HT ECOLOGY

# Bat Survey and Provisional Mitigation Strategy

## Pockeridge House and Stables, MOD Corsham

Prepared for:
Resolis

Date:
February 2026

Prepared by:
HT Ecology Ltd
Bramblings
Brampford Speke
Exeter, EX5 5DW
Email: hayden@htecology.co.uk

# Contents

1 Introduction, background and methodology ....1

1.1. Introduction .... 1
1.2. Legislation and planning policy .... 1
1.3. Methodology .... 2
2. Ecological baseline ....6

2.1. Designated sites of nature conservation value .... 6
2.2. Habitats within the site .... 7
2.3. Bats....10
2.4. Birds ....17
3. Provisional mitigation and compensation strategy ....18

3.1. General ....18
3.2. Bats....18
3.3. Nesting Birds....19
4. Residual effects and conclusions ....20

4.1. Bats and birds....20
4.2. Conclusions ....20
5. References....21

Figures
Figure 1: Site location plan
Figure 2: Buildings layout
Figure 3: Proposed area of retention for existing bat roosts

Annexe
Annexe 1: Bat survey plan
Annexe 2: Conservation status and legal protection of bats and birds
Annexe 3: Location of site in relation to designated bat sites
Annexe 4: Bat and Bird Boxes
Annexe 5: DNA analysis
Annexe 6: Enhancement of Southern Barns

| Date and version | Written by | Approved by |
|---|---|---|
| 25/04/2024 | T. Davies MSc MCIEEM | H.Torr CEnv MCIEEM |
| 25/10/2024 v1 updated 2024 survey | J. Clay MSc | H.Torr CEnv MCIEEM |
| 30/09/2025 v2 updated 2025 survey | J.Clay MSc | H.Torr CEnv MCIEEM |
| 21/01/2026 v3 updated with hibernation 2025/2026 survey | J. Clay MSc | H. Torr CEnv MCIEEM |
| 11/2/2026 updated to remove stables | H. Torr CEnv MCIEEM | H. Torr CEnv MCIEEM |
| 19/2/2026 Update to remove B4 demo | T. Davies MSc MCIEEM | T. Davies MSc MCIEEM |
| 09/06/2026 updated to include Annexe 6 | T. Davies MSc MCIEEM | H. Torr CEnv MCIEEM |

## Disclaimer

This document has been prepared by HT Ecology Ltd who accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared. The evidence which we have prepared and provided is true and has been prepared and provided in accordance with the guidance of the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. Any recommendation, opinion or finding stated in this report is based on circumstances and facts as they existed at the time that HT Ecology Ltd performed the work. HT Ecology Ltd has exercised due care in preparing this report. It has not, unless specifically stated, independently verified information provided by others. .

# 1 Introduction, background and methodology

## *1.1. Introduction*

1.1.1. HT Ecology was commissioned by Resolis to produce a Bat Survey and Provisional Mitigation Report to inform the proposed demolition of Pockeridge House at MOD Corsham, Wiltshire, SN13 9GB (approximate OS Grid Ref. ST855695); refer to Figure 1 and 2. This client advisory report was produced in accordance with the Bat Surveys Good Practice Guidelines (Collins 2023).

1.1.2. A Preliminary Ecological Appraisal of the site was undertaken by Cotswold Environmental in December 2021. The survey identified the potential for roosting bats within the main house and recorded droppings within the stable buildings to the north. Consequently, the report advised that dusk and /or dawn bat surveys of the house and stables would be required to provide further information on the status of roosting bats within the buildings to inform a bat mitigation strategy. This Bat Survey Report and Provisional Mitigation Strategy was therefore produced in accordance with these recommendations and includes the following sections:

- Results of the desk study and bat surveys (nesting birds were also surveyed);
- A Provisional Bat Mitigation Strategy; and
- Residual Impacts and conclusions

Figure 1. Site location plan (Google Earth V6.2.2.6613. August, 2023. Accessed: 17.04.2024)

## *1.2. Legislation*

1.2.1. Bats and their roosts are fully protected by UK legislation, as are all birds, and their nests, eggs and young. Several bat and bird species are also Species of Principal Importance for Conservation of Biodiversity in England (Priority Species); refer to Annexe 2 for further information.

1.2.2. It is understood that the demolition is Permitted Development and planning consent is not required. Therefore, planning policy does not apply to the proposals.

## *1.3. Methodology*

*Desk study*

1.3.1. Information on local bat records within 2km of the site was received from the Wiltshire and Swindon Biological Records Centre (WSBRC) in August 2023.

1.3.2. Information on statutory designated sites of nature conservation value within 2km of the site was obtained by searching the following websites:

- MAGIC website (www.magic.go.uk); and
- NBN Atlas (www.nbnatlas.org).

*Bats*

*Building inspection*

1.3.3. The following building inspection surveys were undertaken:

- Pockeridge House: all accessible parts on 9 April 2024, with inspection of the basement beneath the house on 9 April, 1 and 25 July 2024, 22 July, 9 December 2025 and 13 January 2026.
- Stable buildings (accessible parts only): 19 June, 11 July and 14 August 2023, 1 July 2024 and 1 July 2025.

1.3.4. This involved a search of the interior and exterior of the buildings for evidence of bats (e.g. bats, droppings, feeding remains, staining) in accordance with the Bat Survey Guidelines (Collins, 2023). Ladders, thermal imaging camera (Flir E96) and a high-powered torch were used as necessary, and the survey was carried out under Natural England bat survey licences (T Davies 2015-11992-CLS-CLS Level 2 and H Torr 2015-13165-CLS-CLS Level 2).

*Dusk emergence and dawn re-entry surveys*

1.3.5. The following dusk and/or dawn bat surveys were undertaken:

- Pockeridge House: 19 June (dusk), 12 July (dusk) and 15 August 2023 (dawn), 1 and 25 July (dusk) 2024 and 1 and 22 July (dusk) 2025;
- Stable Buildings B2 and B4 (refer to Figure 2): 20 June (dawn), 11 July (dusk) and 14 August (dusk) 2023 with additional surveys of B4 undertaken on 1 July 2024 (dusk) and 25 July 2025 (dusk).

The survey methodology followed the Bat Survey Guidelines (Collins, 2023). The dusk surveys started 15 minutes before sunset and continued for at least 1.75 hours, whereas the dawn surveys commenced 1.5-2 hours before sunrise and finished 15 minutes after sunrise. All surveys were undertaken during suitable weather conditions; refer to Table 1.1. Five survey points were strategically positioned to adequately cover Pockeridge House on each survey. A further five survey points were used to cover the Stable Buildings, with the exception of the dusk survey on 14 August 2023 when four survey points were used, and the dusk surveys of B4 on 1 and 25 July 2024, and 1 and 22 July 2025 when a single surveyor was used (refer to Annexe 1 for surveyor location).

1.3.6. The surveys were undertaken by three experienced bat ecologists with two high-resolution thermal imaging cameras (G60 Hikmicro[1] and FLIR E96[2]) covering the other two survey points. Each surveyor was equipped with an electronic bat detector (Wildlife Acoustics EchoMeter Touch Pro) in order to record echolocation calls for subsequent analysis. Additionally, each thermal imaging camera was paired with a bat detector. The camera footage was downloaded on to a computer and subsequently reviewed in real time using VLC Player, focussing on detecting emerging/re-entering bats. Each surveyor was also equipped with Nightfox Whisper infrared cameras during the 2024 and 2025 surveys as a visual aid to assist with the bat detection in low light levels.

1.3.7. All recorded bat passes were downloaded to a computer and analysed using 'Kaleidoscope V5.4.2' and/or 'Analook Insight'. The identification of recorded bat calls was carried out using data from known bat roosts, as well as stock recordings from other bat workers, and relevant literature (Russ, 2012 and 2021).

Table 1.1: Weather conditions

| Date | Sunset/Sunrise time | Cloud (Oktas) | Wind speed (Beaufort) | Temperature (Deg C) | Precipitation |
|---|---|---|---|---|---|
| 19/06/2023 Dusk survey of Pockeridge House | 21.29 | 6/8 | 1-2 | Start: 18 Finish: 16 | None |
| 20/06/2023 Dawn survey of stable buildings | 4.51 | 0/8 | 0 | Start: 12 Finish: 11 | None |
| 11/07/2023 Dusk survey of Stable buildings | 21:22 | 1/8 | 1-2 | Start: 16 Finish: 16 | None |
| 12/07/2023 Dawn survey of Pockeridge House | 5:05 | 1/8 | 0 | Start: 13 Finish: 12 | None |
| 14/08/2023 Dusk survey of Stable buildings | 20.33 | 1/8 | 1 | Start: 16 Finish: 15 | None |
| 15/08/2023 Dawn survey of Pockeridge House | 5.53 | 0/8 | 1 | Start: 12 Finish: 11 | None |
| 01/07/2024 Dusk survey of Pockeridge House and B1 | 21:28 | 4/8 | 1 | Start: 17 Finish: 15 | None |
| 25/07/2024 Dusk survey of Pockeridge House and B1 | 21:06 | 1/8 | 1 | Start: 16 Finish: 15 | None |
| 01/07/2025 | 21:29 | 4/8 | 1 | Start: 17 Finish: 15 | None |

[1] The G60 has a 640 x 512 thermal resolution and 25-degree field of view which is in accordance with the recommended specification for unmanned camera detailed in the Thermal Imaging: Bat Survey Guidelines (Fawcett Williams, 2021). The camera was deployed by an operator who had completed a training course in appropriate use of thermal imaging (Wildlifetek, 2022).

[2] The E96 has a 640 x 480 thermal resolution and 42-degree field of view which is also in accordance with the recommended specification for unmanned cameras.

| | | | | | |
|---|---|---|---|---|---|
| Dusk survey of Pockeridge House | | | | | |
| 22/07/2025 Dusk survey of Pockeridge House and B4 | 21:11 | 7/8 | 1 | Start: 17 Finish: 17 | None |

*Static detector survey of Pockeridge House Basement*

1.3.8. An Anabat Express (Titley Electronics Ltd) was positioned in the basement on 1 July 2024 and 9 December 2025 continuously recorded bat activity within the buildings for 20 nights and 35 nights respectively. The calls were analysed using the same methodology as detailed in the dusk survey section above.

*Birds*

1.3.9. A search for evidence of nesting birds (i.e., active or disused nests) was undertaken during the building inspections in June 2023 and April 2024.

*Survey limitations*

1.3.10. Due to potential safety concerns, a building inspection of Pockeridge house was initially limited to external inspections. A structural surveyor and asbestos specialist both inspected part of the interior of Pockeridge House in March 2024, following which an internal survey was undertaken by a Natural England Licensed Bat Ecologist in April 2024. This internal inspection was again limited in scope as several ceilings had collapsed. Approximately 60% of the building was accessible, including both basements and the loft spaces in the southern half of the building. The internal inspection combined with extensive dusk/dawn surveys of this building were considered to provide sufficient information to determine the species and roost status of the building over the summer.

1.3.11. The majority of the Stable Buildings were accessible during the building inspections; however, the door of a lean-to in the southern half of the complex was locked, and the key was not available. This was not considered a significant limitation as it was possible to survey the majority of the interior through a partly open window on the eastern elevation with a thermal imaging camera. Also, this building is no longer planned for demolition.

1.3.12. The ground floor of B4 was inaccessible; however, limited suitable bat access points were noted in this part of the building and, therefore, this is not considered to be a significant limitation to the survey results. Also, it was possible to access the roof void of this building via a small hay loft door on the northern elevation.

*Surveyor and Author experience and Quality assurance*

1.3.13. CIEEM's Code of Conduct was followed throughout the project. The surveys and reporting were undertaken by the following ecologists:

- T. Davies – 14 years' experience working in the ecological sector and is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). He holds a Class 2 Natural England (NE) bat survey licence. Tom undertook the bat surveys and authored this report.
- J. Clay – Is a qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM). He holds a Class 1 NE bat licence and has extensive experience of protected species surveys over the last 5 years and assisted with the dusk/dawn bat surveys.
- H. Torr – Director at HT Ecology with 25 years' experience working in the ecological sector and is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and a Chartered Environmentalist. He holds a Class 2 Natural

England (NE) bat survey licence and is a Registered Consultant on NE's Bat Mitigation Class Licence for bats and Level 2 (including horseshoe bats) of the Earned Recognition Bat Licence. Hayden undertook the bat surveys and quality assured the report.

# 2. Ecological baseline

## *2.1. Designated sites of nature conservation value*

2.1.1. There are no statutory sites of nature conservation value within or immediately adjacent the site. Corsham Railway Cutting Site of Special Scientific Interest (SSSI) is located approximately 235m to the southwest of the site. This SSSI is designated for its geological features and unlikely to be affected by the works carried out.

2.1.2. Bath and Bradford-on-Avon Bats SAC occurs approximately 1.1km to the west of the site (refer to Annexe 3) and is designated for supporting important populations of hibernating greater horseshoe bat, Bechstein's bat and lesser horseshoe bat. The site comprises a network of underground sites covering four SSSIs, including Box Mine, Combe Down and Bathampton Down Mines, Winsley Mines and Brown's Folly. These component sites comprise extensive networks of caves, mines and man-made tunnels which are used by bats for hibernation, breeding, mating and as a staging post prior to dispersal. The grassland, watercourses, scrub and woodland surrounding them are used by bats for feeding and commuting. Although these habitats are not included in the SAC designation, they are vital to support the bats which are features of the SAC (Wiltshire Council, 2015). Box Mine SSSI is the closest SSSI which occurs 1.1km to the west and is designated for the same hibernating bat species, as well as supporting roosts for whiskered, Brandt's, Natterer's and Daubenton's. Only the subterranean habitat is designated by the SAC/SSSI and not the land at ground level.

*Bats*

2.1.3. The following bats have been recorded within the desk study area: Bechstein's, Brandt's, brown long-eared, common pipistrelle, Daubenton's, Leisler's, Nathusius' pipistrelle, Natterer's, noctule, serotine, soprano pipistrelle, western barbastelle and whiskered bat.

2.1.4. The desk study identified several significant bat roosts within 2km of the site. Due to sensitivities associated with this data, only a 4-figure grid reference was provided by WSBRC (1km square). The following roosts appeared to be particularly significant and are likely to be associated with the Bath and Bradford SAC:

- A greater horseshoe bat hibernaculum roost with a maximum count of 281 individuals (recorded in 2007), approximately 1.15km west of Pockeridge House at the closest point of the kilometre square;
- A greater horseshoe bat maternity roost with a maximum count of 186 individuals (2008) and a lesser horseshoe hibernaculum with a maximum count of 333 individuals (2006), approximately 2.1km to the west of Pockeridge House at the closest part of the kilometre square;
- A lesser horseshoe maternity roost of 77 individuals (2017), approximately 1.15km to the west of Pockeridge House at the nearest grid reference location.
- A Natterer's bat roost (unknown roost status) with 167 females and 323 males (recorded in September 2014), located approximately 2.5km from Pockeridge house to nearest grid reference location.

2.1.5. The Corsham Batscape Strategy (Johns, 2019) also contains the location of several horseshoe roosts within the Corsham area (refer to Annexe 3). Of particular note is the record of a maternity colony for lesser horseshoe bats approximately 225m to the west of Pockeridge House.

## 2.2. *Habitats within the site*

### *Pockeridge House*

2.2.1 The building (B1; refer to Figure 2) comprises an 18th century dwelling previously used as an officer's mess but has remained disused for several years. The building is constructed with limestone and comprises a three-storey wing adjoining a two-storey wing. The roof is covered in slate tiles with pitched, hipped and conical roofs with associated valleys and parapet gable end walls. Metal guttering and downpipes occurred beneath the eaves throughout the building's exterior. Several loft spaces were recorded, though not all were accessible for safety reasons. Those which were surveyed comprised king-post timber structures lined with bitumen underfelt with fibreglass insulation on the loft floor. Several areas contained vaulted ceilings with limited loft space. The building also contained two basements, both of which were surveyed. The front door on the western elevation was screwed shut, however a large gap in the top left-hand corner of the door was recorded. Two broken windows were identified on the eastern elevation.

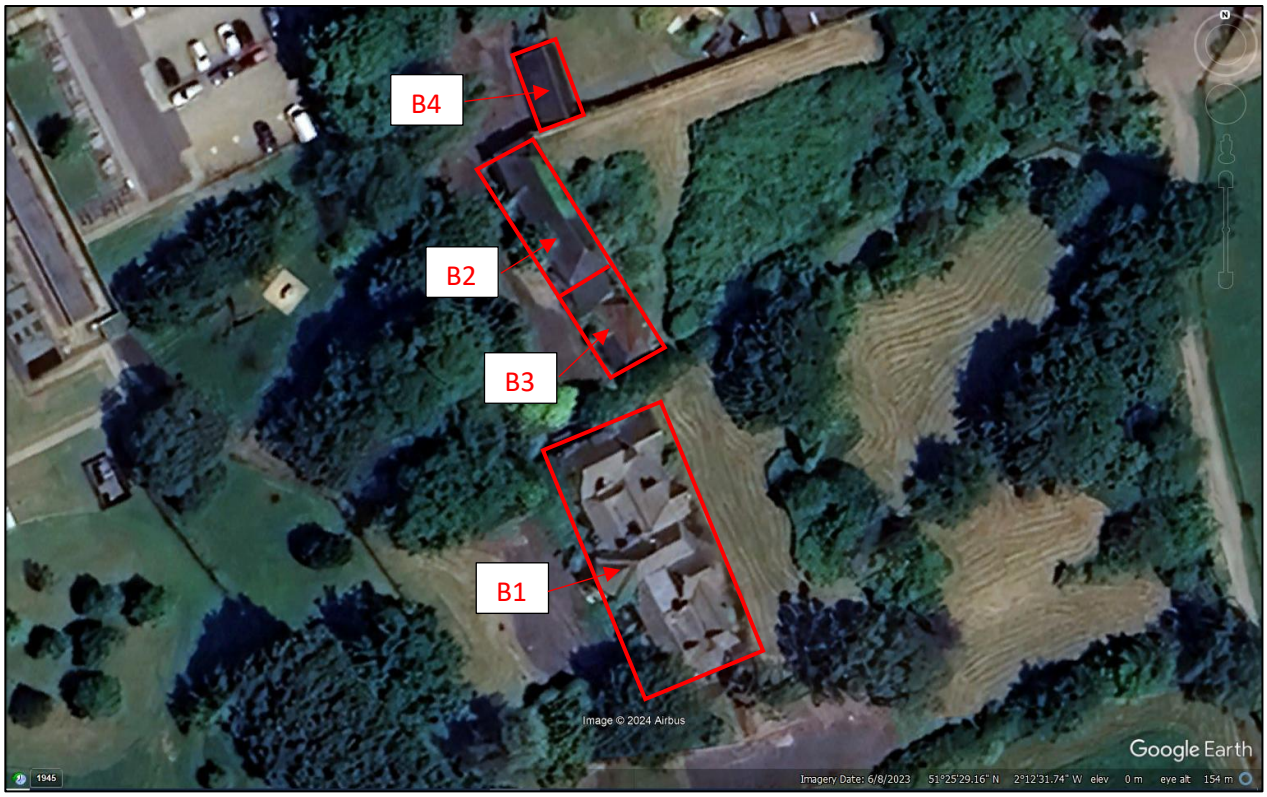



Figure 2: Buildings layout

Photograph 1: Western elevation of Building 1 (Pockeridge House)

*Stable Buildings*

2.2.2 These comprised a complex of disused buildings arranged in a linear fashion to the north of Pockeridge House. Building 2 (B2) comprised a two-storey building with a hipped cement tile and slate roof. The ground floor comprised empty, open spaces with flagstone floors and the first floor was open to the rafters with no lining beneath the roof slates/tiles. Access to these buildings was via large wooden doors on the western elevation. Several broken windows were identified on the eastern elevation. A large area of dense bramble scrub was found adjacent the east elevation with buddleia scrub adjacent the western elevation of B2.

Photograph 2: North and western elevations of Building 2

2.2.3 Building 3 (B3) included an inaccessible lean-to section adjoined to B2's southern extremity which had a partially open window on the eastern elevation. A small room internally clad with wooden panelling was found at the southern end of the complex. A large amount of dense bramble scrub was recorded on both the east and west elevations of B3.

Photograph 3: Western elevations of Building 3

2.2.4 B4 comprised a detached, single-storey, stone-built structure with a pitched roof clad in slate tiles adjoined to a large stone wall. Only the loft space was accessible (via a small hay loft door on the northern elevation) which was lined with bitumen underfelt and fibreglass insulation on the floor. It was determined by looking through the windows that B4 was a former office which was divided internally into three rooms.

Photograph 4: Loft space above Building 4

*Surrounding habitats*

2.2.5 The site was surrounded by an associated curtilage and gardens comprising extensive lawned areas, areas of dense bramble scrub and mature native scattered trees. In the wider context, the site is located in the northeast corner of MOD Corsham grounds which include further extensive grassland and pockets of broadleaved woodland.

## 2.3. *Bats*

*Building inspection*

2.3.1 Potential bat access points were identified throughout the site. These comprised:

- Gap in the corner of the front door of Building 1;
- Broken windows on the eastern elevation of Building 1;
- Missing/slipped/broken tiles on several elevations of Building 1;
- Broken windows on the eastern elevation of Buildings 2 and 3;
- Open doors on the western elevations of Buildings 2 and 3; and
- Open hay loft door on northern elevation of B4.

Photograph 5: Gap adjacent Front door of Building 1

Photograph 6: Gaps under tiles of Building 1

Photograph 7: Broken window on western elevation of Building 3

Photograph 8: Open hay loft door on northern elevation of Building 4

2.3.2 An inspection of Pockeridge House (B1) on 9 April 2024 found approximately 100 fresh droppings indicative of greater horseshoe bats aggregated in the basement at the southern end of the building, along with 50 scattered fresh droppings indicative of lesser horseshoe bats (refer to Annexe 1). The basement could only have been accessed by bats via a doorway at the bottom of a set of stairs which appeared to have recently become loose. The droppings appeared to be fresh and indicate that the basement may have only recently been used by roosting bats (i.e. within the last 12 months). No evidence of bats was found in the building's other basement. A follow up survey on 9 December 2025 and 13 January 2026 found a similar number of droppings as the April 2024 survey. No bats were recorded in December 2025 or January 2026 (refer to Paragraph 2.3.10 for further details). Due to the absence of recent evidence, it is assumed that this roost is currently used sporadically.

2.3.3 Approximately 300 lesser horseshoe bat droppings were identified aggregated on the first floor of Pockeridge House; 100 of which were found in a small cupboard. Horseshoe bats roost out in the open and therefore the number of droppings indicate a probable day or night roost for this species.

2.3.4 Approximately 300 small, mixed age bat droppings (indicative of lesser horseshoe and pipistrelle species) were identified in a loft space in the eastern half of Pockeridge House, 200 of which were aggregated; DNA analysis of a sample of these droppings confirmed they belonged to lesser horseshoe bats (Annexe 5a). This indicates a probable day roost for pipistrelle and lesser horseshoe bats.

2.3.5 Inspections of the small room in Building 3 found four lesser horseshoe bats roosting on 20 June with a further individual found on 14 August. Approximately 100 lesser horseshoe bat droppings were also found scattered on the floor (refer to Photo 9 and Annexe 1).

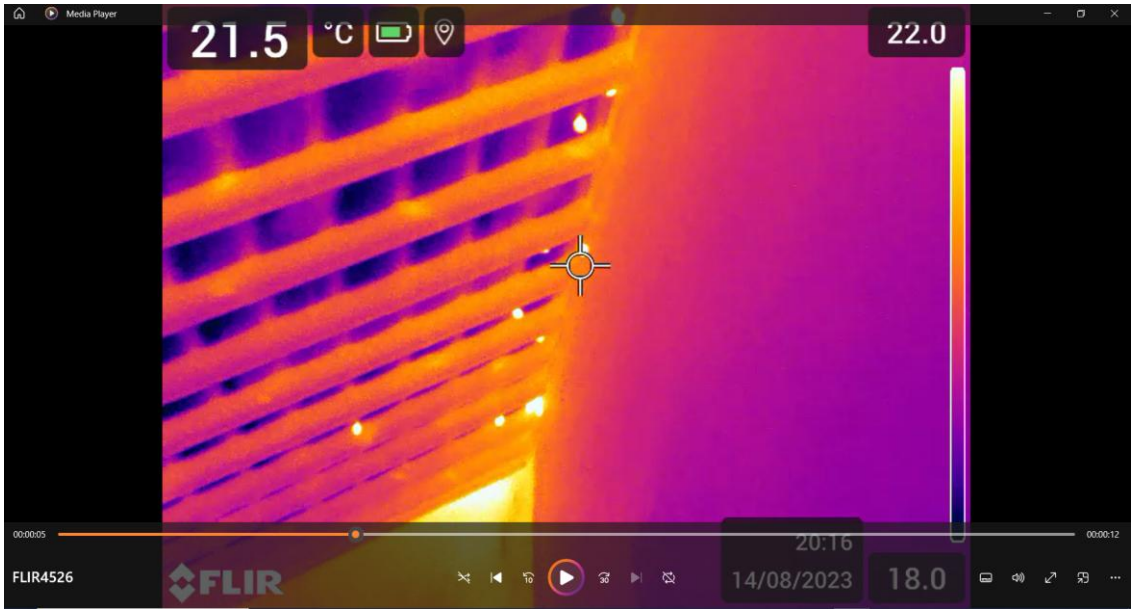
Photograph 9: Lesser horseshoe bat roosting in B3

2.3.6 Approximately 150 lesser horseshoe bat droppings (confirmed by DNA analysis; refer to Annexe 5) were scattered within the loft space of B4 on 11 July 2023 and 1July 2024.

Photograph 10: Lesser horseshoe bat droppings found in loft space of B4

2.3.7 At least 14 lesser horseshoe bats were recorded roosting in the lean-to section of Building 3 through a broken window on the eastern elevation on 14 August 2023, 13 lesser horseshoe bats recorded on 1 July 2024 and at least 14 lesser horseshoe bats on 1 July 2025. It was not possible to determine the exact number due to a cluster of individuals furthest away from the open window on each occasion (refer to Photo 11 and 12, and Annexe 1).

Photograph 11: Lean-to on Building 3 containing lesser horseshoe satellite roost




Photograph 12: Screenshot of thermal imaging camera showing lesser horseshoe bats day roosting in Building 3 (1/7/24)

*Dusk emergence/dawn re-entry surveys*

2.3.8 The results of the nocturnal surveys for Pockeridge House (B1) are summarised in Table 2.2 below and the results of the nocturnal surveys for the Stable Buildings (B2, B3 and B4) are summarised in Table 2.3 and 2.4 below. Refer also to Annexe 1 (Bat Survey Plan).

Table 2.2: Pockeridge House (B1) – Emergence/Re-entry survey results

| Date | Time | Point No. (refer to Annexe 1) | Survey results |
|---|---|---|---|
| 19/06/2023 | 21.34 | 1 - Emerging from the ridgeline of the building towards the east | 1 x Common pipistrelle emerged |
| | 22.02 | 1 - Emerging from the ridgeline of the building towards the east | 1 x Common pipistrelle emerged |
| | 22.03 | 2 - Emerge from gap in the roof where drainage gully exits | 1 x Brown long-eared bat emerged |
| 12/07/2023 | No bat emergence recorded during this survey, overall low activity | | |
| 15/08/2023 | 5.23 | 3 - Flying towards and over the ridgeline where bats have previously been seen emerging from | No echolocation recorded; possible long-eared bat or bird |
| 01/07/2024 | 21:53 | 10 – Bat entered the porch area and emerged again | No echolocation recorded possible long-eared bat |
| 25/07/2024 | No bat emergence recorded during this survey, overall low activity | | |
| 01/07/2025 | No bat emergence recorded during this survey, overall low activity | | |
| 22/07/2025 | 21:54 | 10 – Bat entered the porch and into building | 1 x Common pipistrelle |

Table 2.3: Stable Buildings - Emergence/Re-entry survey results

| | Time | Point No. (refer to Annexe 1) | Survey results |
|---|---|---|---|
| 20/06/2023 | 4.10 | 4 - Entering the loft space through a broken window on the second-floor eastern side of building | 2 x Lesser horseshoe bats enter building loft space |
| | 4.40 | 5 - Open door into a small room at the southern end of the stable buildings | 4 x Lesser horseshoe bats recorded roosting in building |
| 11/07/2023 | 21.36 | 6 - Through vegetation that is covering entrance to a small, covered area | 2 x Lesser horseshoe bats emerged |
| | 21.42 – 22.15 | 6 - Through vegetation that is covering entrance to a small, covered area | 12 x Lesser horseshoe bats emerged during time period |
| | 21.54 | 7 - Small letterbox sized gap in the barn loft doorway | 1 x Common pipistrelle bat emerged |
| | 22.03 | 7 - Small letterbox sized gap in the barn loft doorway | 1 x Common pipistrelle bat emerged from letterbox on loft door |
| | 22.06 | 7 - Small letterbox sized gap in the barn loft doorway | 1 x Common pipistrelle bat emerged from letterbox on loft door |
| | 22.23 | 8 - Ground level open doorway into the barn | 1 x Common pipistrelle bat emerged from doorway |
| 14/08/2023 | 20.45 – 21.00 | 6 - Through vegetation that is covering entrance to a small, covered area | 19 x Lesser horseshoe bats emerged during time period |
| | 21.01 | 9 - Small gap near guttering in the southwest corner of the barn roof | 1 x Serotine emerged |
| | 21.07 | 6 - Through vegetation that is covering entrance to a small, covered area | 2 x Lesser horseshoe bats emerged |
| | 20.55 | 8 - Ground level open doorway into the barn | 1 x Common pipistrelle emerged |
| | 20.59 | 8 - Ground level open doorway into the barn | 1 x Common pipistrelle emerged |

Table 2.4: Stable Building B4 – Emergence/Re-entry survey results

| | Time | Point No. (refer to Annexe 1) | Survey results |
|---|---|---|---|
| 20/06/2023 Dawn | No bats recorded entering this building. | | |
| 11/07/2023 Dusk | No bats recorded emerging from this building. | | |
| 14/08/2023 Dawn | No bats recorded entering this building. | | |
| 01/07/2024 Dusk | 21:58 | 11 – Open loft window | 1x lesser horseshoe bat enter the loft window |
| | 22:00 | 11 – Open loft window | 1x lesser horseshoe bat exit the loft window |
| | 22:23 | 11 – Open loft window | 1x lesser horseshoe bat enter loft window |
| | 22:25 | 11 – Open loft window | 1x lesser horseshoe bat exit loft window |
| | 22:38 | 11 – Open loft window | 1x lesser horseshoe bat enter loft window |
| | 22:42 | 11 – Open loft window | 1x lesser horseshoe bat enter loft window |
| 25/07/2025 Dusk | 22:25 | 11 – Open loft window | 1x lesser horseshoe bat enter loft window |

Photograph 13: Emergence point for serotine from Building 3 in August 2023

*Static detector results*

2.3.9. No bat calls were recorded on the static detector positioned in the southern basement on either July 2024 or December 2025. The detector was located adjacent the doorway and any bats flying within the basement are likely to have been recorded; therefore, this indicates that bats were absent during this period.

*Assessment of roost importance*

*Pockeridge House*

2.3.10 A maximum count of two common pipistrelle bats was recorded on any one night emerging from the roof of Pockeridge House during the surveys. This is considered to be a '**day roost'** and of Parish level value when assessed in accordance with the CIEEM Guidelines (CIEEM, 2018).

2.3.11 A maximum number of one long-eared bat was recorded emerging from Pockeridge House during the surveys. It was not possible to locate any long-eared bat droppings for DNA analysis but it is likely to be a brown long-eared bat as grey long-eared bats are rare in Wiltshire. This is considered to be a '**day roost'** and of Parish value.

2.3.12 Lesser horseshoe bat droppings were recorded on the first floor and roof void of Pockeridge House. It is likely that a '**day/night roost'** for this species occurs within this part of Pockeridge House, which is of Parish value.

2.3.13 Lesser horseshoe and greater horseshoe bats roost in the southern basement of Pockeridge house. This basement appears to have become available to bats within the last 3 years, as the door was likely to have been shut prior to this point. The absence of hibernating and day roosting bats during checks in July 2024, December 2025 and January 2026, together with lack of fresh bat droppings and absence of recordings on the static bat detector, indicates that this is not an established roost but is used sporadically by bats, potentially as a 'night roost'.

*Stable Buildings*

2.3.14 A maximum number of four common pipistrelle and a single serotine bat were recorded emerging from the Stable Buildings in a single night. These roosts are considered to be '**day roosts'** and of Parish value.

2.3.15 A maximum number of 21 lesser horseshoe bats were recorded emerging from the Stable Buildings in August 2023 and 14 in July 2023. The 21 bats recorded in August are likely to be a combination of adults and juveniles. Sites with <20 adult lesser horseshoe bats are classed as '**satellite roost**[3]' (Schofield, 2008). This satellite roost is considered to be of 'Regional' value as a result of the site's close proximity to and likely association with the population of bats for which the Bath and Bradford-on-Avon Bats SAC is designated (refer to Annexe 3).

2.3.16 The lesser horseshoe droppings recorded in the loft space of B4 indicate a **day/night** roost which is of Parish value.

*Bath and Bradford-on-Avon Bats Special Area of Conservation (SAC)*

2.3.17 It is considered likely that the satellite lesser horseshoe bat (LHS) roost identified in the stables are linked to the maternity colony which has been recorded 225m to the west (refer to Annexe 3b). The bats within the maternity roost are likely to be associated with the population within the Bath and Bradford-on-Avon Bats SAC which occurs approximately 1.1km west of the stables (refer to Annexe 3a). The stables are also directly to the north of a strategic bat flyway (refer to Annexe 3e). The habitat mosaic found within and around the MOD Corsham wider site comprising woodland, parkland and grazed pasture, offers optimal foraging and commuting habitat for LHS (refer to Annexe 3b; cluttered woodland environments are favoured by lesser horseshoe bats for foraging due to the bats high manoeuvrability). Radio tracking

[3] A Satellite roost is defined as an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

studies show that LHS fly an average of 2km from their roost sites each night, indicating that it's likely that individuals recorded roosting within the stables move between roosts in the wider site and also within the SAC.

## *2.4. Birds*

2.4.1 An old bird nest (indicative of a barn swallow) was identified in the end room of Building 3 and a further old bird nest (likely to be a jackdaw) was identified during the inspection of the loft space of Pockeridge House.

# 3. Provisional mitigation and compensation strategy

## *3.1. General*

*The proposed works*

3.1.1 The proposed works comprise the demolition of Pockeridge House. Demolition is currently planned for 2026. No trees, hedgerows or vegetation are likely to be removed as a result of the proposed works and no increase in lighting is predicted. Therefore, no effects on the commuting or foraging habitat of the Bradford-on-Avon Bats SAC is predicted.

3.1.2 The following section details the recommended mitigation strategy for protected species impacted by the proposed building demolition. Full details would be included in the Natural England Bat Licence Application.

## *3.2. Bats*

*Retention of the significant roosts*

3.2.1 The lesser horseshoe bat satellite roost within Buildings 2 and 3 is likely to be linked to the Bradford-on-Avon Bats SAC. Due to the significant value of this roost, it is recommended that Building 3 and part of Building 2 is retained. These buildings could be enhanced for roosting bats to mitigate for the loss of the bat roosts within Pockeridge House.

*Licence application and ecological watching brief*

3.2.2 Bat roosts have been recorded within Pockeridge House; therefore, a NE Mitigation Licence is required to ensure the proposed demolition works are legally compliant.

3.2.3 NE require bat survey data from the most recent bat survey season in order to licence the proposed demolition work. Update surveys have therefore been undertaken in summer and winter 2025 focussed on Pockeridge House. A licence would be required prior to demolition which would take approximately 7 to 8 weeks to obtain. Works to the roofs (i.e. tile removal/soft demolition) should commence either in early March, immediately prior to the bird nesting period, or October. This would avoid the bat breeding period (May to September) when bats may have dependent young and also the bat hibernation period (late November to February) when bats are sensitive to disturbance.

3.2.4 Prior to the start of the proposed works, five woodcrete bat boxes (refer to Annexe 4) should be installed on the mature trees around the site; full details of box locations should be provided in the Natural England Bat Mitigation Licence Application.

3.2.5 A 'Toolbox Talk' should be given by a bat ecologist to all personnel involved prior to stripping the roof to ensure site personnel are aware of what to do in the event that bats were discovered during the works. A pre-works survey should be undertaken by a licensed bat ecologist to remove any roosting bats from the building by hand and release them into a bat box on the tree or the enhanced roost (refer to Paragraph 3.2.6 below). The licensed ecologist should also oversee stripping of all roofing on each of the buildings; any bats found would be transferred in the same way.

*Enhancement of Building 3*

3.2.6 It is recommended that Building 3 be enhanced to mitigate for the loss of the roosts within Pockeridge House. This work should be completed prior to the proposed demolition work to provide suitable roosting conditions for bats (refer to Figure 3 below). Full details of the proposed enhancements to Building 3 are provided in Annexe 6 and include the following:

- Windows blocked up to prevent light ingress;

- Thermalite 'cool tower' constructed;
- Hotbox to be installed;
- Gaps to be filled in around tiles and wooden triangular baffles installed to reduce airflow;
- Wooden battens to be screwed into ceiling to enable bats to hang within;
- Enhancement of the existing bat entrance and filling in gaps not used by bats to reduce air flow within the building;
- Insert additional alcoves to create new horseshoe bat roosting opportunities;
- Sealing shut of existing doors with lesser horseshoe entrance enhanced;
- Bat slates installed in the roof and bat boxes on the walls to provide habitat for crevice roosting bats; and
- Additional small crevices to be installed as appropriate.

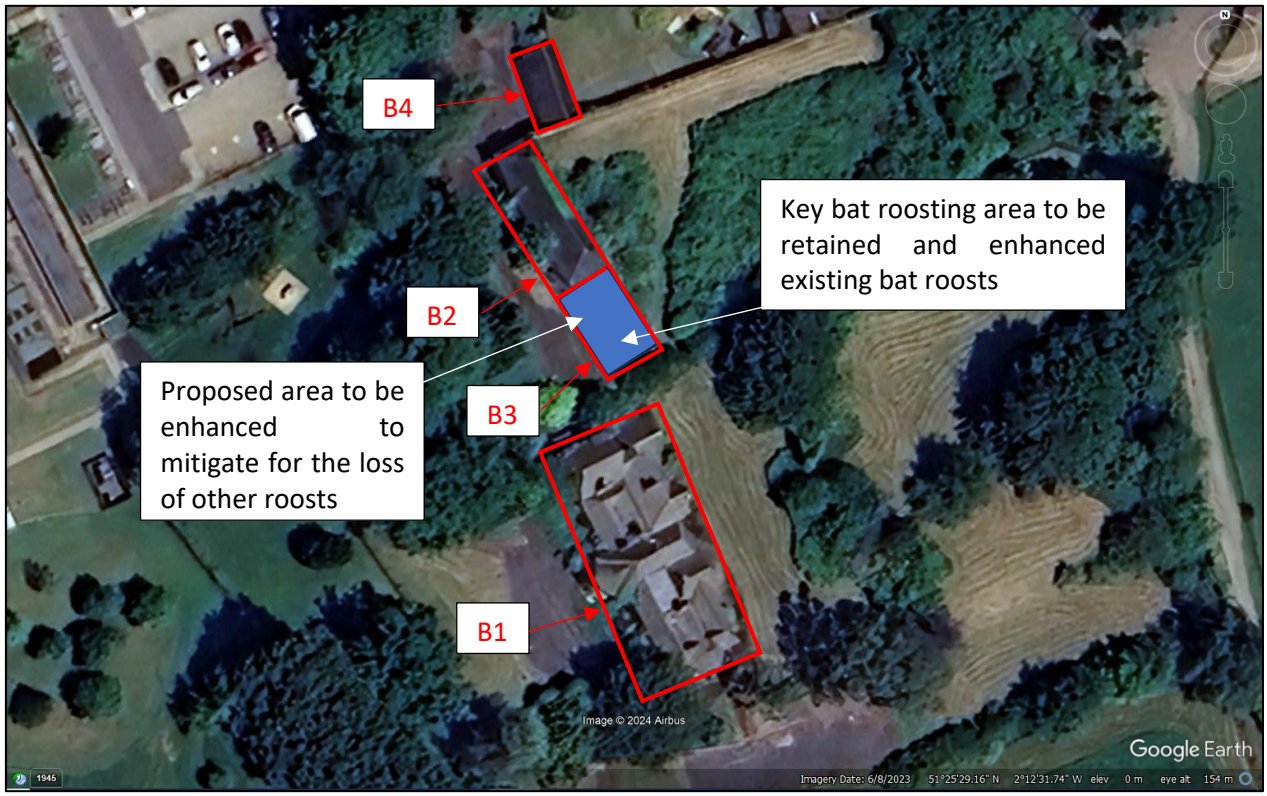



Figure 3: Proposed area of retention for existing bat roosts

## *3.3. Nesting Birds*

3.3.1 The bird nesting season typically runs from March through to the end of September. If any demolition work is undertaken during this period, then a pre-works check should be undertaken by an ecologist. If nesting birds were found, work in that area would need to be delayed until all chicks had fledged.

3.3.2 Although not a legal requirement, two bird boxes (refer to Annexe 4) should be installed on the trees within the site grounds to provide alternative nesting habitat for birds.

# 4. Residual effects and conclusions

## *4.1. Bats and birds*

4.1.1 The survey work identified the following bat roosts within the site:

*Pockeridge House (Building 1)*

- Day roost of common pipistrelle bats within the roof space;
- Day roost of long-eared bat within the roof space;
- Day/Night roost of lesser horseshoe bats on the first floor/roof void; and
- Likely Night roosts of both greater horseshoe and lesser horseshoe bats within the southern basement of the building.

*Stable buildings (Buildings 2, 3 and 4)*

- Day roost of common pipistrelle in the loft space of Building 2;
- Day roost of serotine bats between the tiles in Building 3;
- Satellite roost of lesser horseshoe bats used for breeding in the lean-to section of Building 3; and
- Day/night roost of lesser horseshoe bats in loft space of B4.

4.1.2 Adverse effects on bats could occur through loss of roosts and disturbance to bats during the proposed works; however, potential effects of killing and injury would be avoided through ecological supervision. In order to ensure legal compliance during construction, all demolition work should be carried out under a Natural England Bat Mitigation Licence. Ecological supervision should be undertaken by the Licensed bat ecologist during demolition.

4.1.3 Bat boxes should be installed on trees prior to works commencing, and the enhancements to the bat roosts within Buildings 3 should be completed before demolition begins. This would ensure that the ecological functionality of the site was maintained for roosting bats and that the population of bats would, therefore, be maintained at a 'Favourable Conservation Status' in the locality.

4.1.4 No effects on nesting birds or other species are anticipated during construction.

## *4.2. Conclusions*

4.2.1 A provisional mitigation strategy outlined in Section 3 is designed to maintain the 'Favourable Conservation Status' of the bats in the locality. It prioritises retention and enhancement of Buildings 2 and 3 (including improved lesser horseshoe roosting opportunities), installation of bat boxes on mature trees prior to works, and ecological supervision of all soft-strip and demolition activities under a Natural England Bat Mitigation Licence. Subject to implementing these measures and adhering to seasonal working constraints, the ecological functionality of the site for roosting bats will be maintained and residual effects are not anticipated to be significant.

# 5. References


Chartered Institute of Ecology and Environmental Management (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland – Terrestrial, Freshwater and Coastal. CIEEM, Winchester.

Collins, J. (Ed) 2023. Bat surveys good practice guidelines – 4th edition. BCT, London.

Cotswold Environmental (2021). Pockeridge House, Protected Species Report for Bats and Nesting Birds

Fawcett Williams (2021) Thermal Imaging: Bat Survey Guidelines.

Johns Associates with Corsham Town Council (2019) Corsham Bat Strategy

Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1. Chartered Institute of Ecology and Environmental Management, Ampfield.

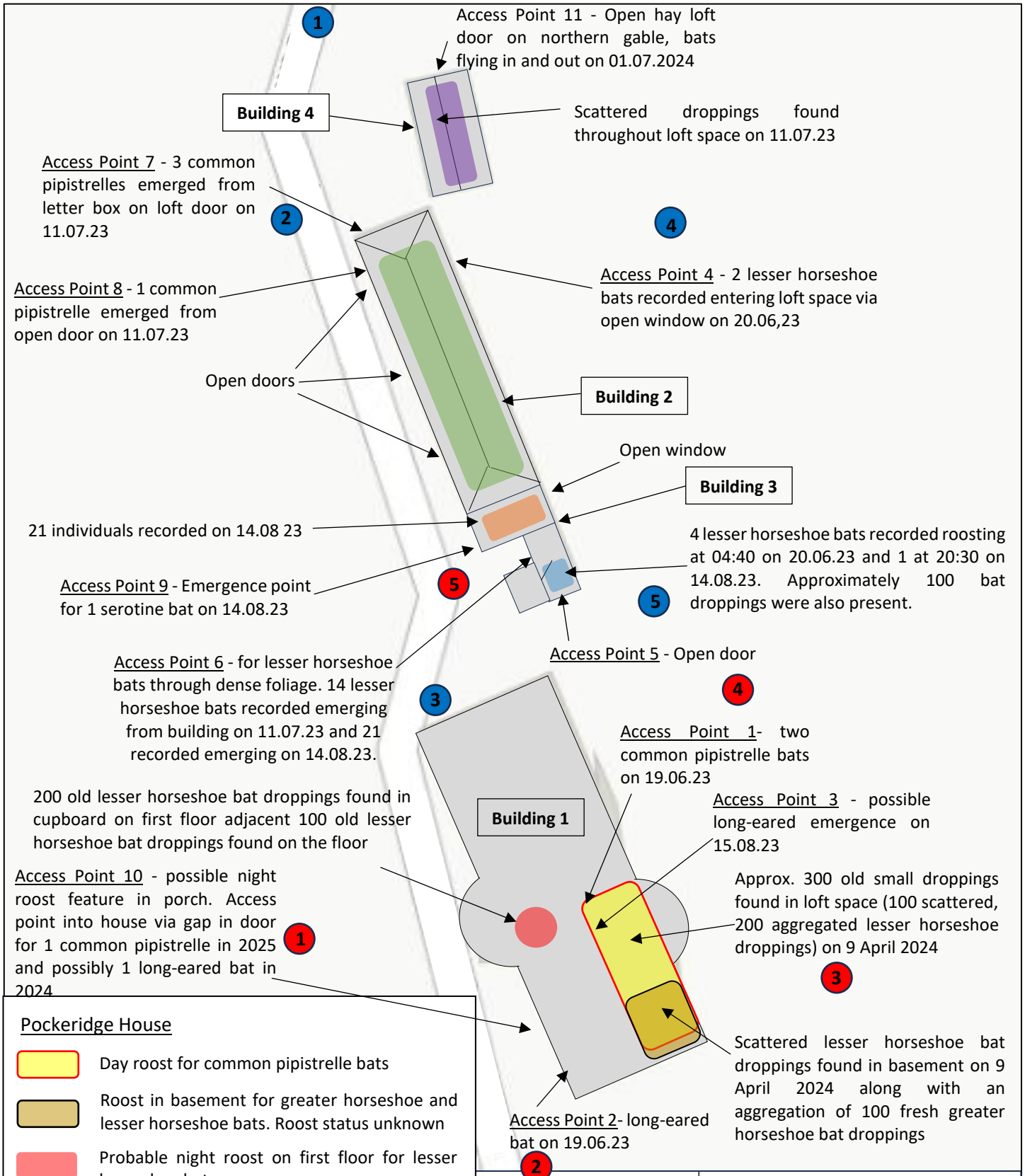
Russ, J. (2012) British Bat Calls: A Guide to Species Identification. Pelagic Publishing.

Russ, J (2021) Bat Calls of Britain and Europe. Pelagic Publishing

Schofield, H.W. (2008) The Lesser Horseshoe Bat Conservation Handbook. Vincent Wildlife Trust.

Wiltshire Council with Natural England (2015) Bat Special Areas of Conservation (SAC), Planning Guidance for Wiltshire

# Annexe 1: Bat survey plan




Pockeridge House

- Day roost for common pipistrelle bats
- Roost in basement for greater horseshoe and lesser horseshoe bats. Roost status unknown
- Probable night roost on first floor for lesser horseshoe bats.

Stable Buildings

- Lesser horseshoe bat satellite roost (**significant roost**).
- Lesser horseshoe bat day/night roost
- Day/night roost for low numbers of lesser horseshoe bats
- Day/night roost for low numbers of lesser horseshoe and common pipistrelle bats
- 1 Pockeridge House surveyor position
- 1 Stable Buildings surveyor position

Bat Survey Plan

Pockeridge House
MOD Corsham

Date: 02.10.25

HT ECOLOGY

# Annexe 2: Conservation status and legal protection of bats and birds

## Birds

The bird breeding season generally lasts from March to early September for most species. All birds are protected under the Wildlife and Countryside Act (1981) (as amended) and the Countryside & Rights of Way (CRoW) Act 2000. This legislation makes it illegal, both intentionally and recklessly, to:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while it is being built or in use;
- take or destroy the eggs of any wild bird

Furthermore, birds listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) are protected against intentional or reckless disturbance whilst nest building and when at or near a nest containing eggs or young. Dependent young of Schedule 1 species are also protected against disturbance.

In addition to this legal protection, the leading governmental and non-governmental conservation organisations in the UK have reviewed the population status of the birds regularly found here and produced a list of birds of conservation concern. Of the 245 species assessed, 70 were placed on the Red List of high conservation concern, 103 on the Amber List of medium conservation concern and 72 on the Green List of low conservation concern:

- Red list species are those that are Globally Threatened according to IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery.
- Amber list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; and those with internationally important or localised populations.

## Bats

There are 18 species of bats found in the UK, 17 of which are known to breed here. The conservation status of these species is summarised in the table below:

| Common name | Scientific name | IUCN Red List* | Priority Species |
|---|---|---|---|
| Greater horseshoe | *Rhinolophus ferrumequinum* | LC | Yes |
| Lesser horseshoe | *Rhinolophus hipposideros* | LC | Yes |
| Daubenton's | *Myotis daubentonii* | LC | No |
| Brandt's | *Myotis brandtii* | LC | No |
| Whiskered | *Myotis mystacinus* | LC | No |
| Natterer's | *Myotis nattereri* | LC | No |
| Bechstein's | *Myotis bechsteinii* | NT | Yes |
| Alcathoe bat | *Myotis alcathoe* | DD | No |
| Greater mouse-eared | *Myotis myotis* | LC | No |
| Common pipistrelle | *Pipistrellus pipistrellus* | LC | No |
| Soprano pipistrelle | *Pipistrellus pygmaeus* | LC | Yes |
| Nathusius's pipistrelle | *Pipistrellus nathusii* | LC | No |
| Serotine | *Eptesicus serotinus* | LC | No |
| Noctule | *Nyctalus noctula* | LC | Yes |
| Leisler's | *Nyctalus leisleri* | LC | No |
| Barbastelle | *Barbastella barabastellus* | NT | Yes |
| Brown long-eared | *Plectorus auritus* | LC | Yes |
| Grey long-eared | *Plectorus austriacus* | LC | No |

*IUCN categories: LC Least Concern, NT Near Threatened, DD Data Deficient

All bat species are afforded full protection under UK legislation, including the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). Together, this legislation makes it illegal to:

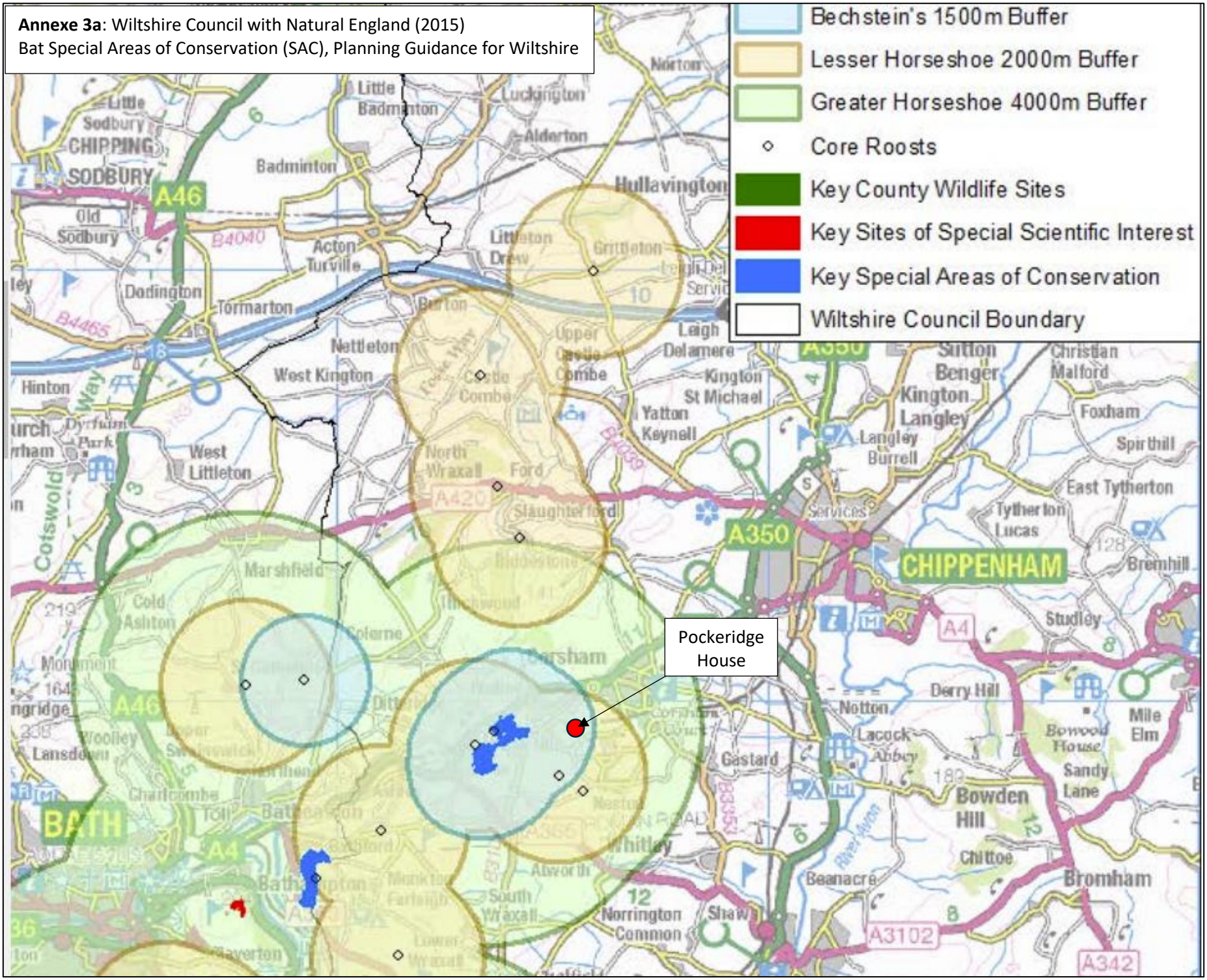
- Deliberately capture, injure or kill a bat.
- Damage or destroy a bat roost; or intentionally or recklessly obstruct access to bat roosts.
- Deliberately, intentionally or recklessly disturb, a bat, including in particular any disturbance which is likely:
- to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or
- 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.

A bat roost is defined in the legislation as "any structure or place which a bat uses for shelter or protection". Roosts are protected whether or not bats are present at the time.

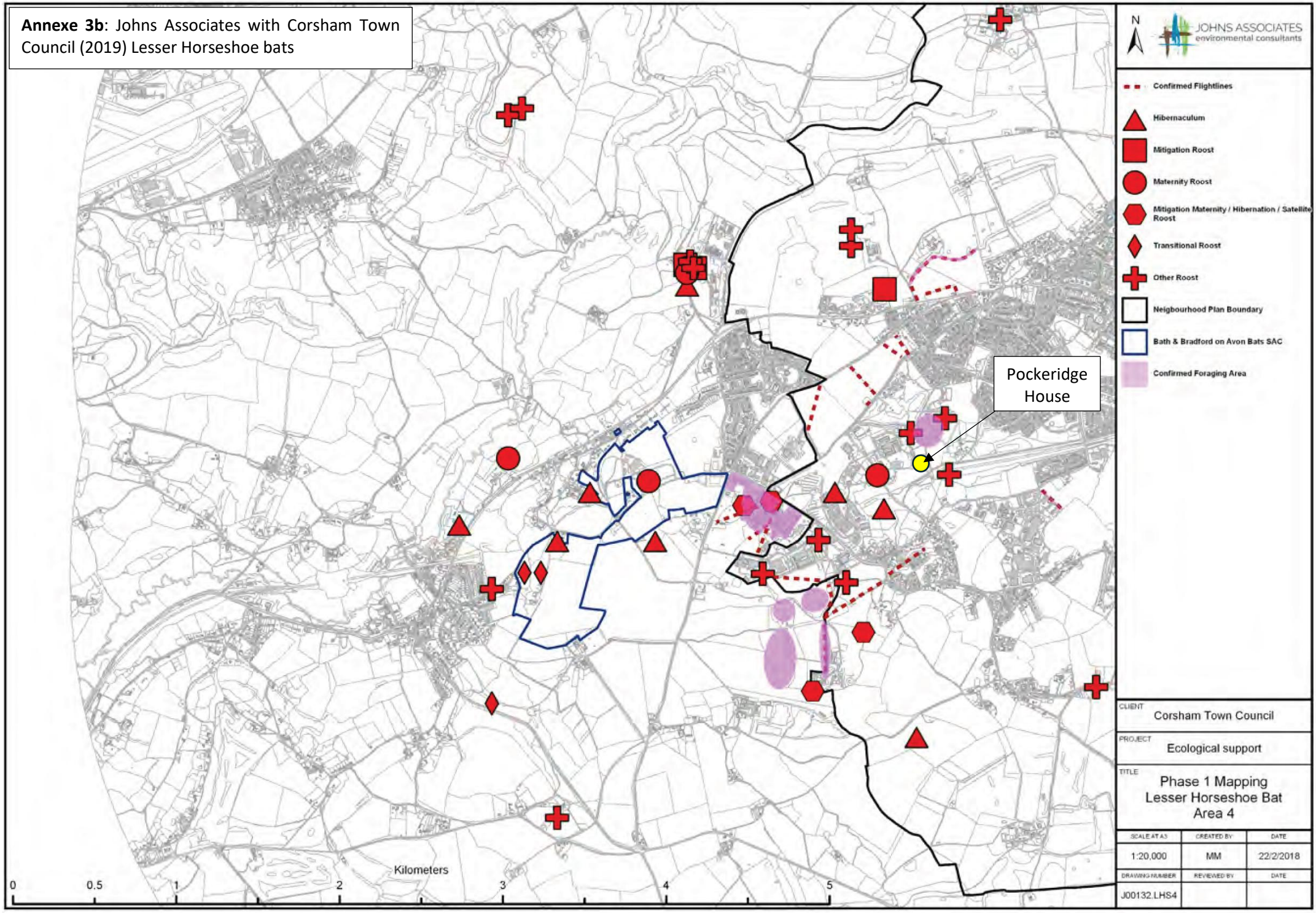
# Annexe 3a-e: Location of site in relation to designated bat sites

taken from Johns Associates, 2019 and Wiltshire Council 2015

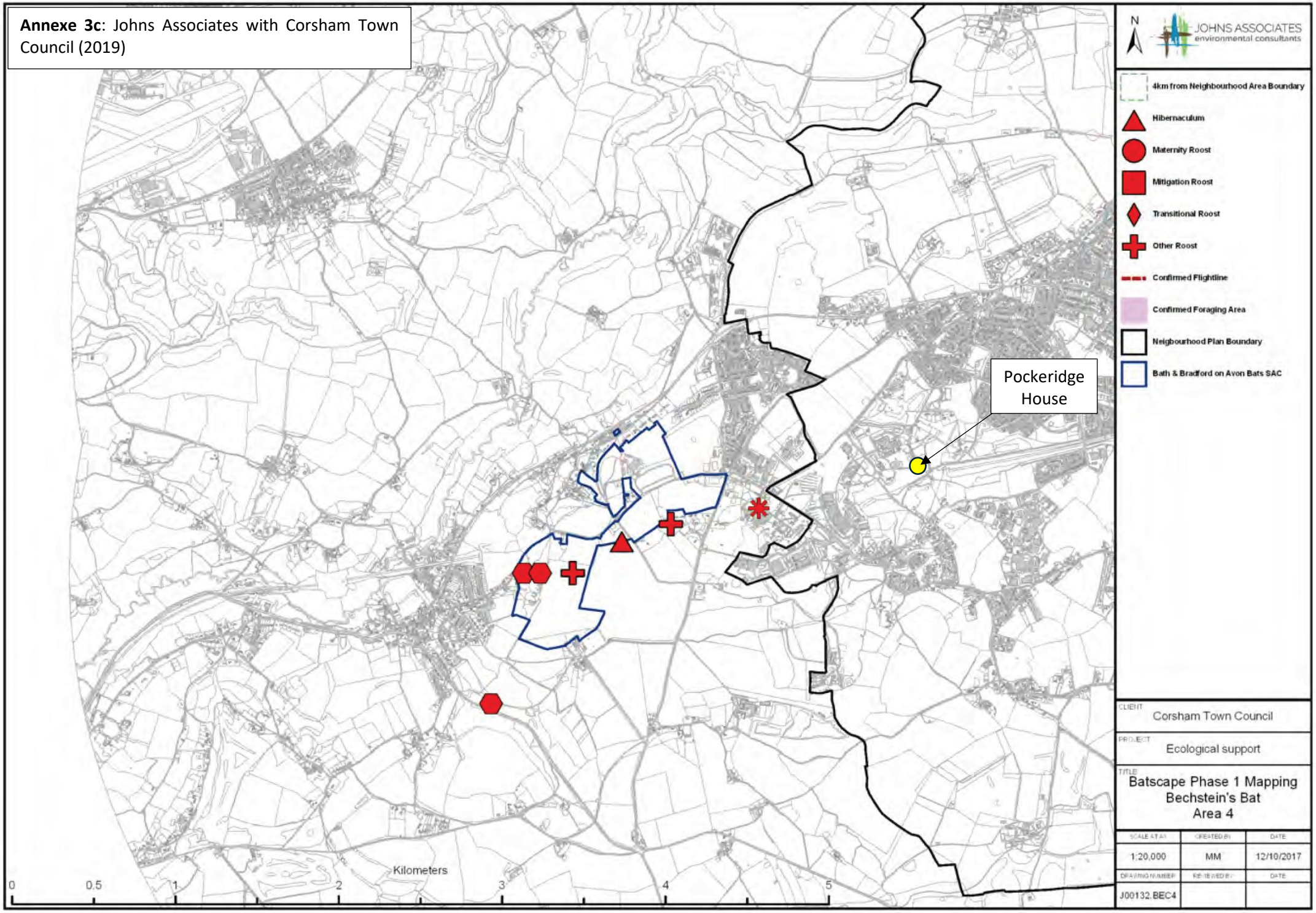
**Annexe 3a**: Wiltshire Council with Natural England (2015)
Bat Special Areas of Conservation (SAC), Planning Guidance for Wiltshire



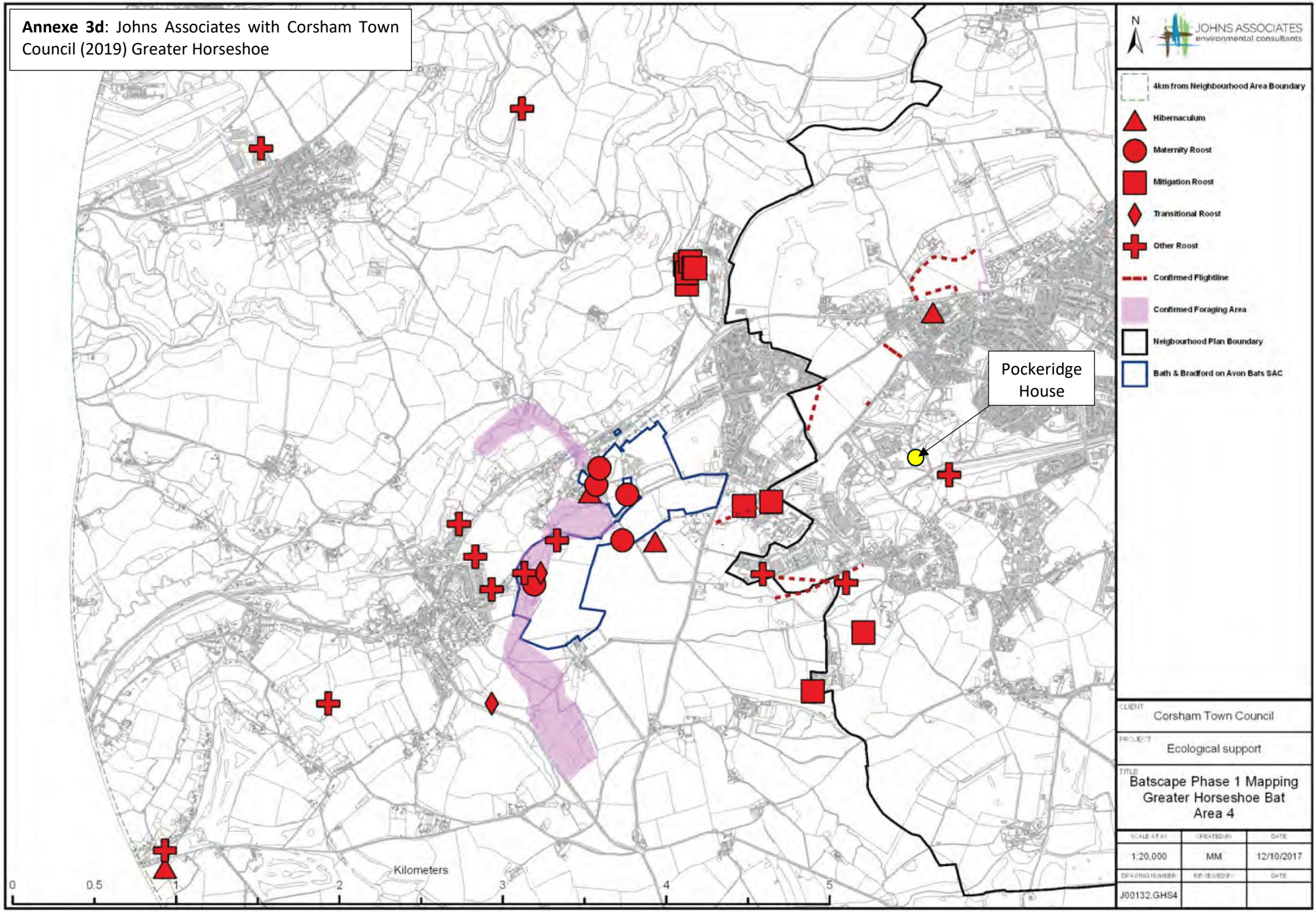
**Annexe 3b**: Johns Associates with Corsham Town Council (2019) Lesser Horseshoe bats



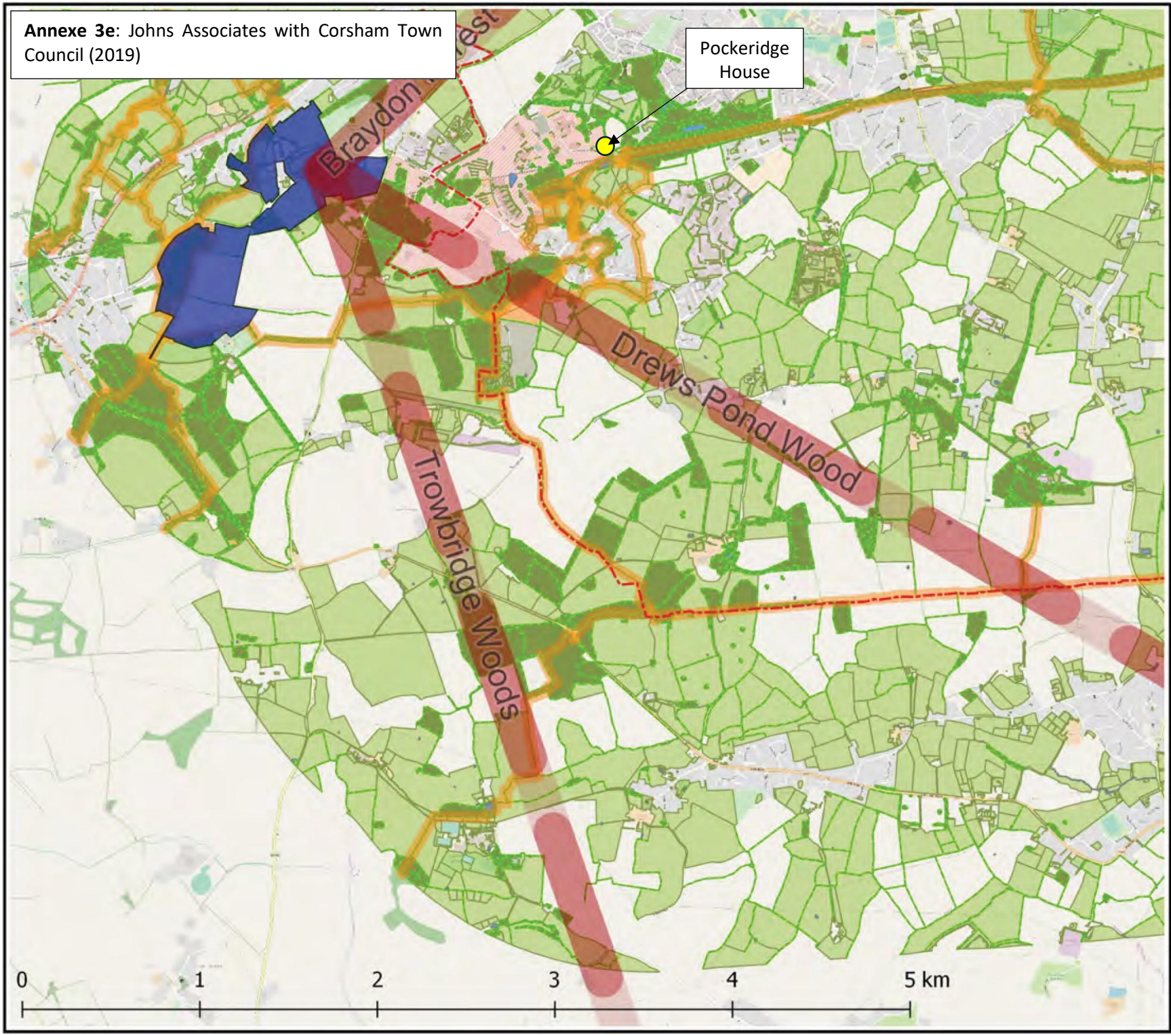
**Annexe 3c**: Johns Associates with Corsham Town Council (2019)



**Annexe 3d**: Johns Associates with Corsham Town Council (2019) Greater Horseshoe



**Annexe 3e**: Johns Associates with Corsham Town Council (2019)




N

JOHNS ASSOCIATES
environmental consultants

## Key

- Direct Migration Routes
- Corsham Parish Boundary
- Bath & BOA SAC
- Strategic Flyways
- Connective Habitats

### Foraging habitats

- Water Features
- Woodland & Scrub
- Grass Cropping & Pasture
- Rough Grassland
- Ministry of Defence Land

**CLIENT**
Corsham Town Council

**PROJECT**
Corsham Batscape Phase 2

**TITLE**
SW Section

| SCALE AT A3 | DRAWN | DATE |
|---|---|---|
| 45000 | BM | 28.09.17 |
| | | |

# Annexe 4: Bat and bird boxes

# 2F Schwegler Bat Box

https://www.nhbs.com/4?slug=bat-boxes&q=&fR[hide][0]=false&fR[live][0]=true&fR[shops.id][0]=4&fR[subsidiaries][0]=1&hFR[subjects_equipment.lvl1][0]=Bat%20Boxes&qtview=158629

# 2M Schwegler Nest Box

https://www.nhbs.com/equipment?q=&hPP=60&idx=titles&p=0&fR%5Bdoc_s%5D%5B0%5D=false&fR%5Bhide%5D%5B0%5D=false&fR%5Blive%5D%5B0%5D=true&hFR%5Bsubjects_equipment.lvl1%5D%5B0%5D=Bird%20Boxes&qtview=174758

# Annexe 5a and b: DNA analysis

5a: Pockeridge House

5b:  Building 4 (Northern Stable Block)

# Results

## Sample ID: EG-1778-1

*Sample information:*

**Sample type:** Faecal

**Species group:** Bats

**Suspected species:** Unsure

**Site Location:** Pockeridge House, MOD Corsham

**Comments:**

*Laboratory information:*

**DNA Extraction Code:** EG-2024-2013

**Identification method:** qPCR

**Analysis Procedure Notes:**

**Laboratory Comments:**

None

*Species Identified:*

**Species 1**: Rhinolophus hipposideros (Lesser horseshoe bat)

**qPCR Ct Value:** 21

WARWICK
THE UNIVERSITY OF WARWICK

EcoWarwicker
Ecological Forensics

10 September 23

Re: Identification Results for Tom Davies, HT Ecology

Job number 20117, received 21 August 2023
Sample labelled: Pock Stables sample 2 11/7/23
PCR amplification successful. DNA sequence:
ATCCAAAGTTTCATCAGGAGGAAATACTTGATGGGGCAGGTAGATCAATGAATGAGT
CATTGATAATTTTAAATAGTGGGTGGGACTTTCGAATGTTGGTCAT

Phylogenetic analysis identification: *Rhinolophus hipposideros*

Confirmed by maximum likelihood, maximum parsimony, bootstrap 100%.

Best regards,

Professor Robin Allaby

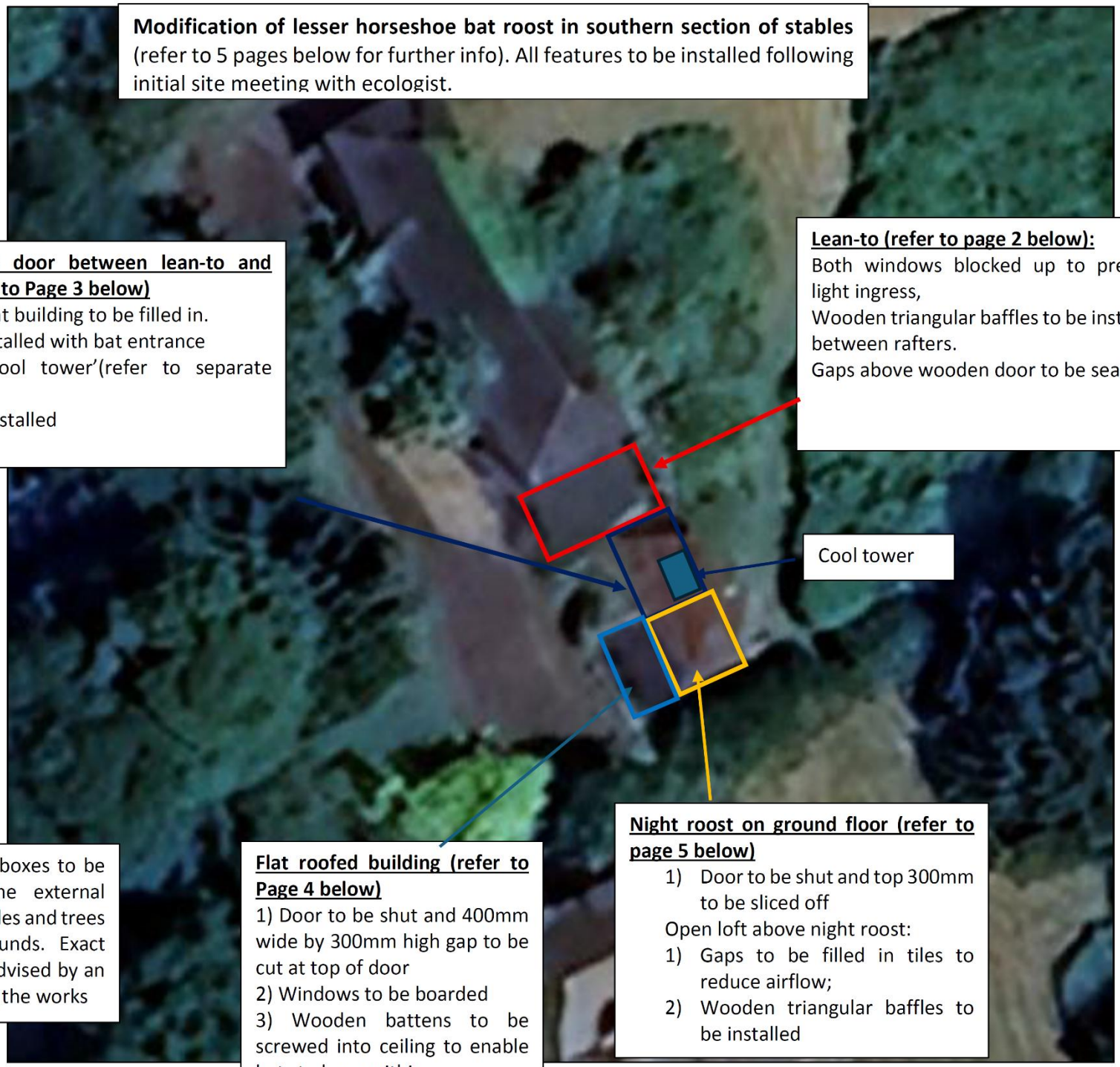
The results and conclusions in this report are based on an investigation of mtDNA sequence analysis. The results obtained have been reported with accuracy. The interpretation represents the most probable conclusion for the DNA sequence obtained rather than the sample provided given current levels of species data. It should be borne in mind that different circumstances might produce different results. Therefore, care must be taken with interpretation of the results especially if they are used as the basis for commercial recommendations.

**Professor Robin Allaby**

School of Life Sciences,
Gibbet Hill Campus,
University of Warwick,
Coventry CV4 7AL
Tel: 02476575059
Fax: 02476574500
Email: r.g.allaby@warwick.ac.uk

# Annexe 6: Enhancement of Southern Barns

**Modification of lesser horseshoe bat roost in southern section of stables** (refer to 5 pages below for further info). All features to be installed following initial site meeting with ecologist.




**Building without door between lean-to and night roost (refer to Page 3 below)**

1. Gaps in adjacent building to be filled in.
2. Doors to be installed with bat entrance
3. Thermalite 'cool tower'(refer to separate specification);
4. Hotbox to be installed

**Lean-to (refer to page 2 below):**

Both windows blocked up to prevent light ingress,
Wooden triangular baffles to be installed between rafters.
Gaps above wooden door to be sealed

At least 10 bat boxes to be installed on the external walls of the stables and trees within the grounds. Exact location to be advised by an ecologist during the works

**Flat roofed building (refer to Page 4 below)**

1) Door to be shut and 400mm wide by 300mm high gap to be cut at top of door
2) Windows to be boarded
3) Wooden battens to be screwed into ceiling to enable bats to hang within

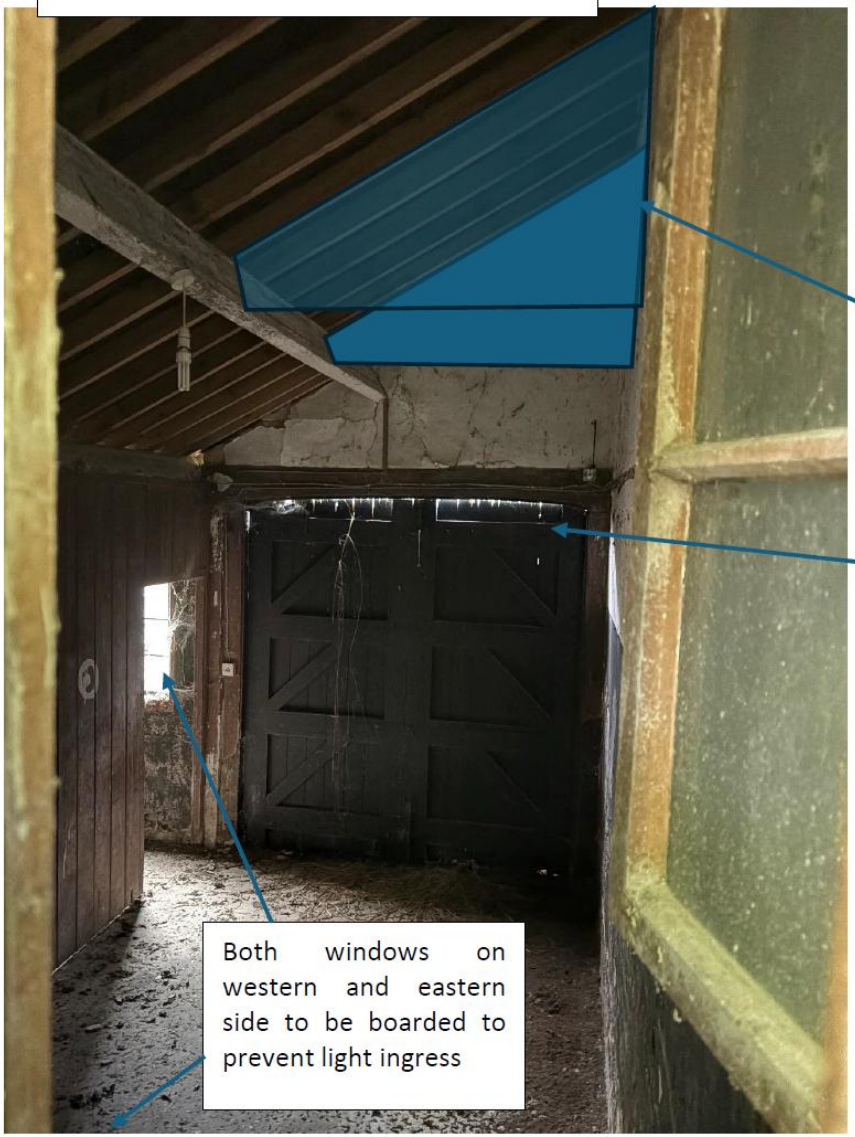
**Night roost on ground floor (refer to page 5 below)**

1) Door to be shut and top 300mm to be sliced off

Open loft above night roost:

1) Gaps to be filled in tiles to reduce airflow;
2) Wooden triangular baffles to be installed

**Lean-to in north**



**Building without door between lean-to and night roost**

Thermalite block 'cool tower' for hibernating bats to be installed in south eastern corner. Refer to separate specification.

Wooden doors to be fitted with large bat access at top of doors stretching the whole length. Access 400mm high from top rafter.

Gaps to filled in with polymer foam spray or rockwool similar to prevent air flow

'Hot box' constructed between rafters with wooden boards with entrance at the bottom – example photo shown above

**Flat roofed building**

1) Door to be shut and 400mm wide by 300mm high gap to be cut at top of door
2) Windows to be boarded
3) Wooden battens to be screwed into ceiling to enable bats to hang within

**Night roost on ground floor**

Door to be shut and top 300mm to be sliced off to allow bat entry

**Open loft above night roost:**

1) Gaps in tiles to be filled;
2) Wooden triangular baffles to be installed