



Protected Species Survey
Buildings at Main Street
Nailstone
Leicestershire
NGR sk41525 07053

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Report Contents

Contents

1. Introduction
 - 1.1 Site Description, Location and Survey Background
 - 1.2 Neighboring Land Uses
2. Survey Context
 - 2.1 Protected Species
 - 2.2 Legal Constraints
3. Survey Methodology
4. Survey Findings
5. Conclusion and Recommendations

Figures

Figure 1 – Site Location Plan
Figure 2 – Contextual Aerial Photograph
Figure 3 – Property Plan

Appendices

Appendix 1: Procedure to follow if bats are unexpectedly discovered during works
Appendix 2: Bat Activity Survey records, photographs and plans

Non-technical Summary

The site surveyed is a number of buildings comprising a large barn, three stable outbuildings, a garage and the extension to a residential house at Main Street, Nailstone, Leicestershire, centred at NGR SK41525 07053.

An internal and external inspection of the buildings was completed on 01st December 2022. This was followed by dusk and dawn activity survey completed during the July and August 2023 within the bat activity season in compliance with the interim guidance within the 4th Ed of the Survey Guidelines.

Eight building were inspected internally and externally by C Barker (2015-10140-CLS-CLS) during the stage 1 survey. No physical evidence of roosting bat activity was found on or within any of the building inspected. However, two of the building have features of potential interest to roosting bats associated with the roof structures (Building B2 and B4) and one building has some significant features associated with a large loft space that is open over a driveway arched access (Building B3) assessed as having moderate roost potential.

Two swallow nests were found within the interior of B4 attached to the roof beams during the stage 1 inspection. No other evidence of protected species was found in any of the buildings or the courtyard and garden areas adjacent to these.

The dusk activity survey was completed on 12th July 2023. ***No bat was seen to leave a roosting position within any of the buildings under surveillance*** or show any particular interest in these structures. Detectors confirmed presence of five species of bat foraging in the area around the building and some bat passes were noted going through the open entranceway within B3. The majority of the recorded bat flights were of Common Pipistrelle but occasional passed by Soprano Pipistrelle, Leislars, Noctule and Brown Long-eared bats were noted foraging within the local area in the vicinity of the buildings under observation.

During the dawn survey on 29th August there was very little bat activity within range of these building and ***no bat was seen to return to roost in any of these, particularly B3***. Detectors confirmed presence of three species of bat foraging in the area around the building and once again a handful of bat passes by Pipistrelle were noted going through the open entranceway within B3. The majority of the recorded bat flights were of Common Pipistrelle but occasional passed by Noctule and Brown Long-eared bats were noted.

From the stage 1 inspection and subsequent stage 2 activity surveys completed, no evidence of any roosting bat activity has been identified associated with any of these buildings. There are features present within the roof structures of B2, B3 and B4 that may be of potential interest to roosting bat sin the future and it would be prudent to remove the roof structures of these building outside of the main bat activity season. If these structures are not removed before 01 May 2024 then a further inspection may be required to ensure no protected species has colonised immediately in advance of works.

As part of the proposed development it is recommended that features such as roost bricks and artificial swift / swallow nests are incorporated into the converted building in suitable locations.

No evidence of, or potential for other protected species was identified during the inspection of the building or the land immediately surrounding these and no mitigation is required in regard to these other protected species.

1. Introduction

1.1 Site Description, Location and Survey Background

The site surveyed is a number of buildings comprising a large barn, three stable outbuildings, a garage and the extension to a residential house at Main Street, Nailstone, Leicestershire, centred at NGR SK41525 07053.

The location of the site is shown on the plan within **Figure 1** and an aerial photograph is provided to place the site into its environmental context in **Figure 2**.



Figure 1: Site Location

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Planning permission has been applied for to convert the barn and extend the existing house. In addition, it is understood that the existing stable buildings will be moved to a different location and the garage will be re-roofed. As part of the application the Applicant has been advised to have the existing buildings assessed for the potential presence of protected species, in particular bats and birds.

An internal and external inspection of the buildings was completed on 01st December 2022. This was followed by dusk and dawn activity survey completed during the July and August 2023 within the bat activity season in compliance with the interim guidance within the 4th Ed of the Survey Guidelines.

1.2 Neighbouring Land Uses

As can be seen from the photograph below the property lies in a rural position on the edge of the village of Nailstone. The village centre lies to the east and there are residential houses nearby to the south and east. To the north is open improved grassland used for equestrian purposes

beyond which is open agricultural land. To the west is a large agricultural unit with barns and equipment sheds. There is limited tree canopy cover in the area and no significant water features. This is an area of moderate potential interest to roosting bats and nesting birds. A contextual aerial photograph is provided below.



Figure 2: Site Contextual Aerial Photograph

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2. Survey Context

This survey has been carried out to provide information to the Planning authority in regard to an application to extend the existing dwelling and convert the large barn building and other buildings.

2.1 Protected Species

The survey covers existing barns and stable buildings, a garage and the extension of an existing house. Taking in account the issue of ‘proportionality’, as referenced in the 2016 Bat Survey Guidelines and Clause 4.1.2 of BS42020 wherein “*professionals should take a proportionate approach to ensure the provision of information within the (planning) application is appropriate to the level of environmental risk it presents,*” it was considered appropriate to review records for protected species obtained from the Leicestershire and Rutland Biological Records Centre for a 1km radius in the first instance and also review records of EPSL mitigation licenses issued by Natural England.

Genus	Common Name	Date (most recent)	Records	Location
Bufo bufo	Common Toad	2008	1	Nearest record in pond 400m to the north of the buildings
Lissotriton vulgaris	Smooth Newt	2008	1	Nearest record in pond 400m to the north of the buildings

Triturus cristatus	Great Crested Newt	2017	2	Nearest record in pond 425m to the north of the buildings
Coturnix coturnix	Quail	2011	1	Nearest record in open agricultural land 250m to the north of the building
Falco peregrinus	Peregrine	2021	1	Nearest record in open agricultural land 250m to the north of the building
Turdus iliacus	Redwing	2021	1	Nearest record in open agricultural land 250m to the north of the building
Turdus pilaris	Fieldfare	2021	1	Nearest record in open agricultural land 250m to the north of the building
Tyto alba	Barn Owl	2006	1	Nearest record in open agricultural land 250m to the north of the building
Chiroptera	Bat	2005	1	Nearest record in open agricultural land 250m to the north of the building
Lutra lutra	Otter	2021	1	Nearest record over 500m distance to the south east
Meles meles	Badger	2021	13	Nearest record over 500m to the east
Pipistrellus	Pipistrelle Bat species	2014	2	Nearest record in a residential property 400m to the east of the buildings surveyed
Pipistrellus pipistrellus	Common Pipistrelle	2014	2	Nearest record in a residential property 400m to the east of the buildings surveyed
Plecotus auritus	Brown Long-eared Bat	2005	1	Nearest record in a residential property 400m to the east of the buildings surveyed

The records for EPSL Mitigation licenses issued by Natural England identify the nearest one being issued for GCN at a site 2.5km to the north east of the building being surveyed. The nearest EPSL issued for bat species are 3.5km to the south in Barlestone and 3.5km to the north at Ibstock Lodge.

Since the survey area comprises existing buildings, all of which are in current use, the potential for protected species to be present is likely to be restricted to species such as roosting bats and nesting birds. Ground nesting within the surrounding courtyard and horse exercise area is unlikely and these areas offer little foraging potential for species such as badger or Great Crested Newt. There are no records of protected species within this property.

During the survey of the building observations and identification or signs of any species protected under the Habitat Regulations 2010 (originally Part 1 of the Wildlife and Countryside Act 1981) were noted. The objective of the survey is to identify and report any physical evidence of protected species, particularly bats using the building.

The inspector cannot be held responsible for any parts of the building structures that may have been inaccessible to the inspector due to services or structural restrictions, or any other restriction that could compromise the safety of the inspector or prevent unrestricted access. ***In this instance of the buildings were accessed including any enclosed loft areas although access to parts of the loft to building B3 were restricted due to structural concerns.***

The client must accept that the inspector will remain impartial to all parties involved and the results of the survey may not be in the best interests of the client. The surveyor, Christopher Barker, is an experienced ecological surveyor and Licensed Bat Worker (Class 18 L2 Natural England License) and an active member of the Lincolnshire Bat Group (Class 15 License Natural England Roost Visitor).

2.2 Legal Constraints

A methodical inspection of the site was carried out to identify the habitat(s) present and to look for any evidence of protected species using the site and to identify any features with potential to provide significant shelter or foraging opportunities for these. The survey was carried out by

Christopher Barker, an experienced ecological consultant and Chartered Environmentalist holding Class Licences issued by Natural England.

The Conservation of Habitats and Species Regulations 2010 consolidates the various amendments that have been made to the Regulations. The original (1994) Regulations transposed the EC Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Council Directive 92/43/EEC) into national law.

“European protected species” are those which are present on Schedule 2 of the Conservation of Habitats and Species Regulations 2010. They are subject to the provisions of Regulation 41 of those Regulations. All European Protected Species are also protected under the Wildlife and Countryside Act 1981 (as amended). Taken together, these pieces of legislation make it an offence to:

- a. Intentionally or deliberately capture, injure or kill any wild animal included amongst these species
- b. Possess or control any live or dead specimens or any part of, or anything derived from these species
- c. deliberately disturb wild animals of any such species
- d. deliberately take or destroy the eggs of such an animal, or
- e. intentionally, deliberately or recklessly damage or destroy a breeding site or resting place of such an animal, or obstruct access to such a place

For the purposes of paragraph (c), disturbance of animals includes in particular any disturbance which is likely—

- a. to impair their ability—
 - i. to survive, to breed or reproduce, or to rear or nurture their young, or
 - ii. in the case of animals of a hibernating or migratory species, to hibernate or migrate; or,
- b. to affect significantly the local distribution or abundance of the species to which they belong.

Although the law provides strict protection to these species, it also allows this protection to be set aside (derogation) through the issuing of licences. The licences in England are currently determined by Natural England (NE) for development works. In accordance with the requirements of the Regulations (2010), a licence can only be issued where the following requirements are satisfied:

- i) The proposal is necessary ‘to preserve 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’
- ii) ‘There is no satisfactory alternative’
- iii) The proposals ‘will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.’

General faunal activity, such as mammals or birds observed visually or by call during the course of the surveys was recorded. Specific attention was also paid to the potential presence of any protected, rare or notable species, and specific consideration was given to bats, birds, badgers, amphibians and reptiles as described below.

Breeding Birds: All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. The inspection

of the site included a search of hedgerows, ground vegetation and tree canopies looking for evidence of active or former nests.

Bats: All species of Bat within the UK are protected under the Conservation of Habitat and Species Regulations 2010 (Habitat Regulations) that amended and incorporated the Wildlife and Countryside Act 1981. These regulations make it an offence to:

- Intentionally kill, injure or take a bat [WCA section 9(1)]
- Possess or control any live or dead specimen or anything derived from a bat [WCA section 9(2)]
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a bat [WCA section 9(4)(a)]
- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for that purpose [WCA section 9(4)(a)]

Any building or significant trees present within the survey area have been assessed for their suitability to support roosting bats based on the presence of features such as holes, crevices, cracks, splits or loose bark.

Common Reptiles: All species of British reptile are protected by the Wildlife and Countryside Act 1981 (as amended). The common species (adder, grass snake, slow worm and common lizard) are only protected against intentional killing and injuring (but not taking).

The survey included a search of all areas adjacent to the buildings where suitable habitat for reptiles to shelter under or bask may be present, lifting rocks, bricks and other suitable features to search underneath. The surveyor also maintained a careful watch whilst moving across the garden to look for signs of reptiles moving to cover.

Great crested newts are afforded legal protection under European and UK law under the auspices of The Conservation (Natural Habitats &c.) (Amendment) Regulations which came into force on 21 August 2007, superseding the Habitat Regulations 1994. The 2007 amendments have increased the protection afforded to European Protected Species.

The law provides protection to adults, juveniles, efts (immature GCN) and eggs and it is an offence to intentionally or recklessly or as an incidental result of actions:

- Intentionally or deliberately capture, kill, or injure Great Crested Newts
- Intentionally or recklessly damage, destroy or obstruct access to any place used for shelter or protection (including resting or breeding places) whether occupied or not
- Deliberately, intentionally or recklessly disturb Great Crested Newts when in a place of shelter
- Possess a Great Crested Newt, or any part of it, unless acquired lawfully
- Sell, barter, exchange or transport or offer for sale Great Crested Newts or any part of them.

The survey included a search of any ponds and wetland areas within the site or immediate surrounding area nearby (where these features were present and accessible).

Badger: Badgers are protected under the Protection of Badgers Act 1992. This makes it an offence to willfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. A badger sett is defined in the legislation as “*a structure or place, which displays signs indicating current use by a badger*”.

The survey searching for evidence of badger activity comprised two main elements. The first element involved searching for evidence of Badger setts. For any setts that were encountered, each sett entrance was noted and mapped. The following information was recorded:

- Number and location of well used / active entrances; these are clear from any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently;
- Number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance;
- Number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

The second element of the survey involved searching for signs of Badger activity such as well-worn paths and push-throughs, snagged hair, footprints, latrines and foraging signs, so as to build up a picture of any use of the site by Badger.

Invasive Species: Attention was paid to the presence of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, the detectability of such species varies due to a number of factors, e.g. time of year, site management, etc., and hence the absence of invasive species should not be assumed even if no such species were detected during the Phase 1 survey.

A range of invasive non-native plant species are listed in Schedule 9 (Part 2) of the Wildlife and Countryside Act 1981, which makes it an offence to plant or cause these introduced invasive plants to grow in the wild, effectively making it illegal to spread the plants during development operations.

3 Stage 1 and Stage 2 Survey Methodology

The initial stage 1 inspection of this property was completed in early December 2022 which is outside of the optimum survey season for nesting birds and roosting bats.

The initial survey of the buildings included an inspection of the internal and external roof structures searching for evidence of bat activity. This initial inspection was completed outside of the optimum survey season for roosting bats and nesting birds. Appraisal of the external faces of each building was carried out using binoculars to assess potential features of interest. This was followed by a more detailed external and then internal inspection of the buildings with particular attention being paid to the internal roof and any other features of interest noted.

The visual inspection initially comprised an assessment from all accessible sides using professional high-quality binoculars 10 x 25 magnification to establish if any access points for bats are present and identify any external indications such as stains, wear around holes etc. that indicate the potential presence of these species. Windows, windowsills, doors, walls and the ground around the base of walls were inspected for signs of bat activity although evidence such as droppings may only be retained in covered and protected external areas. If evidence of potential access points for bats has been identified, these features have been targeted for further detailed investigation at close quarters. Bats in particular may roost at any time of year in locations such as voids behind beams and tiles, fissures, knot holes, gaps between bricks, voids behind roofing felt etc.

A potential bat roost site is to be inspected for overt evidence of bat presence and occupation. This could present as:

- Staining around a cavity, fissure, void or split caused by oils secreted by the bat into its fur
- Scratching on timbers and joists caused by the bat in the act of take off and landing
- Bat droppings and feeding debris in and around the access point or below the feeding roost
- Urine stains below a possible entrance site or within the entrance to a cavity. The urine also smells heavily of ammonia which is distinctively identifiable at close quarters
- Possible audible noises during daylight of bats chattering especially in hot weather
- Flies around entrance of possible roost which may be attracted to bat guano
- The lack of cobwebs around a possible entrance site may also suggest occupation, but of course does not directly confirm bat presence.

Potential bat roost locations in relation to buildings are described within this report (taken from the Bat Survey Guidelines) as:

Confirmed Roost – a structure with physical evidence confirming the presence of bats or bats visibly seen.

High – a structure with one or more potential roost features that are obviously suitable for use by a large number of bats on a regular basis and which is situated in an area of continuous high-quality foraging habitat suitable for bats;

Moderate – a structure with one or more potential roost features that could be used by bats, but which is unlikely to support a roost of high conservation status and which is in an area of connected habitat suitable for foraging by bats;

Low – a structure with one or more potential roost features that could be used by individual bats opportunistically. However, these potential roost features do not provide sufficient potential to be used by a larger number of bats or on a regular basis and the surrounding habitat is not of high value to foraging bats.

Negligible – a structure with negligible habitat features which is in a poor location making it highly unlikely roosting bats will be present.

Any potential roost features with the evidence indicating the presence of bats that is not fully visible to the naked eye will then be subjected to a visual inspection using a torch or, if necessary, an Endoscope with illumination as appropriate.

The survey also looked for evidence of nesting birds and significant bird activity such as nesting materials, feathers, guano, owl pellets and redundant or active nests within the building interior and around the exterior.

The open parking areas and landscaped ground adjacent to these were inspected looking for track, trails, burrows or other field signs of protected species.

The stage 2 Activity survey consisted of a dusk survey completed on 12th July 2023, prior to the start of which the buildings were quickly re-inspected for field evidence of bats and birds, and a dawn survey completed on 29th August 2023. Both surveys were completed within the optimum survey period for roosting bats and nesting birds. The surveyors were positioned to watch the buildings with low or moderate roost potential and each surveyor was equipped with an Echometer detector and two also used infra-red cameras in compliance with the interim survey guidance. Full details of the survey positions and survey rationale are provided in section 4.2 of this report and survey sheets. Photographs and maps are provided within **Appendix 2**.

Figure 3 Building Plan



Building	Description	Features present	Roost category
B1	Bungalow extension. Red brick in excellent condition with a pitched rosemary tile roof on the west face and a slate roof on the east face. Roof in excellent condition with no gaps, holes or cavities noted. Roof edges appear effectively sealed. Underside of roof lined with bituminous felt. Enclose internal loft space accessible via loft hatch. Brown uPVC windows throughout tightly fitting. This building will be renovated and extended.	No obvious features identified on the exterior or within the interior roof space of potential interest to bats. No field signs of bats or evidence of nesting birds associated within this small structure.	Negligible
B2	Single storey stable block. Red brick construction with the brickwork in good condition throughout. Pitched roof constructed from rosemary tiles in reasonable condition but with numerous small gaps. Timber doors with significant gaps at the top along the south face of the building and internally divided into three stalls, all linked within the open roof space. Underside of roof not enclosed and the majority of the roof is not lined. One section has clear plastic sheet lining through which the roof beams and tiles can be seen. Concrete floor throughout. This building will be demolished.	Numerous gaps noted on the roof exterior, some under the lifted ridge tiles but the roof is not lined. No other obvious features identified on the structure of potential interest to bats. No field signs of bats or evidence of nesting birds associated within this small structure.	Low
B3	Large two-storey barn divided into two sections but an entrance leading between the courtyard and driveway. Red brick structure showing signs of structural failure with the roof structure leaning noticeably to the west. Brickwork in reasonable condition but some cracks noted on the exterior and inspected where possible. Pitched red tile roof is not lined underneath and the roof space is open and accessible via the entranceway in the centre of the building. Timber roof beams in good condition but starting to lean precariously. Ground floor storage areas inspected, concrete floor throughout. This building will be converted.	Open roof space has gaps and crack present and some areas are fairly dark. Cracks on brickwork to east gable end and north face of building may be of interest to bats. No field signs of bats or evidence of nesting birds associated within this small structure.	Moderate
B4	Lean-to extension on the south side of B3. Red brick construction with good brickwork and a sloping roof of rosemary tiles laid over timber beams. Roof in good condition with no missing or broken riles. Bituminous lining under the roof and no enclosed loft space. Timber roof beams fully exposed. Concrete floor throughout. Building has timber doors on the south side which are not tightly fitting with significant open gaps and windows / doorways. This building will be demolished.	Roof is lined and there will be a gap between the tiles and lining which may be accessible. No field signs of bats. Swallows nesting under roof beams accessing from the open stable doors.	Low
B5	Horse stall – timber framed and clad in corrugated fibreboard. No lining with timber roof beams fully exposed. Timber stable door on front. This building will be removed and reconstructed in a new position.	No structural features identified of potential interest to bats or birds. No field evidence of roosting bats or nesting birds.	Negligible
B6	Horse stall – timber framed and clad in corrugated fibreboard. No lining with timber roof beams fully exposed. Two timber stable door on front. This building will be removed and reconstructed in a new position.	No structural features identified of potential interest to bats or birds. No field evidence of roosting bats or nesting birds.	Negligible
B7	Garage – inspected as a precaution as the owner is intending to replace the existing flat concrete roof with a new pitched roof structure. Pae red brick in good condition. Gently sloping corrugated asbestos sheet roof with no lining. Concrete floor. Some Swithland slate tiles present at one end tightly affixed.	No structural features identified of potential interest to bats or birds. No field evidence of roosting bats or nesting birds.	Negligible

4. Survey Findings

4.1 Stage 1 Inspection

The survey covered seven building and these are described and assessed in the table above. Each building has external and internal photographs provided taken by the surveyor on the day of the inspection.

Each building was inspected internally and externally by C Barker (2015-10140-CLS-CLS) who has over 20 years of experience as a surveyor and roost visitor. The inspection used a torch and also endoscope where necessary to search for evidence of bats such as droppings, feeding debris, urine spatter etc, and evidence of nesting birds.

No physical evidence of field signs to indicate the presence of roosting bats was found on or in any of the buildings as summarised in the table above. However, Building B3 is in very poor structural condition and it was not possible to fully explore the open loft area safely. As a result this particular building, which would be accessible to bats and which does have features within the roof structure, was placed into the ***moderate roost potential*** category despite the absence of any field evidence. Two other buildings were placed into the ***low roost potential category*** as a result of minor structural features identified on the exterior of these. Photographs of the buildings are provided below.

Bungalow Extension B1



Front (north and west side)



Rear (north and east side)



Bungalow loft interior



Bungalow loft interior

Stable Block B2



Front (south face) of B2



Rear (north face) of B2



Close up of tiled roof B2



Open underside of roof B2

Large Barn B3 and lean to extension B4



South west side B3 and B4



South east side B3



North east side B3



North west side B3



Roof space interior east side



Roof space interior west side



Underside of roof east side



Underside of roof west side



Interior of B4 lean to extension



Interior of B4 lean to extension

Stables B5 and B6



Exterior of B5



Interior of B5



Exterior south face B6



Exterior north face B6



Interior of B6

Garage B7



North face of garage



South face of garage



Interior roof of garage

4.2 Stage 2 Dusk and Dawn Activity Surveys

The full details of the dusk and dawn surveys completed are provided in the tables within **Appendix 1** and this appendix also contains photographs and plans showing the bat activity identified. The time and conditions of the surveys are summarised in the table below. The dusk survey targeted buildings B2, B3 and B4. The dawn survey concentrated on building B3.

Date of Survey	Survey Time	Temperature and weather	Survey conditions
12th July 2023	21.20 – 23.10	Clear sky becoming overcast from the west. 17°C at 21.20. Breeze 8mph from the west. Humidity 64% at 1024hPa	Suitable surveying conditions for bat foraging. Sunset 21.25.
29 August 2023	04.00 – 06.10	Clear sky with occasional cloud. 11°C at 04.00. Breeze 4mph from the south west. Humidity 88% at 1014hPa	Suitable surveying conditions for bat foraging and returning to roost. Sunrise 06.11.

The stage 1 inspection of the buildings completed outside of the main bat activity season found no evidence of bat activity. Prior to the stage 2 activity survey in July a further internal and external inspection was carried out to buildings B2, B3 and B4. ***During this inspection completed within the main bat activity season no field evidence to indicate the presence of bats was found.***

For the dusk survey five surveyors, each equipped with Echometer detectors showing real-time sonograph analysis were positioned to keep the three linked buildings B2, B3 and B4 under surveillance. Two of the surveyors also held night vision equipment (Nightfox Corsac 3 X HD binocular and Sigweis 10mag infra-red camera). The survey positions were as follows:

Surveyor 1 – positioned to the south east of the building B4 to watch the south facing roof and roof edge of this building with low roost potential and also watching the south facing roof of B3.

Surveyor 2 – positioned at the south end of the covered access under building B3 which has moderate roost potential to watch the open roof junctions for emerging bats. This surveyor used night vision equipment after dark to look inside the loft structures.

Surveyor 3 – positioned on the north west side of B3 to watch the roof of this building with moderate roost potential.

Surveyor 4 – positioned on the north eastern corner of B2 to watch the roof of this building and the roof and gable end of B3.

Surveyor 5 – positioned in the courtyard to the south east side of B2 to watch the front of this building and the south facing roof of B3. This surveyor used night vision equipment to watch the south facing roof structures after dark.

During the dusk survey no bat was seen to leave a roosting position within any of the buildings under surveillance or show any particular interest in these structures. Detectors confirmed presence of five species of bat foraging in the area around the building and some bat passes were noted going through the covered entranceway within B3. The majority of the recorded bat flights were of Common Pipistrelle but occasional passes by Soprano Pipistrelle, Leislars, Noctule and Brown Long-eared bats were noted foraging within the local area in the vicinity of the buildings under observation.

Activity in the area was of fairly low intensity and it is likely that there is significant double counting of individual Common Pipistrelle bats being picked up at two or three survey points. Plans of the survey positions and flight patterns is shown within **Appendix 3**.

Species identified at Dusk	Number of flights In all locations	Time of first record (sunset 9.25)	Roosting confirmed
Common Pipistrelle	66	21.58	None
Soprano Pipistrelle	9	22.08	None
Noctule	9	21.39	None
Leislars	2	22.08	None
Brown Long-eared	2	22.32	None
Total	88		

During the dusk survey 88 bat flight were recorded in the five positions. 66 of the flights were of Common Pipistrelle. No concentration of bats was noted and all of the flights seen were of solitary bats foraging in the open areas around the buildings. Surprisingly the bats which passed through the entranceway under the open roof of B3 did not show any interest in flying into the open ends of the loft spaces areas during the survey but passed straight through.

For the dawn survey in August 2023 three surveyors, each equipped with Echometer detectors showing real-time sonograph analysis were positioned to keep building B3 under surveillance. Two of the surveyors also held night vision equipment (Nightfox Corsac 3 X HD binocular and Sigweis 10mag infra-red camera). The survey positions were as follows:

Surveyor 1 – positioned within the entranceway through B3 to watch the open ends of the loft spaces to watch for returning bats. This surveyor used night vision equipment for the early part of the survey period.

Surveyor 2 – positioned near the north western corner of the building to watch the north facing roof and entranceway. This surveyor used night vision equipment during the early part of the survey period.

Surveyor 3 – positioned on the south eastern side of B3 to watch the roof and exposed gable end of this building.

During the dawn survey there was very little bat activity within range of these building and no bat was seen to return to roost in any of these, particularly B3. Detectors confirmed presence of three species of bat foraging in the area around the building and once again a handful of bat passes by Pipistrelle were noted going through the covered courtyard entranceway within B3. The majority of the recorded bat flights were of Common Pipistrelle but occasional passed by Noctule and Brown Long-eared bats were noted.

Activity in the area was of low intensity and it is likely that there is significant double counting of individual Common Pipistrelle bats being picked up at the three survey points. Plans of the survey positions and flight patterns is shown within **Appendix 3**.

Species identified at Dusk	Number of flights In all locations	Time of first record (sunrise 06.11)	Roosting confirmed
Common Pipistrelle	21	05.35	None
Noctule	5	05.21	None
Brown Long-eared	2	05.15	None
Total	28		

During the dawn survey only 28 bat flight were recorded in the three positions around building B3 and 21 of these were flights of solitary Common Pipistrelle. No concentration of bats was noted. Once again the handful of bats which passed through the entranceway under the open roof of B3 did not show any interest in flying into the open ends of the loft spaces areas during the survey but passed straight through.

5. Conclusions and Recommendations

The development proposal is as follows

- Building 1 will be extended which will require the existing roof structure to be disturbed. This building has negligible roost potential and no field evidence of bats was identified during the inspection. There is no indication that any bat or roost location will be disturbed as a result of work to the roof of this building.
- Building 2 will be completely demolished. This building has low roost potential but no field evidence of bats was identified during the inspection and no roosting bat activity was identified during the activity surveys carried out. There are features present within the roof structure that may be of interest to bats in the future but there is no indication that any bat or confirmed roost location will be disturbed as a result of work to the roof of this building. It

would be prudent to remove the roof tiles and roof timbers outside of the bat activity season as a precaution.

- c) Building 3 will be converted but this will require the existing roof structure to be dismantled and reconstructed due to its poor structural condition. This building has moderate roost potential. No field evidence of bats was identified during the inspection and no roosting bat activity was identified during the activity surveys carried out. There are features present within the roof structure that may be of interest to bats in the future but there is no indication that any bat or confirmed roost location will be disturbed as a result of the removal and replacement of the roof of this building. It would be prudent to remove the roof tiles and roof timbers outside of the bat activity season as a precaution.
- d) Building 4 will be completely demolished. This building has low roost potential but no field evidence of bats was identified during the inspection and no roosting bat activity was identified during the activity surveys carried out. There are features present within the roof structure that may be of interest to bats in the future but there is no indication that any bat or confirmed roost location will be disturbed as a result of work to the roof of this building. It would be prudent to remove the roof tiles and roof timbers outside of the bat activity season as a precaution. There is evidence of swallows previously nesting in this building. Work must not take place during the nesting season and suitable replacement nesting sites must be provided as part of the redevelopment proposals for this property.
- e) Building 5 will be taken down and reconstructed in a new position. This building has negligible roost potential and no field evidence of bats was identified during the inspection. There is no indication that any bat or roost location will be disturbed as a result of work to the roof of this building.
- f) Building 6 will be taken down and reconstructed in a new position. This building has negligible roost potential and no field evidence of bats was identified during the inspection. There is no indication that any bat or roost location will be disturbed as a result of work to the roof of this building.
- g) Building B7 will have the roof removed and rebuilt. This building has negligible roost potential and no field evidence of bats was identified during the inspection. There is no indication that any bat or roost location will be disturbed as a result of work to the roof of this building.

As part of the proposed development it is recommended that features such as roost bricks and artificial swift / swallow nests are incorporated into the converted building in suitable locations.

No evidence of, or potential for other protected species was identified during the inspection of the building or the land immediately surrounding these and no mitigation is required in regard to these other protected species.



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REFERENCES

National Planning Policy Framework 2019 as amended. Department for Communities and Local Government. HMSO

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Guidelines for Preliminary Ecological Appraisal, 2nd Edition (2017). Institute of Ecology and Environmental Management (CIEEM)

Guidelines for Ecological Impact Assessment (EcIA) in the UK and Ireland (2018). Institute of Ecology and Environmental Management (CIEEM)

Web references

MAGIC: Designated area data downloaded from URL <http://www.magic.gov.uk.html>

National Biodiversity Network: Protected species data downloaded from URL <http://data.nbn.org/interactive/map>

APPENDIX 1: Procedure to follow if bats are unexpectedly discovered during works

- The roof edge tiles and ridge tiles to all of the buildings should be removed carefully by hand to enable the underside of these features to be inspected in accordance with accepted good practice. Ideally this work should be completed outside of the main bat activity season but if this is not possible reasonable precautions should be followed.
- If, prior to any approved works commencing following there is any indication that bats may be present in or around the building (e.g. droppings or staining is noted on the walls or significant bat activity is seen around the property in the evenings), work should not be undertaken until a further survey is carried out to determine the significance of this.
- If at any point during the work bats are discovered, then the contractors must immediately stop work and telephone Christopher Barker on 07957 912470.
- An appropriately licensed bat worker will liaise directly with Natural England and the County Ecologist if any indication of bats or actual presence of bats is discovered. Actions will then be taken following the advice given. This may include removal of bats, but only where direct written or verbal permission is gained from the appropriate authorities.
- Only when the appropriate authority is satisfied that there is no further risk to bats will works recommence.
- Should it transpire that the operation being carried out is of more risk to bats than was originally thought, then works will be stopped until they can be supervised by an appropriately licensed bat worker.
- Any injured bats should be gently placed in a secure ventilated box in a cool, quiet dark place (e.g. cardboard box with a sealed lid) by the contractor while wearing gloves for the bat's protection whilst awaiting the arrival of the licensed person.

APPENDIX 2: Biological Records from Leicestershire and Rutland Records Centre.

Separate Appendix.

Appendix 3: Activity Survey Records, Photographs and Activity Plans

Date of Survey	Survey Time	Temperature and weather	Comments
12th July 2023	21.20 – 23.10	Clear sky becoming overcast from the west. 17°C at 21.20. Breeze 8mph from the west. Humidity 64% at 1024hPa	Suitable surveying conditions for bat foraging. Sunset 21.25.
Flight / Forage activity: Detectors confirmed presence of five species of bat foraging in the open land and courtyard area around the buildings. The majority of the recorded bat flights were of Common Pipistrelle but occasional passed by Soprano Pipistrelle, Leislars, Noctule and Brown Long-eared bats were noted foraging within the local area			

Species	S1 bat passes	S2 bat passes	S3 bat passes	S4 bat passes	S5 bat passes
Common Pipistrelle	11	9	21	13	12
Soprano Pipistrelle	-	-	4	2	3
Noctule	1	1	3	3	1
Leislars	-	-	-	1	1
Brown Long-eared	1	-	1	-	-
Total	13	10	29	19	17

Roosting Activity – None identified.

Surveyor S1 positioned on the south side of B3 and B4. Low intensity activity with only 13 bat flights seen or recorded. Only individual flights noted. No concentration of bats with Common Pipistrelle being the dominant species. One Noctule was heard but not seen. One Brown Long-eared bat was seen to circle the courtyard towards the end of the survey period but this did not emerge from either of the buildings under observation.

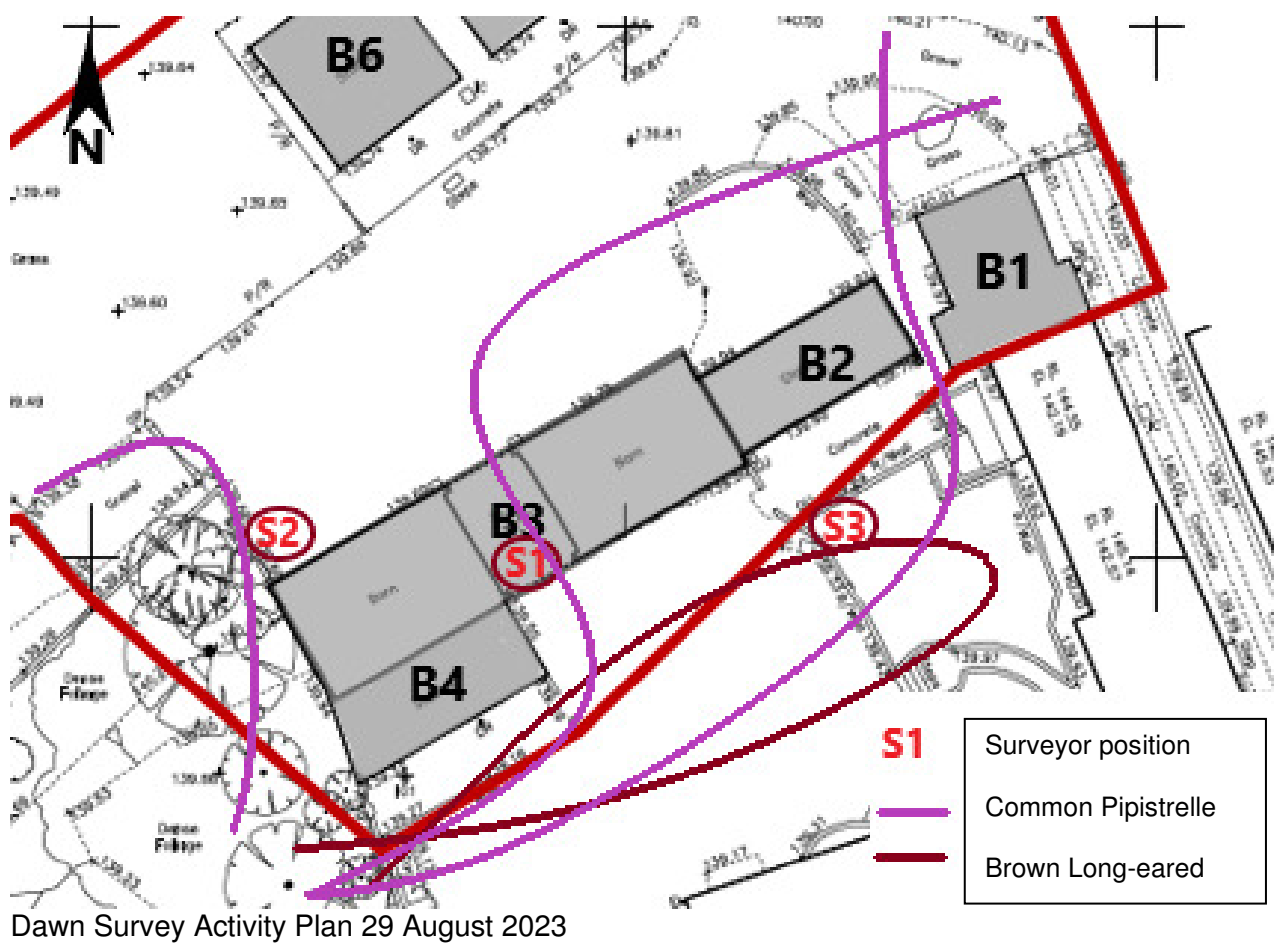
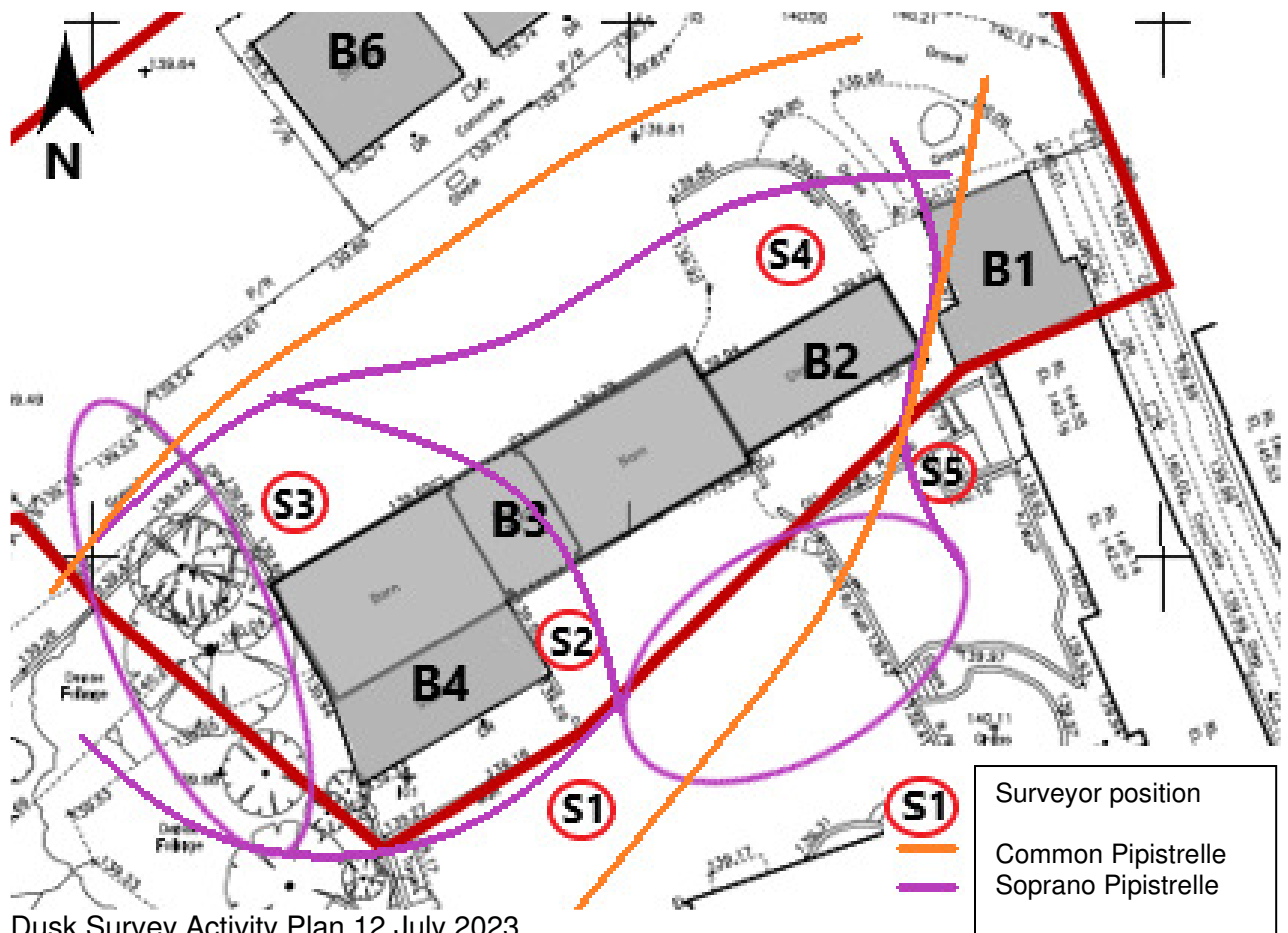
Surveyor S2 positioned under the arched entranceway to watch for bats emerging from the loft spaces of B3. Low intensity activity with only 10 bat flights seen or recorded, six of these being individual Pipistrelle flying through the entrance. Only individual flights noted. No concentration of bats with Common Pipistrelle being the dominant species. One Noctule was heard but not seen. No activity by Plecotus or Myotis species was recorded or seen.

Surveyor S3 positioned to watch the roof of B3 and entrance through this building. Low intensity activity with 28 bat flights seen or recorded. Only individual flights noted, most passing to the west of B2/B3 between the trees and the building. No concentration of bats with Common Pipistrelle being the dominant species. Noctule were heard but not seen. One Brown Long-eared bat was picked up towards the end of the survey period but this did not emerge from the building under observation.

Surveyor S4 positioned to watch the roof of B2 and B3 and entrance through this building. Low intensity activity with 17 bat flights seen or recorded. Only individual flights noted, most passing to the east of B2 between the courtyard and the open land to the north. No concentration of bats with Common Pipistrelle being the dominant species. Noctule were heard but not seen and one Leislars pass was recorded. No activity by Plecotus or Myotis species was recorded in this location.

Surveyor S5 positioned to watch the roof of B2 and gable end of B3. Low intensity activity with 17 bat flights seen or recorded. Only individual flights noted, most passing to the east of B2 between the courtyard and the open land to the north. No concentration of bats with Common Pipistrelle being the dominant species. Noctule were heard but not seen and one Leislars pass was recorded. No activity by Plecotus or Myotis species was recorded in this location.





Date of Survey	Survey Time	Temperature and weather	Comments
29 August 2023	04.00 – 06.10	Clear sky with occasional cloud. 11°C at 04.00. Breeze 4mph from the south west. Humidity 88% at 1014hPa	Suitable surveying conditions for bat foraging and returning to roost. Sunrise 06.11.
Flight / Forage activity: Detectors confirmed presence of three species of bat foraging in the area around the buildings. Bat activity was of low intensity and the majority of the recorded bat flights were of Common Pipistrelle but occasional passes by Noctule and Brown Long-eared bats were recorded.			

Species	S1 bat passes	S2 bat passes	S3 bat passes		
Common Pipistrelle	5	9	7		
Noctule	2	2	1		
Brown Long-eared	1	-	1		
Total	8	11	9		

Roosting Activity – None identified.

Surveyor S1 positioned under the covered access in B3 to watch the open roof access points using an infra-red camera whilst it was dark. Occasional bat passes through the access were noted but no bat was seen to enter the roof structures during the survey and none showed any interest in accessing these for roosting purposes. Most of the small number of flights identified were if individual Common Pipistrelle. The last Pipistrelle pass was at 05.26am. A Brown Long-eared bat was seen and recorded passing through the courtyard at 05.15 heading west as it was starting to get light. No activity by any Myotis species bats was noted in this position. No bat was seen to leave the building under observation or show any interest in this.

Surveyor S2 positioned to watch the north face of B3 and the entranceway noted low intensity activity by individual Common Pipistrelle and picked up passes by Noctule. No bat was seen to use the roof structure of B3 as a roost and the last Common Pipistrelle pass was at 05.35 heading west past the building.

Surveyor S3 positioned in the courtyard to watch the south facing roof of B3 and the exposed east gable end noted flights by individual Common Pipistrelle in the yard and passing the building but no bat was seen to show any interest in the building or enter this to roost. The last Pipistrelle pass was at 05.26am passing S3 towards S1 heading west. One Brown Long-eared bat flew a circuit of the courtyard at 05.15 also picked up by S1.



