

4 Downshire Square, Reading

Preliminary Roost Assessment
Finerain Developments



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The views and opinions contained within the document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to works.

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Executive Summary

- **The PRA determined that building 1 had MODERATE bat roost potential based on the number of PRF recorded in the external and internal fabric of the structure.**
- **Building 2 had LOW bat roost potential based on the number of PRF recorded in the external and internal fabric of the structure.**
- **Building 1 requires 2 emergence surveys between 1st May and the 31st August. Building 2 requires 1 emergence survey between 1st May and the 31st August.**
- In July 2024 Daniel Ahern Ecology Ltd were commissioned by Finerain Developments to undertake a Preliminary Roost Assessment (PRA), also known as a bat inspection survey 4 Downshire Square, Reading.
- The desk-based assessment returned no SACs relating to Annex II bats within 7.5km. 8 EPSL was found within 2km of the site. The licences covered brown long-eared, common pipistrelle, daubentons and soprano pipistrelle bats.
- Mitigation and habitat enhancement will be informed by the results of the bat emergence surveys.

Introduction

1.1. Introduction

In July 2024 Daniel Ahern Ecology Ltd were commissioned by Finerain Developments to undertake a Preliminary Roost Assessment (PRA), also known as a bat inspection survey 4 Downshire Square, Reading.

1.2. Site Location and Description

4 Downshire Square, hereafter referred to as 'the Site', was situated in West Reading, (NGR SU 70435 72895). An aerial photo view of the site can be seen in Figure 1 below.

Figure 1. Red line boundary for the Site.



1.3. Development Proposals

The current proposal consist of the following:

- Renovation and refurbishment of building 1 & 2.

1.4. Survey Objectives

The objectives of the bat inspection survey comprise the following:

- Assess the building within the survey area for the potential for bats to use it to roost.

1.5. Quality Assurance

All ecological surveys are led by Ecologists who are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) at the appropriate level. By joining the CIEEM staff sign up to a professional code of conduct.

Methodology

2.1. Preliminary Roost Assessment

An internal and external bat inspection was undertaken on 12th July by Megan Conway (Accredited Agent under Natural England licence: 2020-44508-CLS-CLS). The inspection followed methods described in the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (fourth edition) (Collins; 2023).

2.2. Desk Study

A desk study was carried out with the aim of supplementing the field survey results by collating and reviewing existing ecological information relevant to the site and the local area.

Bat European Protected Species Licences (EPSL) records from within 2km of the site were obtained from the MAGIC website, in addition details of designated sites, within 7.5 km of the site, relating to Annex II bat species were also obtained from the same website.

2.3. External Inspection

The exterior walls and roof of the building were viewed from ground level and features that provide potential bat access points or roosting places were noted and referred to as potential roost features (prf). Features that were looked for include:

- cracks/holes in mortar;
- gaps between ridge tiles and ridge and roof tiles;
- gaps in soffit boxes;
- gaps under wooden cladding; and
- gaps around the eaves.

Areas where bat droppings may accumulate, such as on the ground, ledges, window sills and walls, were also inspected.

Any features that may potentially be used by bats were identified and any evidence of bat activity, as listed below, were noted.

2.4. Internal Inspection

The internal inspection comprised a thorough search of the roof void within the building, see Figure 2 below for a floor plan, for evidence indicative of past or current use by roosting bats. Direct evidence of bat presence may include:

- live bats or bat corpses;
- droppings;
- bat sounds;
- scratch marks;
- urine stains; and
- clean, cob-web free gaps around potential entrance points.

Potential access points and roosting sites were also noted.

In any roof voids, a systematic search for evidence of bat presence was undertaken, concentrating on roof beams, ceiling joists and exposed surfaces.

Any evidence was recorded.

2.5. Bat Roost Assessment

The findings of the internal and external surveys inform an assessment of the structure, classifying the bat roost potential it has. The different classifications are set out in Table 1 below.

Table 1: Bat Roost Assessment Classifications

Classification	Description
NONE	No habitat features on site likely to be used by any roosting bats at any time of year (ie a complete absence of crevices/suitable shelter at all ground/underground levels).
NEGLIGIBLE	No habitat features on site likely to be used by any roosting bats; however, a small elements of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
LOW	A structure with one or more potential roost sites which could be used by individual bats opportunistically at any time of year. However, these potential roost sites do not provide enough space, shelter or protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats, (ie unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).
MODERATE	A structure with one or more potential roost sites which could be used by bats due to their size, shelter, protection, conditions and suitable surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation space-space the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
HIGH	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and suitable surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.
CONFIRMED	Evidence of bats roosting in the building or structure is recorded, bats, their droppings or feeding remains.

2.6. Equipment

The following equipment was available to use during the survey:

- close-focusing binoculars;
- P7 Lenser torch;
- camera;
- Depstech endoscope.

2.7. Limitations

The data provided by the online resources were not exhaustive. It is possible that bat species not included in the data search occur within the vicinity of the proposed development site.

The internal and external inspection survey provides a snapshot of conditions at the time of survey. Bats are mobile creatures that will move into and out of areas.

The details within this report will remain valid for a period of 12 months from the date of issue.

Results

3.1. Preliminary Roost Assessment

3.2. Desk Study

Statutory Conservation Sites

Records of Special Areas of Conservation relevant to Annex II bat species within 7.5km of the Site are presented in Table 2 below.

Table 2: Statutory Designated Sites.

Name	Area (ha)	Designation	Description	Distance & direction from the Site
Statutory sites				
n/a	n/a	n/a	n/a	n/a

Key

SAC – Special Area of Conservation

Bat Species

Records of bat EPSL within 2km of the Site are presented in Table 3 below recorded within the last 30 years.

Table 3: Bat EPSL Records within 2km of the Site

EPSL Reference	Species named	Distance & direction from the Site
EPSM2010-2590	soprano pipistrelle	884m southwest
2015-14868-EPS-MIT	brown long-eared, common pipistrelle	1965m south
EPSM2013-6388	brown long-eared, common pipistrelle	1965m south
EPSM2013-6155	common pipistrelle	1671m northeast
2016-22301-EPS-MIT	common pipistrelle	1654m east
2019-44194-EPS-MIT	common pipistrelle, soprano pipistrelle	1636m northeast
2017-28045-EPS-MIT	Daubentons	1700m northeast
2017-32379-EPS-MIT	common pipistrelle	522m southeast

3.3. Bat Inspection Survey

The results of the building inspection are set out in Table 4, below.

Table 4: Bat inspection External & Internal Survey Results

Building	External description	Internal description
Building 1 – Main house	A detached house set on Downshire Square. The main house had a hip roof. the roof was clad with clay tiles. A low number of PRF features were present within the roof cladding. Two large dormer windows on the western and eastern elevations of the main house. On the western elevation there was a hole in-between the tiles on the right side of the roof. On the dormer windows, PRF were recorded amongst the hanging tiles.	There were three separate internal voids. One small one contained the water tank. No PRF were recorded in this void. The other 2 roof voids were medium sized and L-shaped. The roof was lined with type 1F roofing felt which was over chicken wire and in largely good repair. There was a small hole on the northern elevation which was letting daylight in. No evidence of bats was recorded internally.

	The eaves where closed with wood, no PRF were recorded. The walls were rendered and there was ivy growing on the western elevation. No evidence of bats were recorded externally.	
Building 2 - Garage	The Garage was a simple dual pitched with gable ends on the western and eastern elevations of the building. The roof is clad with slate, on the western elevation there was an overhang that sheltered the entrance of the garage doors. The walls where constructed of rough cast render. There were no PRF recorded. No evidence of bats where recorded externally.	The roof void was medium in size, the roof was boarded with timber sarking under the roof. The room was well lit via windows. No evidence of bats was recorded internally.

Results of the bat roost assessment are set out in Table 5 below.

Table 5: Bat Roost Potential for the Buildings Surveyed

Building	Bat Roost Potential	Reason	Requirements
Building 1	MODERATE	- hole in the western elevation of the roof. - two dormer windows to the western and eastern elevations of building 1. - loose leading on the eastern dormer window along with a few slipped tiles. - no evidence of bats recorded externally or internally.	two emergence surveys required between 1 st May and the 30 th August
Building 2	LOW	- no PRF present. - no evidence of bats recorded externally or internally.	one emergence survey required between 1 st May and the 30 th August

Discussion and Requirements

4.1. Discussion

4.1.1. Desk based assessment results

The desk-based assessment returned no SACs relating to Annex II bats within 7.5km. 8 EPSL was found within 2km of the site. The licences covered common pipistrelle, soprano pipistrelle, brown long-eared and daubentons bats.

It is not believed the proposed development will have a significant impact on the status of the known local roosts.

4.1.2. Survey results – Preliminary Roost Assessment

Building 1 had a MODERATE bat roost potential based on the presence of PRF in the external and internal fabric of the structure. No bats were recorded internally or externally in building 1.

Building 2 had LOW bat roost potential based on the low number of PRF in the external and internal fabric of the structure.

There is the potential for bats to be an ecological constraint to the proposed works in the building 1 and 2.

4.2. Requirements

Under current best practice guidance building 1 required two emergence surveys and building 2 requires one bat emergence survey.

References

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn.) The Bat Conservation Trust, London.

Gunnell, K., et al (2010) Designing for Biodiversity: A technical guide for new and existing buildings. (2nd edn). RIBA.

Mitchell-Jones, A. J. (ed.) (2004) Bat Workers' Manual (3rd edn). JNCC

Photographs

Photo 1 – western elevation of building 1 showing PRF features in the dormer window.



Photo 2 – western elevation of building 1 showing possible PRF features in the roof.



Photo 3 – eastern elevation of building 1 showing the second dormer window



Photo 4 – Side view of building 1 showing potential PRF features on the building



Photo 5 – Internal view of one of the voids in of building 1



Photo 6 – Internal view into the void in building 1



Photo 7 – sarking in building 2



Photo 8 – southern elevation of building 2



Photo 9 – building 1 & 2



Legislation and Policy

Bats

All species of bat found in the UK are listed under Schedule 5 of *The Wildlife and Countryside Act 1981* (as amended 2018) and are afforded protection under Section 9(1), Section 9(4)(b&c) and Section 9(5) of the Act. Under this legislation, a person is guilty of an offence if he intentionally or recklessly:

- Kills or injures any bat;
- Disturbs any bat while it is occupying a structure or place which it uses for shelter or protection; or
- Obstructs access to any structure or place which any bat uses for shelter or protection.

Bats are afforded additional protection through their inclusion on Schedule 2 of *The Conservation of Species and Habitats Regulations 2017* (as amended). Under Part 3 of this legislation, a person is guilty of an offence if he:

- Deliberately captures, injures or kills a bat;
- Deliberately disturbs a bat; or
- Damages or destroys a bat breeding site or resting place.

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, breed or reproduce, rear or nurture their young, migrate or hibernate. It also includes any disturbance likely to affect significantly the local distribution or abundance of the species. Consequently, attention should be given to dealing with the modification or development of an area if aspects of it are deemed important to bats, such as flight corridors and foraging areas.

Breeding Birds

Wild birds, their nests and eggs, are afforded protection under Section 1(1) of *The Wildlife and Countryside Act 1981* (as amended). Under this legislation, a person is guilty of an offence if he intentionally:

- Kills, injures or takes any wild bird;
- Takes, damages or destroys the nest of a wild bird included in Schedule ZA1;
- Takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- Takes or destroys an egg of any wild bird.