Bat Survey of Barns at Court Farm, West Woodlands, Somerset

Client	Mr M Knight
Reference	W1122.013
Issue	Three
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NATURAL SOLUTIONS

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Non-technical Summary

Background

In January 2019, Crossman Associates was commissioned by Thonrneycroft Construction to undertake a bat and bird survey of two barns at Court Farm, West Woodlands, Somerset, BA11 5EN. Development proposals include the conversion of the building into a residential dwelling. The survey was updated in November 2022

Methodology

The scoping survey was undertaken by Fairbrass Knowles, a fully licensed bat worker and experienced ecologist. The barns were inspected externally and internally for any evidence of bat / bird presence, such as droppings, food remains, staining or actual bats / birds.

Results

The two barns are two modern metal and concrete farm buildings. The buildings lack abiotic roosting features and have Negligible Suitability for roosting bats.

Recommendations

It is recommended that the following be undertaken as part of the development;

- A precautionary approach to development
- Installation of new bird boxes

Contents

1. Background

1.1. In January 2019, Crossman Associates was commissioned by Thonrneycroft Construction to undertake a bat and bird survey of two barns at Court Farm, West Woodlands, Somerset, BA11 5EN (site Ordnance Survey grid reference; ST 7786 4395). The survey was updated in November 2022.

1.2. One of the buildings is proposed for conversion into a residential dwelling and the second building will be demolished to make way for a garden.

1.3. The objectives of the survey were to:

- Make an assessment of the likely presence or absence of bats and birds
- Identify any legislative or planning policy constraints relevant to the site
- Determine the need for further surveys, compensation or mitigation

Site Description

1.4. Court Farm is a redundant farmstead that includes a large period dwelling with seven barns and farmyard. Buildings E & F, which are the main subject of this report are two large modern-style steel and blockwork prefabricated and open style barns that lie on the southern edge of the farmstead. Other building include a small simple rectangular stone barn that has previously been converted into an office, a traditional stone barns, two small barns that have both been renovated and used as games rooms / workshops and a simple, rectangular shaped and modern-style blockwork barn with lean-to.

1.5. The farm is located within the small hamlet of West Woodlands, approximately 4 km south of the town of Frome. The farm is located adjacent to the eastern carriageway of the B3092 and immediate surroundings are the holdings of the farm, which are a network of pasture fields, divided by managed and unmanaged hedgerows with frequent trees; although the farmstead is now redundant the fields are still in active agricultural use.

1.6. The wider landscape is characterised by extensive tracts of farmland, with networks of small to moderate-sized fields divided by both managed and unmanaged hedgerows. Lower Woods is the closest significant area of woodland and provides an extensive area of mature broadleaved woodland, approximately 700 m east of the site. A small unamed brook forms the closest significant watercourse; the brook runs in an approximate north-south direction and adjacent to the farmyards eastern side.

Proposals

1.7. Proposals involve the conversion of the two buildings into residential.

Legislation

1.8. In the UK all species of bats are protected under the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations, 2017. Under this legislation it is a strict liability offence to injure or destroy a bat or to disturb damage or destroy the resting place of a bat. Under this legislation the UK is obliged to fully take into account bats within the planning process and the level of bat activity on-site must be fully assessed prior to the assessment the planning application.

1.9. In Britain all wild birds are granted legal protection under the Wildlife & Countryside Act ((1981) (as amended)). This legislation protects the birds, their eggs and nests whilst being built or in use.

2. Methodology

Desktop Study

Data search

2.1. The MAGIC website was accessed to gain information on any statutory site designations within a 4 km radius of the site that are designated for bats.

National Planning Policy

2.2. National Planning Policy has been reviewed for policies that relate to nature conservation relevant to the site.

Field Survey

Bat scoping survey

2.3. The buildings were methodically inspected internally and externally for any evidence of roosting bats, including actual bats, droppings, urine staining and evidence of feeding activity such as discarded insect wings and cases.

2.4. The buildings were also assessed for its suitability to support roosting bats by considering several factors including whether bats can access internal and external voids within the building and whether these voids provide adequate protection and shelter for roosting bats. If the building is not confirmed as a roost, it is assessed from High to Negligible Suitability as follows;

- **High Suitability** – many roosting opportunities. Buildings tend to be old, large and rural

- **Moderate Suitability** – some roosting opportunities. Building tend to be old, rural with some recent maintenance
- **Low Suitability** – few roosting opportunities. Buildings tend to be modern, urban and well maintained
- **Negligible Suitability** – insignificant roosting opportunities. Buildings tend to be small, modern, urban and very well maintained.

Birds

2.5. The buildings were also inspected for the presence of birds including house sparrow *Passer domesticus* and barn swallow *Hirundo rustica*. The buildings were also checked for field signs including nesting material, accumulations of droppings and/or pellets.

3. Results

Desktop Study

Data Search

3.1. The MAGIC website informed that there are no statutory sites designated for bats within 4 km of the site.

Planning Policy

3.2. National policy guidance is provided by National Planning Policy Framework (NPPF), which sets out the Government' planning policies for England and how they should be applied to planning applications;

<u>Conserving and enhancing the natural environment</u>

- Planning decisions should contribute to and enhance the natural and local environment by:

  a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

  b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

  c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Habitats and Biodiversity

- When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate. Field Survey

Bat scoping survey

3.3. Survey work was undertaken by Alex Crossman, an experienced ecologist and fully licensed bat worker; licence number 12392 CLS-CLS and took place on 10 November 2022. The barns were fully accessible.

3.4. Figure 2 in Appendix I provides a building layout plan and the barns are refered to as Barns E and F.

3.5. The external and internal conditions of the buildings are described in the table below and photographs can be found in Appendix II.

3.6. A table within Appendix III sets out the criteria for the way a building is assessed for its potential to support roosting bats.

Building	Feature Description	Bat suitability
Barns E and F	Barns E & F are both simple open plan / open sided style storage plans. Barn E is the larger and older of the two likely dating from the 1950's / 60's, while Barn F is likely to date from the 1990's. Both barns are constructed with a combination of low—height (c 1.8 m) high solid concrete blockwork walls, with similar walls used to create internal bays (two in Barn E and two in Barn F). A steel superstructure is built off the walls and supports a further steel superstructure roof. The barns have multiple openings along the northern elevation, while the upper sides and the roof is formed from single skin steel corrugated roof sheets fixed to the steel work; all of which remain present and well-fixed in place. Both barns provide a well-lit and draughty interiors and the use of single skin and uniform materials, fixed to a basic steel superstructure, results in a lack of any significant abiotic potential roosting features (PRF's) suitable for bats. Both barns are in use for storage.	Negligible Suitability ☒

Evaluation

Barns E and F

3.7. During the scoping survey no droppings, staining, feeding remains or actual bats were observed in association with Barns E and F.

3.8. All three barns are simple modern style buildings constructed from modern and uniform materials that offer no significant complexities. The buildings interiors are all well-lit and draughty and overall are considered to offer bats with **negligible roosting suitability.**

4. Recommendations

4.1. The recommendations in the paragraphs below are provided to help ensure that wildlife and important ecological features are protected during the course of works. Recommendations also set out mitigation measures to minimise harm where this cannot be avoided and provide compensation measures to allow the proposals to meet current legislative and planning policy objectives.

4.2. Under the Government's National Planning Policy Framework (NPPF), opportunities to incorporate biodiversity in and around developments should be encouraged by local planning authorities. In particular, paragraph 175 (d) states that 'development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity'.

4.3. The Natural Environment and Rural Communities Act (2006) ("**NERC**") states that a public authority must "in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity" (section 40 (1) NERC); Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat

4.4. Further, the Conservation of Habitats and Species Regulations 2017 states that "a competent authority, in exercising any of its functions, must have regard to the requirements of the Directives so far as they may be affected by the exercise of those functions." (Regulation 9(3)). Reference to "Directives" includes Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the "**Habitats Directive**").

Species recommendations

Barns E & F

4.5. Survey work has concluded that barns E & F have **negligible bat roosting suitability** and do not require any further survey effort.

4.6. Due to the transitory nature of bats, there is a small possibility that bats could be encountered during demolition works; therefore, all works must proceed under a cautionary approach. Wall and roof panels will be removed in a vertical rather than horizontal sliding motion. Soffits and masonry will be dismantled using a 'soft' approach taking care with cavity walls where present. All site workers will be vigilant at all times and in the very unlikely event that a bat is found, then works must stop immediately and advice should be sought from Crossman Associates or Natural England (telephone number 0300 0603900).

Lighting

4.7. Exterior lighting must consider the presence of bats and other nocturnal wildlife as the site is currently unlit. New exterior lighting should consist of a modern LED-type and should be directional and or cowled. Lighting should aim to avoid light spill along adjacent habitat features. It is also recommended that exterior lighting plans should be implemented during the construction phase to avoid the possibility of new homeowners retro fitting less desirable lighting schemes.

4.8. The choice of lighting is important to minimising light spill and it is recommended that the following factors are considered to reduce the impact as much as possible;

- Narrow spectrum lights with no UV content, such as white or warm white LED
- Directional downlighting, illuminating downwards and below the horizontal plane to avoid light trespass
- Inclusion of hoods, louvres or cowls to prevent light spill

Ecological enhancement

4.9. The simplest way to provide an ecological enhancement, in order to meet planning policy objectives, is to install new bird nesting features on the new property. For new builds, conversions and renovations, house sparrow boxes are usually very successful and will help provide a nesting opportunity for a species that has suffered historic declines. It is recommended that a two sparrow terraces are installed beneath the eaves of the property, on the south, east or west elevation. A permanent woodstone or woodcrete model will be used, rather than timber. An example model is the Vivara Pro WoodStone House Sparrow Nest Box available from www.nhbs.com

5. Limitations

5.1. This report records wildlife found during the survey and anecdotal evidence of sightings. It does not record any plants or animals that may appear at other times of the year and were therefore not evident at the time of visit.

5.2. This report represents a preliminary assessment only. Recommendations and conclusions are subject to change should further findings significantly differ from those collected from the survey efforts to date.

5.3. The advice contained in this report relate primarily to factual survey results and general guidance only. On all legal matters you are advised to take legal advice.

6. References

Bat Conservation Trust (BCT) *Bats and Lighting in the UK* BCT

HMSO (1981) *Wildlife and Countryside Act 1981 (and subsequent amendments).* HMSO

HMSO (1995) *Biodiversity.* The UK Steering Group Report

Joint Nature Conservation Committee (JNCC) *Common Standards Monitoring Guidance for Reptiles and Amphibians* (2004) JNCC

Mitchell-Jones, A.J (2004) *Bat Mitigation Guidelines* English Nature

Mitchell-Jones, A.J , & McLeish A.P. (2012) *The Bat Worker's Manual* (4th Edition)

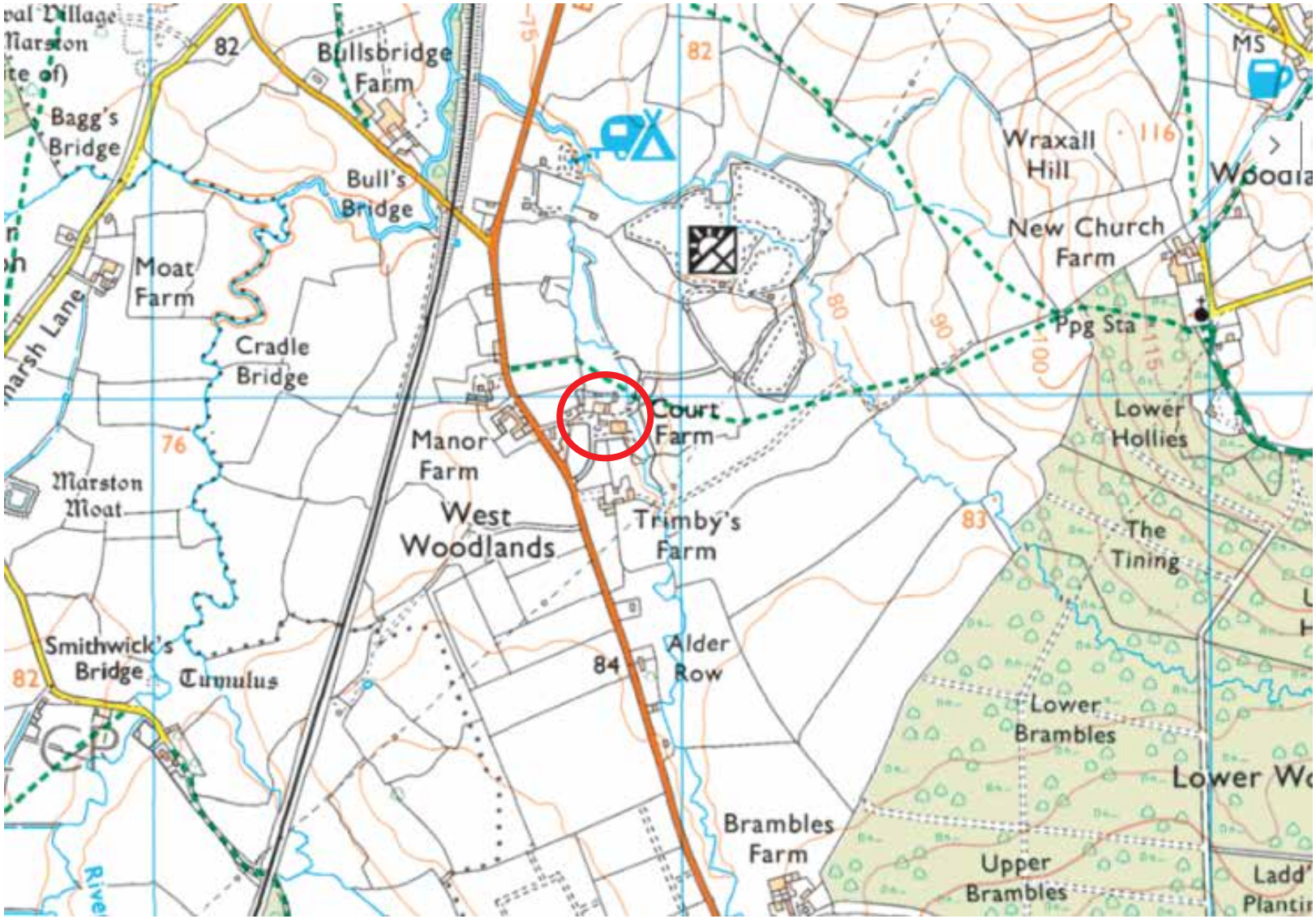
Multi-Agency Geographical Information for the Countryside (MAGIC) Website at www.magic.gov.uk

Stace, C. (1997) *New Flora of the British Isles 2nd Edition.* Cambridge University Press

TSO (2012) *National Planning Policy Framework.* TSO

TSO (2006) *Natural Environment and Rural Communities Act* TSO

Appendix I – Site Figures



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Site Boundary

Client	Mark Knight
Title	Site Location
Site	Court Farm
Figure	1
Date	23 November 2022
Scale	Indicative

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Client	Mr M Knight
Title	Building Layout
Site	Court Farm, West Woodlands
Figure	2
Date	23 November 2022
Scale	Indicative

Appendix II– Site Photographs

Photographs 1-3

Photograph 1:

Building E; northern; front elevation

Photograph 2:

Building F

Photograph 3:

Building E; northern elevation

Appendix III– Information Sheets

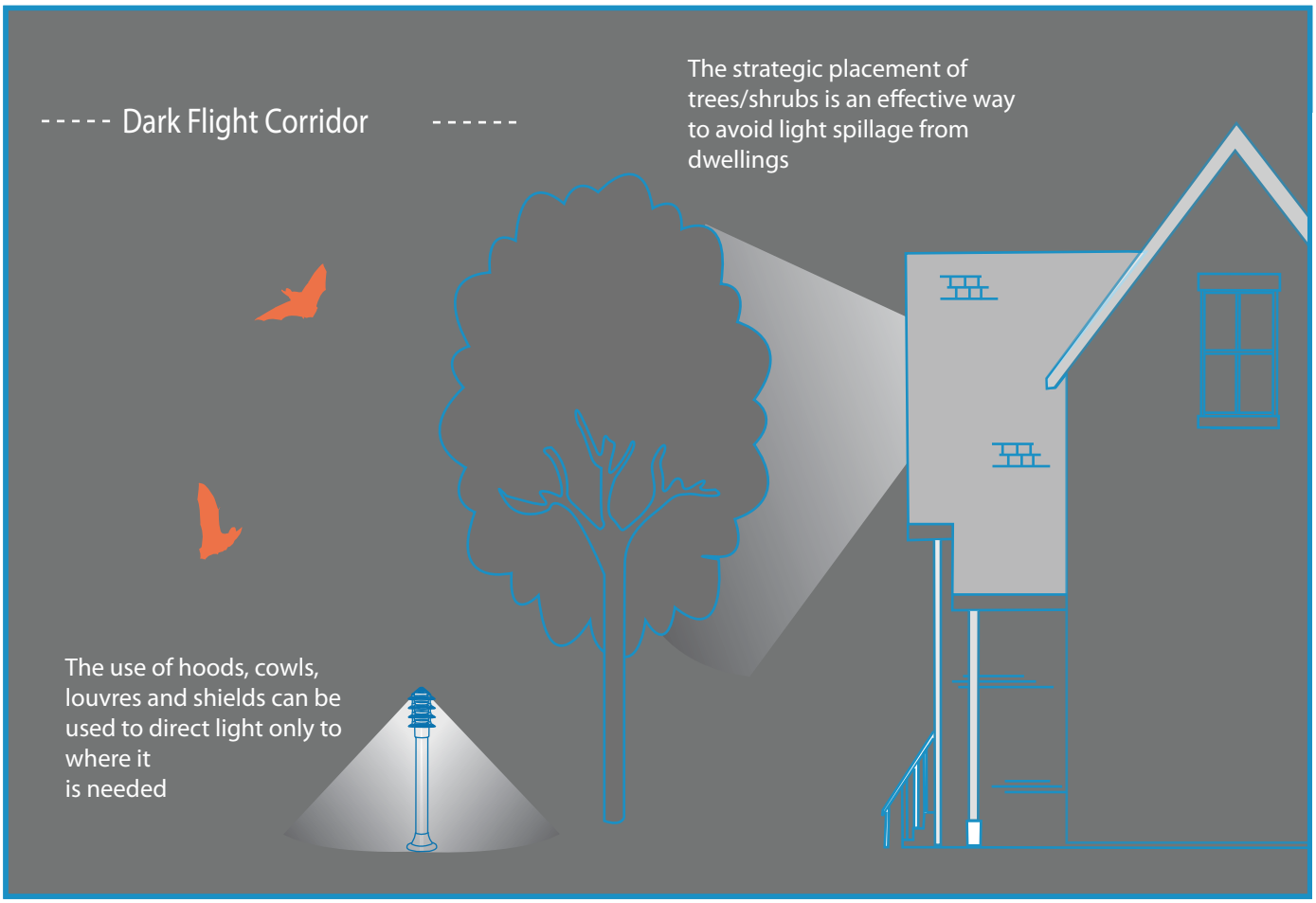
Bat Habitat Suitably Criteria

Bat Roosting Suitability	Criteria	Survey requirement to prove likely absence
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further survey work required
Low	A building, structure or tree with one or more potential roosting sites that could be used by individual bats opportunistically; however, these possible roost sites do not provide enough space, shelter, protection and/or suitable surrounding habitat to be used by large numbers of bats and are unlikely to be suitable for maternity or hibernation roosts.	One activity survey
Medium	A building, structure or tree with one or more potential roost sites that could be used by bats due to the size, shelter, protection, conditions and surrounding habit, but is unlikely to support a roost of high conservation status.	Two activity surveys
High	A building, 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 potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Three activity surveys

Survey requirements are taken from Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016), which is the recognised industry standard guidance used by local planning authorities and other statutory consultees.

Sensitive Lighting for Bats

MITIGATION GUIDELINE Nº 001



Lamp Type

The impact of light on bats can be minimised by the use of low/high pressure sodium lamps.

Lighting Column

The height of lighting columns should be kept as low as possible to reduce the impact of light spill. For example, when designing lighting for pedestrian walkways, use short bollard lights that produce a low level light (as low as 3 lux) directed downwards.

Light Mapping

Mapping the light spill of a lighting scheme using computer software can prove essential in designing schemes that are fit for purpose, that minimise energy costs and create dark flight corridors and foraging areas for bats.

Light Levels

Proposed light levels within landscape plans should be as low as possible. If lighting is not needed, don't light.

Timing of Lighting

The times at when lighting is left on should be limited where possible. The use of movement sensors and timers for lights is useful for saving energy and reducing the amount of time a light is left on.

Impacts of Light on Bats

As nocturnal mammals, light causes disturbance to bats and many species will actively avoid lit areas. The illumination of bat roosts can delay bats emerging and thus shorten their foraging time and may eventually lead to bats abandoning their roost. The illumination of foraging or commuting areas may also lead to an increase in the rate of predation of bats by predators.

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