

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Report Control Sheet

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INTRODUCTION

1.0 SCOPE & PURPOSE

1.1.1. Collington Winter Environmental Ltd was commissioned by Watch This Space (Jembrana) Limited to undertake a Preliminary Roost Assessment (PRA) and subsequent Nocturnal Bat Survey of the site at Bridgewater House, Deansgate. This report has been produced to inform a planning application at the site.

1.1.2. The author of this report is Olivia Collington BSc (Hons), MEnvSc, CEnv, Director and Principal Ecologist at Collington Winter Environmental Ltd. Olivia is highly experienced managing schemes and has produced many ecological reports to inform planning permission. Olivia holds a Class 1 Natural England Bat Licence and is experienced assessing sites for bat roosting potential.

1.2. LOCATION

1.2.1. Please refer to Figure 1.1 for the site location. The site is located within an urban area of Deansgate, Manchester. Bridgewater Canal is located approximately 90m north of the site boundary, with the A56 bounding the site to the north.

Figure 1.1 Site Location



1.3. OBJECTIVES

1.3.1. The objectives of the PRA are as follows:

- Identify any areas of bat roosting potential within the building
- Assess the value of the building for roosting bats
- Search for signs of bats
- Provide recommendations on any further surveys or mitigation required for bats

1.3.2. Subsequent Nocturnal Bat Surveys were completed at the site following the PRA. The objectives of the Nocturnal Bat Surveys are as follows:

- Identify any bats roosting within the building.
- Assess the value of the building for roosting bats.
- Identify the species assemblage of bats using the site.
- Provide recommendations on any further surveys or mitigation required for bats.

METHODOLOGY

2.1. DESK STUDY

2.1.1. An initial desk-based assessment of the site was undertaken to collate baseline data. The desk study included:

- Review of aerial and OS maps for habitat information.
- Review of potential habitat links on and off site, to determine the potential zone of influence of the proposed development.

2.2. PRELIMINARY ROOST ASSESSMENT

2.2.1. A Preliminary Roost Assessment (PRA) of the site was undertaken on 25th September 2021 by Olivia Collington BSc (Hons), MEnvSc, CEnv. Olivia holds a Class 1 Bat Survey Licence from Natural England (Reference 2020-46960-CLS-CLS).

2.2.2. The survey was undertaken following guidance set out in Collins (2016). This includes undertaking a detailed internal and external inspection of any features to compile information on potential and actual bat entry/ exit points, roosting locations and evidence of bats.

2.2.3. The building was assessed as per categories listed in Table 4.1 Collins (2016) and reproduced in Table 2.1.

Table 2.1 Assessment Criteria for Bat Roosting Potential

Bat Roosting Potential	Description
Negligible	Negligible features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitats to be used on a regular basis by larger numbers of bats.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats, but unlikely to support a roost of high conservation status.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and for longer periods of time.

2.3. NOCTURNAL BAT SURVEY

2.3.1. A dusk nocturnal survey was undertaken on 16th September 2021. A second dusk emergence survey was undertaken on 5th July 2022.

2.3.2. Please refer to Figure 2.1 for locations of vantage points used during the surveys.

Figure 2.1 Surveyor Locations



2.3.3. The dusk survey was undertaken in line with guidance as set out in Collins (2016). Surveyors used heterodyne handheld bat detectors. All surveyors were suitably experienced undertaking bat emergence surveys. Please refer to Table 2.1 below for details of surveyors.

Date	Sunset/ Sunrise Time	Start	Finish	Surveyors	Weather Conditions
16/09/2021	19.20	19.05	21.05	S Tomlinson Mark Cookson Gary Edwards Tobie Wharton Austin Morley	Temp. at start:19 Celsius Temp. at end:14 Celsius Cloud start: 6/8 Cloud finish: 6/8 Wind: 0 (Beaufort scale) No precipitation
05/07/2022	21:39	21:24	23:09	V1- Andrew Bridge V2- Andrew Taylor V3- Darnell Shaw V4- Jacob Ng V5- Will Higgins	Temp. at start:16 Celsius Temp. at end:14.5 Celsius Cloud start: 4/8 Cloud finish: 4/8 Wind: 3 (Beaufort scale) No precipitation

2.3.4. The surveys were undertaken during suitable weather conditions.

2.4. SURVEY LIMITATIONS

- 2.4.1. During the PRA, only limited internal access was available into the building due to the poor state of repair and generally unsafe nature of the building. Therefore, only a view from the entrance hallway was taken, and no access to the upper storey or any loft spaces was undertaken.
- 2.4.2. The second emergence survey was undertaken in 2022, to complete the recommended two emergence surveys as recommended in Collins (2016). The first survey in September was undertaken late in the season, however the updated survey was undertaken in July which is considered peak season, and very similar bat activity was recorded.

SURVEY RESULTS

3.1. DESK STUDY

- 3.1.1. The site is located within a highly urbanised area of Deansgate, approximately 1km south of Manchester city centre. The site is surrounded all aspects by buildings and road infrastructure which are anticipated to be of limited commuting and foraging value for bats.
- 3.1.2. Bridgewater Canal and associated riparian habitats is located approximately 80m north of the site and is anticipated to be important resource for foraging and commuting bats within the city centre. Whilst grassland fields in association with Hulme Park is located 190m south of the site, however it is separated via the A57(M) which is anticipated to act as a significant dispersal barrier for bats.

3.2. PRELIMINARY ROOST ASSESSMENT

- 3.2.1. A multi-storey red brick building with a multi-pitched roof which had been soft stripped. The external brick work was in good condition with no obvious crevices within the brick work. Air bricks were present on the majority of aspects of the building and may lead to a suitable cavity for roosting bats.
- 3.2.2. The majority of windows and doors has been secured with wooden boards and gaps were present in a number to provide internal access to the building.
- 3.2.3. The roof was constructed of plastic sheeting and wooden frame. The tiles had been removed during the survey. The plastic sheeting provided no suitable access to the loft space. The central aspect of the building comprised a flat roof and constructed of concrete with no loft space present.
- 3.2.4. External crevices were observed between the wooden fascias on the northern aspect of the building and the brick work.
- 3.2.5. Internally, the building comprised a complex of rooms which has been plastered and painted however were in a poor state of repair.
- 3.2.6. Please refer to Table 3.1 for photographs.

Table 3.1 Building Photographs

Feature	Photograph
Eastern aspect of the building	
Flat roof aspect of the building	
Soft stripped roof	

Boarded and non-boarded window on the eastern aspect, and air brick.



Internal aspect



3.3. NOCTURNAL BAT SURVEY 1 (16/09/21)

3.3.1. No roosting behaviour was observed during the dusk survey in relation to the building. The majority of surveyors did not record any bat surveys during the survey. V3 observed a single common pipistrelle (*Pipistrellus pipistrellus*) at 19:59 (approximately 30 minutes after sunset) but was heard not seen.

3.4. NOCTURNAL BAT SURVEY 2 (05/07/22)

3.4.1. No roosting behaviour was observed during the dusk survey in relation to the building. V1 and V5 had no records of bats throughout the survey. V2/3/4 all recorded the same two common pipistrelle (*Pipistrellus pipistrellus*) at 22:34 and 22:37 respectively (approximately one-hour after sunset) with V3/4 recording a heard not seen, but V2 reporting

3.5. INTERPRETATION

3.5.1. The survey found no bat roosting in relation to the building.

3.5.2. During the survey, limited bat activity was observed. Whilst artificial lighting in association with the building security and offsite road lighting is anticipated to impact the suitability of the sites value for roosting bats. Illuminating a bat roost can cause disturbance (Downs et al 2003) and this may result in the bats deserting the roost or even becoming entombed within it (Packman et al 2015). As such, it is not considered that a secondary bat survey would be necessary to confirm likely absence, however as a precaution a Method Statement is following during the works process (detailed in Section 4).

RECOMMENDATIONS

- 4.1.1. Proposed construction lighting should follow the protocols 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) to minimise disturbance and sky-glow off site.
- 4.1.2. No bats were recorded roosting within the building, and therefore no further surveys or mitigation with relation to roosting bats is required for any renovations to be completed on the building.
- 4.1.3. It is recommended a Sensitive Lighting Strategy be provided which details lighting levels within the proposed development and provision of “Dark Zones”. Proposed “Dark Zones” would be located along the corridor on the eastern aspect of the building and in the gardens so they can continue to be used by commuting and foraging bats. Lighting should be limited and sensitive wavelengths for bats used if possible:
- Warm white tones are preferable to blue toned lights (3000k)
 - LED light will be used where applicable as they produce less UV.
 - Lights will be downward facing and positioned to avoid light spill skywards.
- 4.1.4. It is recommended that post development, multipurpose bat boxes be installed within the site to provide opportunities for roosting bats as an enhancement measure. It is anticipated three boxes would be appropriate for the size of the site.
- 4.1.5. The building does provide some value for nesting birds. If the building is to be refurbished within the breeding bird season (March – September inclusive), a nesting bird check should first be undertaken by a suitably experienced ecologist. If any nests, or nests in construction are located, a suitable standoff should be maintained until the young have fledged. The works should commence within 48 hours of the nesting bird check.

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