Bat Roost Potential Report

Garage Unit at Nampara

Graffham Street

Graffham, West Sussex

GU28 0NS, NGR: SU 92663 17425

Planning Application SDNP/23/ 03865/HOUS

19th October 2023

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

The recommendations and information contained within this report are based on the information provided on the development works prior to the surveys being carried out. Should the development proposals change then the findings and recommendations contained within would potentially require revision.

The findings within this report do not constitute legal advice. Should this be required, then a suitably qualified professional practitioner should be contacted.

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1 SUMMARY

1.1 This This report provides the findings of a bat roost potential report for the garage building at the property of Nampara, Graffham Street, Graffham, West Sussex, GU28 0NS, centred on NGR: SU 92663 17425 to support the planning application SDNP/23/ 03865/HOUS.

1.2 This survey was carried on the 18th October 2023 using standard guidance and best practice methodology outlined in the Bat Workers Manual (Mitchell-Jones & McLeish, 2004), the Bat Mitigation Guidelines (English Nature, 2004) and Bat Surveys Guidelines for Professional Ecologists 4th Edition – Good Practice Guidelines (BCT 2023).

1.3 No evidence of bats was observed during the internal and external inspection of this building. As a result of these findings, this building can be categorised as having a *negligible* potential to support roosting bats.

1.4 ***Negligible*** potential for bats means that not further survey recommendation is made. Recommendation for ecological enhancement is made to provide potential habitat for bats following completion of the works.

1.5 Recommendation has been made regarding specification for external lighting to preserve the foraging habitat locally.

2 INTRODUCTION

Aim of this Study

2.1 This report provides the findings of a bat roost potential report for a garage building at the property of Nampara, Graffham Street, Graffham, West Sussex, GU28 0NS, centred on NGR: SU 92663 17425 to support the planning application SDNP/23/ 03865/HOUS.

2.2 ***Figure 1 – Location of Site***

Legal Status of Bats

2.3 The potential presence of bat roosts within a proposed development site has to be considered as all eighteen of the UK's bat species are protected under Section 9 of the Wildlife and Countryside Act (WCA) 1981 (as amended). The WCA states that '*a person is guilty of an offence if intentionally or recklessly they disturb [a bat] while it is occupying a structure or place which it uses for shelter or protection; or he obstructs access to any structure or place which [a bat] uses for shelter or protection'.*

2.4 Bats are also protected under the Conservation of Habitats and Species Regulations 2019. Bats are listed as European protected species under which it is an offence if;

- *a person deliberately captures, injures or kills any wild animal of a European protected species,*

- *deliberately disturbs wild animals of any such species,*
- *damages or destroys a breeding site or resting place of such an animal.*

2.5 Disturbances of animals include in particular any disturbance which is likely to impair their ability to,

- *survive, breed or reproduce, or to rear or nurture their young,*
- *in the case of animals of a hibernating or migratory species, to hibernate or migrate, or*
- *to affect significantly the local distribution or abundance of the species to which they belong.*

3 METHODOLOGY

3.1 This survey was carried on the 18th October 2023 using standard guidance and best practice methodology outlined in the Bat Workers Manual (Mitchell-Jones & McLeish, 2004), the Bat Mitigation Guidelines (English Nature, 2004) and Bat Surveys Guidelines for Professional Ecologists 4th Edition – Good Practice Guidelines (BCT 2023). Table 1 below details the specific categories for bat potential against the features within the building. The assessment classifications have been made in accordance to these criteria.

3.2 ***Table 1: Criteria for the Classification of Buildings for Bats (BCT 2023).***

Suitability	Description of Roosting habitats
Negligible	No suitable habitat features on site 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 sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bates (*i.e.* unlikely to be suitable for maternity or hibernation).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are 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 surrounding habitat.

Bat Records Search

3.3 A 2km search of bat data has been made from the National Biodiversity Network. A search of the Multi Agency Governmental Information Centre (MAGIC) was made for previously granted Natural England Mitigation Licences within 2km of the proposed development site.

Lead Surveyor

3.4 The survey work and reporting has been led by Richard Law BSc MRes CEnv MCIEEM FLS. Richard has been undertaking ecological survey work within the last 20 years on a number of differing locations throughout the United Kingdom for a variety of protected species, including bats (Class 2 2015-12576-CLS-CLS) reptiles, amphibians including great crested newt (*Triturus cristatus*) (Class 1 2016-20290-CLS-CLS) and terrestrial mammals including dormice (2015-13188-CLS-CLS) and birds including barn owl licence (CL29/00236). Richard is also qualified in track & sign and trailing *via* an international system of assessment (www.trackercertification.com).

Equipment Used

3.5 A high-power torch (1 million candle power) was utilised to illuminate any external areas of interest, with a less intrusive head torch used for assessing internal spaces. Crevices were checked using a PCE 3 endoscope with a 300cm extension. Nikon Monarch binoculars were used to further assess external areas from the ground.

4 RESULTS

4.1 This section provides an account of the results from survey carried out on the building and provide the justification for any further recommendations outlined within this report.

4.2 ***Table 2: Weather Conditions at Time of Survey***

Temperature	Precipitation 24hrs Prior to Survey or during the survey	Wind Direction	Wind Speed (Beaufort Scale)	Cloud Cover
14.5^{o}C	None	Southwest	1	75%

4.3 The weather conditions at the time of the survey were clear and dry. There had not been any heavy rain immediately prior to the survey and the wind was light and from the southwest.

Bat Species Records

4.4 ***Table 3: Summary of 2km Radius Bat Records Search***

Common Name	Latin Name	Records
Serotine	*Eptesicus serotinus*	1
Whiskered Bat	*Myotis mystacinus*	1
Brown Long Eared Bat	*Plecotus auritus*	4
Common Pipistrelle	*Pipistrellus pipistrellus*	2
Soprano Pipistrelle	*Pipistrellus pygmaeus*	3

4.5 There were five species of bat within the 2kms search area, with relatively few individual records. Whiskered bat was present, which are relatively rare, with serotine being also present. Brown long eared bat, common pipistrelle and soprano pipistrelle were also present.

Mitigation Licences

4.6 ***Table 4: Granted Bat Mitigation Licence Applications within 2km***

Licence Number	Distance and Direction	Species	Type	Date	NGR
2019-42040-EPS-MIT	0.6km north	Common Pipistrelle	Destruction of a Resting Place and Breeding Site	09/09/2019 to 31/08/2023	SU 9301 1790
2020- 49410-EPS-MIT	0.7km north	Brown Long Eared Bat, Common Pipistrelle, Serotine and Soprano Pipistrelle	Destruction of a Resting Place	05/10/2020 to 30/10/2027	SU 9281 1819
2018-37538-EPS-MIT	0.6km north	Brown Long Eared, Common Pipistrelle and Serotine	Damage and Destruction of a Resting Place	29/11/2018 to 19/11/2023	SU 9269 1820

2014-3993-EPS-MIT	1.5km northeast	Brown Long Eared, Common Pipistrelle and Soprano Pipistrelle	Damage of a Resting Place and Breeding Site	16/10/2014 to 01/10/2017	SU 9370 1849
2016-24854-EPS-MIT	1.7km northeast	Brown Long Eared Bat, Common Pipistrelle, Serotine and Soprano Pipistrelle	Destruction of a Resting Place and Breeding Site	01/09/2016 to 31/08/2026	SU 9388 1869

4.7 There were five granted Natural England mitigation licences within the 2km search radius. Two were for the destruction of breeding sites and one was for the damage of a breeding site. Bat species within these maternity roosts were brown long eared bat (*Plecotus auritus*), serotine, common pipistrelle and soprano pipistrelle.

Garage Building

4.8 There was a single building within the application area, and this comprised a brick built garage, with a corrugated metal sheet roof. The gable ends were faced with vertically aligned wooden boards, but this was not set over a cavity. The underside of this cladding was visible from the inside of this building. The corrugated sheeting roof was also single layered with a very small cavity underneath, which presented no evidence of bats. The brick walls were also solid, not presenting any internal cavity. Internally, this building was used for storage and contained materials and equipment typically found in a domestic garage. No evidence of bats was observed within this building and there were not any suitable locations that bats could potential utilise for roosting.

4.9 ***Table 5: Photographs of Buildings***

Plate 1: Northern End and Western Wall of Garage	***Plate 2: Southern End of Building***
	

Plate 3: Western Wall	*Plate 4: Internal View of Garage*
	

Surrounding Habitats

4.10 The building was located within the village of Graffham in rural West Sussex, close to the northern escarpment of the South Downs. The surrounding land use was a mixture of arable and pasture agriculture, with horse grazing also apparent. There were blocks of woodland and open pasture with hedgerow boundaries. This habitat can be considered as having a ***high value*** for foraging bats.

Summary of the Bat Potential

4.11 No evidence of bats was observed during the internal and external inspection of this building. As a result of these findings, this building can be categorised as having a ***negligible*** potential to support roosting bats.

5 DISCUSSION AND RECOMMENDATION

5.1 ***Negligible*** potential for bats means that not further survey recommendation is made. Recommendation for ecological enhancement is made to provide potential habitat for bats following completions of the works.

5.2 In the highly unlikely event that a bat is found during the development works, then works should cease, the bat left undisturbed *in situ* and consultation be made with a suitably qualified ecological consultant as to the most appropriate way to proceed. If the bat is injured, then contact should be made with the National Bat Helpline on 0345 1300 228.

External Lighting

5.3 To maintain the foraging habitat for serotine within the local area, it is recommended that any lighting installed at the property will conform to the specifications which are outlined within BCT Guidance Note (2018). This will reduce any light pollution would have on nocturnal activity of fauna, namely bat species, some of which are extremely sensitive to light pollution. Light spill into adjacent habitats will be reduced and avoided by the following:

- All luminaries will lack UV elements; metal halide and fluorescent sources will be avoided,
- A warm white light spectrum on external lighting will be adopted (<2700kelvin) to reduce the blue light component,
- LED luminaries will be used where a sharp cut off is required to avoid light spill into adjacent habitat,
- External luminaries will feature wavelengths higher that 550nm to avoid the component of light most disturbing to bats,
- Column heights of external lighting will be limited,
- Luminaries will be mounted on the horizontal plane, with no upwards tilt,
- Security lighting will be set on motion sensors and on short timers (<1min).

Ecological Enhancements

5.4 As an enhancement, it is recommended that two bat access bricks are installed into the walls of the newly developed building. These would be installed into the external walls and are discreate enough to not create any visual impacts on the new build and would provide a suitable roosting location for various bat species. These are all self-contained and do not provide access into the internal living space of any newly developed building.

6 REFERENCES

BCT (2023) Bat Survey Guidelines for Professional Ecologist 4th Edition – Good Practice Guidelines

English Nature (2004) Bat Mitigation Guidelines IN13.6

HMSO (1981) The Wildlife and Countryside Act 1981 (as amended) HMSO, London.

HMSO (2017). The Conservation (Natural Habitats, &c). (As amended) Regulations 2017.

Michell-Jones, T & McLeish, A. P (2004) Bat Workers Manual, JNCC