

Manor Farmyard, Blackwell Close,
Earls Barton, NN6 0ND

Bat Survey and Assessment

March 2024

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Executive Summary

- i) **Introduction.** Aspect Ecology was commissioned by Clock House Land and Homes in February 2024 to undertake a preliminary bat roost assessment in respect of the existing buildings at Manor Farmyard, Blackwell Close, Earls Barton, NN6 0ND.
- ii) **Proposals.** The proposals are for the renovation of the existing barn (B4) and part of the existing smithy (B2), and the demolition of the former cattle shed (B3) and storage building (B1) to provide four new dwellings with associated new access and landscaping.
- iii) **Survey.** All buildings within the site were subject to a preliminary bat roost assessment in March 2024 involving external and internal inspection surveys in accordance with best practice guidelines. Subsequent dusk survey work is scheduled to be completed in accordance with the latest guidance starting in May 2024.
- iv) **Ecological Designations.** The site is not subject to any statutory ecological designation. The nearest statutory designation of ecological importance is the Upper Nene Valley Gravel Pits Special Protection Area, Ramsar site and Site of Special Scientific Interest, which is located approximately 1.4km south-west of the site. None of the statutory ecological designations within the surrounding area are designated on the basis of bat interest.
- v) **Survey Results.** Based on the survey work buildings B2 and B4 are assessed to be of moderate suitability to roosting bats. The other buildings on site are assessed to be of low (B1) and negligible (B3) suitability. During the internal/external inspection survey, no evidence to indicate the use of any of the on-site buildings by roosting bats was recorded. Further dusk emergence survey work will be completed in the accepted season to understand whether the potential roosting features identified during the preliminary roost assessment in March 2024 are actively used by bats.
- vi) **Mitigation.** Should bats be confirmed as present a suitable mitigation strategy will be required to safeguard roosting bats during works, which is to be confirmed following completion of the dusk emergence survey work. The mitigation strategy will include the acquisition of a Natural England European Protected Species licence, supervision of relevant works by a licenced ecologist and provision of replacement roosting opportunities at the site. Should bats be confirmed absent from the on-site buildings a number of precautionary safeguards will be implemented.
- vii) **Summary.** Subject to the implementation of suitable mitigation/safeguarding measures set out herein, the proposed works are unlikely to have any adverse effect upon the conservation status of local bat populations.

1 Introduction

Background & Proposals

- 1.1 Aspect Ecology was commissioned by Clock House Land and Homes in February 2024 to undertake a bat survey and assessment of buildings at Manor Farmyard, Blackwell Close, Earls Barton, NN6 0ND, centred at grid reference SP 85455 63569 (see Plan 6782/BSA1), in order to inform a planning application.
- 1.2 The proposals are for the renovation of part of the existing smithy (B2) and the existing barn (B4) and demolition of the former cattle shed (B3) and storage building (B1) to provide four new dwellings with associated new access and landscaping.

Purpose of the Report

- 1.3 This report documents the methods and findings of the preliminary roost assessment survey work undertaken in respect of the on-site buildings, in order to determine the potential or actual presence of bats. Where required, further survey work to be completed is detailed and appropriate mitigation/precautionary measures are proposed to safeguard any identified bat interest.

2 Methodology

Desktop Study

- 2.1 Information on statutory designations was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC) database, which utilises data provided by Natural England, with an extended search radius of 25km. In addition, the MAGIC database was searched for sites where a European Protected Species Licence has been granted for bats in the vicinity of the site.

Field Survey

Visual Inspection Surveys¹

- 2.2 **Buildings.** All buildings within the site (labelled **B1-B4** on Plan 6782/BSA2) were subject to a specific external/internal inspection survey on 6th March 2024, using torches and binoculars where necessary.
- 2.3 During the external inspections, particular attention was given to any potential roost features or access points, such as broken or lifted roof tiles, lifted lead flashing, soffit boxes, weatherboarding, hanging tiles, etc. and for any external signs of use by bats such as accumulations of bat droppings or staining. Binoculars were used to inspect any inaccessible areas more closely where appropriate.
- 2.4 During the internal inspections, evidence for the presence of bats was searched for with particular attention paid to any loft voids and relevant potential roost features and locations, such as ridge boards, rafters, purlins, gable walls, and mortise joints. Specific searches were made for bat droppings that can indicate present or past use and extent of use, whilst other signs that can indicate the possible presence of bats were also searched for, e.g. presence of stained areas, feeding remains, corpses, etc.
- 2.5 Suitability for roosting bats was rated based on relevant guidance² as either:
- None;
 - Negligible;
 - Low;
 - Moderate; or
 - High.

¹ Surveys based on: CIEEM (2023) 'UK Bat Mitigation Guidelines' and Collins, J. (ed.) (2023) 'Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).' Bat Conservation Trust

3 Survey Results and Evaluation

Desktop Study

Ecological Designations

- 3.1 The site is not subject to any statutory designation. A number of statutory designations are present in the surrounding area, the closest is Upper Nene Valley Gravel Pits (Ramsar/SSSI/SPA) located approximately 1.4km south-west of the site, which is designated for its ornithological interest. None of the surrounding statutory ecological designations are designated due to bat interest and no adverse effects on any of the ecological designations are anticipated as a result of the proposals.

EPS Licenses

- 3.2 The closest bat licence on the MAGIC database was granted in 2011 (Reference: EPSM2011-3620) for the destruction of a Soprano Pipistrelle resting place, approximately 4.4km west of the site.

Field Surveys

Visual Inspection Survey - Buildings

- 3.3 **Building B1** is a rectangular single storey lean-to constructed of red brick with a wooden timber framework, which supports a gently sloping roof clad with concrete-asbestos panels. Building **B1** adjoins **B2** to the east and has an open frontage on the northern elevation. Concrete-asbestos panels make up the walls on the south and west elevations, with small holes present in the western wall panels. The building is used for some storage but is largely uncluttered.
- 3.4 No evidence of bat occupation, e.g. droppings, staining, feeding remains, etc., was recorded in association with building **B1** during the inspection survey. There is potential that the building may be subject to occasional opportunistic use by bats with potential roosting features present in the form of splits in the wooden trusses. As such, building **B1** is assessed to afford low suitability to support roosting bats. Due to the low potential suitability afforded by building **B1** further survey work in the form of a single dusk emergence survey will be completed in accordance with the Bat Conservation Trust's good practice guidelines².
- 3.5 **Building B2** is a single storey red brick/Horton stone building with an open frontage to the north. The roof is pitched, clad with concrete-asbestos panelling and supported by a wooden timber framework in the form of an A-frame structure with wooden rafters, purlins and a ridge beam, as well as wooden batons on the southern face of the roof. A small plastic wooden framed window is present on the southern elevation at the far eastern end of the building. There is a substantial amount of Ivy *Hedera helix* present under the roof panels. The floor is concrete and the building is internally divided into sections by red brick and Horton stone walls. At the eastern end of the building, the walls are constructed of Horton stone which is in a poor condition with several gaps and crevices present in the masonry. An old red brick chimney stack is present towards the eastern end of the building. The building is used for storage, albeit is largely uncluttered.

² Collins, J. (ed.) (2023) 'Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).' Bat Conservation Trust

- 3.6 No evidence of bat occupation was recorded in association with the building during the inspection survey. However, roosting potential in building **B2** is afforded internally by a number of gaps and crevices present in the stone masonry at the eastern end of the building. There is potential that the building may be subject to occasional use by crevice dwelling bat species. Overall, building **B2** is assessed to afford moderate suitability to support roosting bats, therefore two dusk emergence surveys will be completed in accordance with the latest guidelines.
- 3.7 **Building B3** is a single storey red brick building that is open fronted to the southeast, with concrete-asbestos panelling forming the walls on the western and southern elevations from approximately 1m above ground level. The pitched roof is supported by a metal framework to the west and wooden framework to the east and clad with concrete-asbestos panels. There are gaps between the roof panels at the apex and the eaves, as well as a missing wall panel piece on the western elevation. The brickwork is in good condition with a few small superficial holes in the mortar. A small ~0.5m high breezeblock former animal pen is present in the southeast corner with a gently sloped concrete panel roof. There is a plastic liner present beneath the roof panels in this area. Building **B3** is used for storage but is largely uncluttered.
- 3.8 No evidence of bat occupation was recorded in association with building **B3** during the inspection survey. Furthermore, there are negligible roost features associated with the building therefore no further survey work is advised in respect of **B3**.
- 3.9 **Building B4** is a two-storey barn constructed of Horton stone, with a tiled pitched slate clad roof supported by a wooden timber framework. The framework supporting the roof comprises a wooden A-frame, with wooden rafters, purlins and a ridge beam, whilst the roof lining is likely bitumen hessian felt. There are four unglazed top storey windows on each of the western and eastern elevations, as well as a single window on the top storey of each of the northern and southern elevations of the building. The window on the northern elevation is unglazed, whilst the southern window is partially covered by broken plastic. Building **B4** is adjoined to **B3** on the western elevation by a brick doorway, and a large wooden door is present on the eastern elevation, with multiple gaps present between individual wooden door panels. A few of the roof tiles on the western elevation of the roof were noted to be lifted or slipped. There is a single missing tile at the eave of the roof on the western elevation as well as some areas of missing mortar beneath the ridge tiles. There is a single storey lean-to extension on the southern elevation of **B4** with a sloped concrete panel roof supported by wooden beams. The walls on the southern and western elevations of the lean-to are constructed of red brick with open frontage on the eastern elevation.
- 3.10 A single suspected bat dropping was found during the internal inspection survey which could be attributed to exploratory use of the building by a bat. Overall, building **B4** is assessed to afford moderate suitability to support roosting bats, therefore two dusk emergence surveys will be completed in accordance with the latest guidelines.

4 Mitigation Measures and Ecological Enhancements

4.1 The specific mitigation measures to be implemented during construction are dependent on the findings of the dusk emergence surveys. The mitigation strategies are divided into two scenarios below depending on whether roosting bats are confirmed present or likely absent during the dusk emergence survey work. The mitigation strategies will ensure the conservation status of local bat populations will be maintained.

Scenario 1 - Bats Present

- **Pre-commencement Survey** - A further external/internal inspection survey of the buildings should be undertaken prior to the commencement of works to confirm the current status of bat roosts.
- **Safeguards during Works** – Prior to the commencement of works, all contractors will be made aware of the potential presence of roosting bats, their legal protection and safe working practices to avoid harming bats. If removing the roof of any buildings with confirmed bat presence or any other structures with potential to support or conceal roosting bats, should be undertaken by hand and with care, during favourable weather conditions (e.g. not during heavy rain, high winds or unseasonable low temperatures) under a Natural England European Protected Species Licence and ecological supervision.
- **Replacement Roosting Opportunities** - New roosting opportunities would be required to compensate for the loss of any bat roost. Details of the roosting opportunities to be provided would be set out within the Natural England licence application but would likely include the provision of bat boxes on the new buildings. A bat box would need to be erected onto a pole within the site prior to the commencement of demolition works. This will allow for any bats encountered during the demolition works to be safely relocated to a new roosting site.
- **New Buildings** - Any water tanks within the roof space of new buildings will be permanently covered, hessian fibre reinforced bitumen roofing felt (type 1F) will be used in place of modern breathable membrane, and timber treatments that are toxic to mammals will be avoided.

Scenario 2- Bats Absent

4.2 Even if no bats are recorded roosting within the buildings during the dusk emergence surveys, a precautionary approach is advised during demolition works.

- **Update Survey** - Should any considerable time (e.g. >1 year) elapse between the survey work undertaken in March 2024 and any development works, a further external/internal inspection survey of the buildings should be undertaken prior to the commencement of works to confirm the continued absence of roosting bats.
- **Precautionary Safeguards during Works** – Removal of any roofs or other structures with potential to support or conceal roosting bats, should be undertaken with care during favourable weather conditions (e.g. not during heavy rain, high winds or unseasonable low temperatures) under the contractors own watching brief. Should any bats be encountered, works would need to stop and

Aspect Ecology contacted so that suitable mitigation can be agreed prior to works re-commencing. This may potentially involve discussion with Natural England and acquisition of a development licence for works to resume.

- **Enhancement of Roosting Opportunities** – As detailed at Section 4.4 below, new bat boxes will be erected within the site to enhance roosting opportunities.

Lighting

4.3 Sensitive Lighting Strategy - Light-spill onto new roost features i.e. bat boxes, will be minimised in accordance with good practice guidance³ to reduce potential impacts on light-sensitive bats. This may be achieved through the implementation of a sensitively designed lighting strategy, with consideration given to the following key factors:

- **Light intensity** – light intensity (i.e. lux levels) should be kept as low as possible to reduce the overall amount and spread of illumination; and
- **Directionality** – to avoid light spill lighting should be directed only to where it is needed. Particular attention should be paid to avoid the upward spread of light so as to minimise trespass and sky glow.

Ecological Enhancements

4.4 The National Planning Policy Framework (NPPF) encourages new developments to maximise the opportunities for biodiversity through incorporation of enhancement measures. Given the proposed scope of works there is opportunity to incorporate ecological enhancements as part of the proposals. Regardless of the results of the schedule further bat survey work, the following ecological enhancements will be incorporated under the proposals:

- **Bat Boxes** – In addition to any boxes required as part of any Natural England licence, if bats are confirmed as roosting on site, a further two bat boxes be incorporated within the proposed development to provide additional roosting opportunities for bats. To maximise their potential use, the bat boxes should ideally be erected as high up as possible and sited in sheltered wind-free areas that are exposed to the sun for part of the day, facing a south-east, south or south-westerly direction.
- **Bird Boxes** – New bird nesting boxes will be incorporated within the proposed development, thereby increasing nesting opportunities for birds at the site (minimum of two boxes). To maximise their potential use, the bird boxes should ideally be erected as high up as possible and sited in sheltered wind-free areas facing a northerly direction.

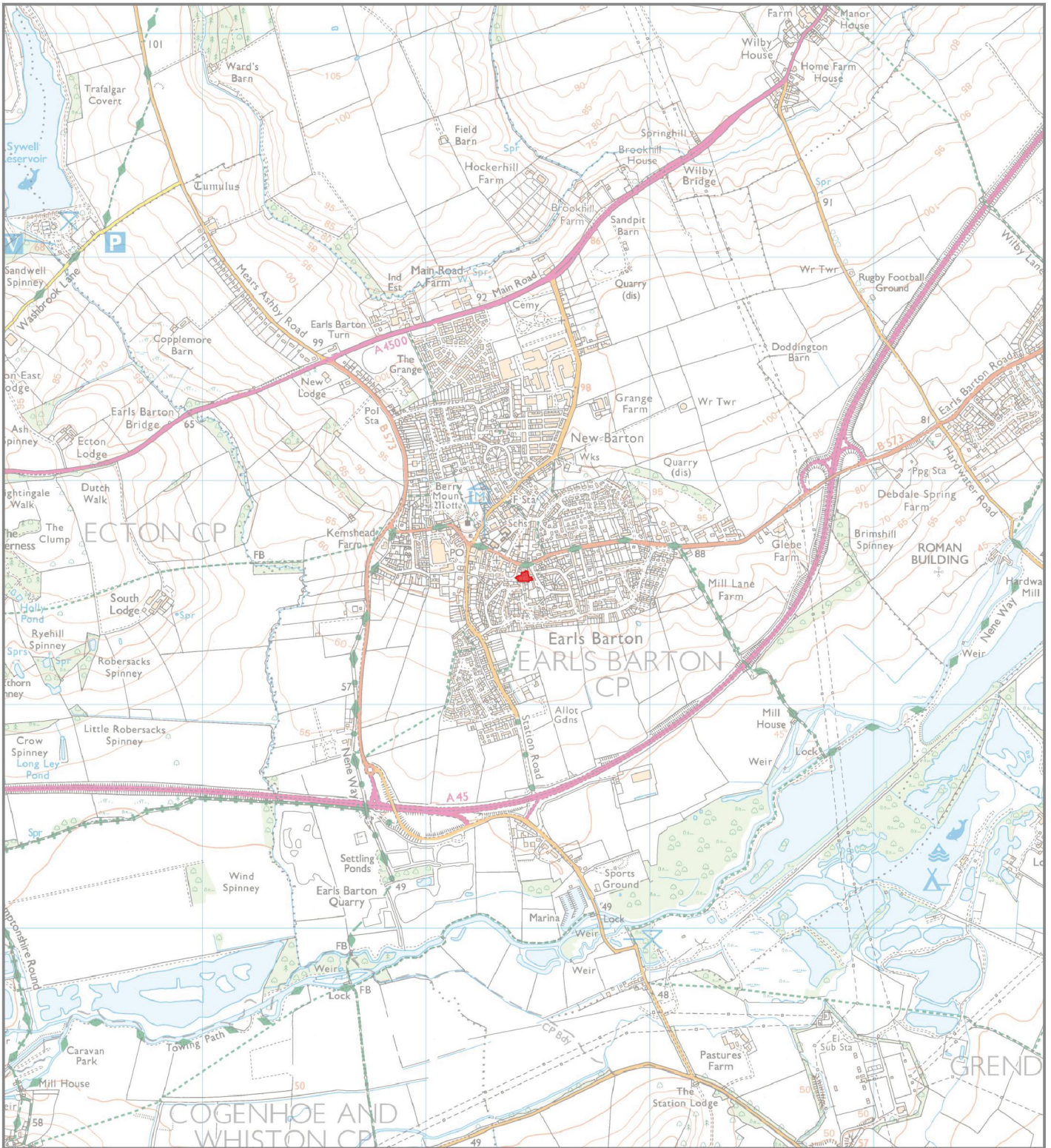
³ Bat Conservation Trust and Institute of Lighting Professionals (2023) 'Guidance Note 08/23: Bats and artificial lighting at night'; Stone, E.L. (2013) 'Bats and lighting: Overview of current evidence and mitigation guidance.'; ILP (2011) 'Guidance notes for the reduction of obtrusive light' Institution of Lighting Professionals, GN01:2011.

5 Conclusions

- 5.1 Aspect Ecology was commissioned by Clock House Land and Homes in February 2024 to undertake a bat survey and assessment in respect of buildings at Manor Farmyard, Blackwell Close, Earls Barton, NN6 0ND.
- 5.2 There are no statutory designations of ecological interest on-site, and no statutory ecological designations in the local area have been designated on the basis of bat interest.
- 5.3 The buildings within the site were subject to an external/ internal inspection survey in March 2024 during which buildings B2 and B4 were assessed to be of moderate suitability, whilst building B1 is assessed as low suitability and B3 as negligible suitability to roosting bats. No evidence to indicate the use of any of the buildings by roosting bats was recorded during the inspection survey. Dusk emergence surveys will be completed in accordance with the latest best practice guidelines, to confirm the presence/likely absence of roosting bats.
- 5.4 A suitable mitigation strategy will need to be implemented during relevant works to ensure roosting bats are fully safeguarded, as detailed within this document.
- 5.5 Subject to the implementation of the recommendations/mitigation set out within this report, the conservation status of local bat populations will be maintained.

Plan 6782/BSR1:

Site Location



Key:

 Site Location

aspect ecology
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Manor Farmyard, Earls Barton

PROJECT

Site Location

TITLE

6782/BSR1

DRAWING NO.

A/BG

REV

March 2024

DATE

DS/BG





QC



Plan 6782/BSR2:

Preliminary Roost Assessment Survey Results



- Key:
-  Site Boundary
 -  Building with Negligible Suitability to roosting bats
 -  Building with Low Suitability to roosting bats
 -  Building with Moderate Suitability to roosting bats



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Manor Farmyard, Earls Barton

Preliminary Roost Assessment Survey Results

6782/BSR2

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