MOOR FARM
ASHTON ROAD
MINETY

INTERIM BAT SURVEY REPORT

MR A MILLAR

ACD ENVIRONMENTAL

Ecology
Archaeology
Arboriculture
Landscape Architecture

Written By:	RY
Checked By:	HR
Date:	22/03/2024
Document File Ref:	PRI24354_Bat_Report
Revision:	-

CONTENTS

1.0	**EXECUTIVE SUMMARY**	**1**
2.0	**INTRODUCTION, CONTEXT AND PURPOSE**	**3**
3.0	**METHODOLOGY**	**5**
4.0	**RESULTS AND EVALUATION**	**10**
5.0	**LEGISLATION AND PLANNING POLICY**	**18**
6.0	**IMPACT ASSESSMENT**	**21**
7.0	**CONCLUSIONS**	**22**

APPENDIX 1: PROPOSED CONVERSION

APPENDIX 2: SITE PHOTOGRAPHS

1.0 EXECUTIVE SUMMARY

1.1 In August 2023, ACD Environmental Ltd was commissioned by Mr A Millar to carry out a suite of bat emergence surveys at Moor Farm, Ashton Road, Minety, SN16 9QP; hereafter referred to as the 'Application Site'.

1.2 The Application Site is located approximately 1.25km north-west of the village of Minety. The curtilage of Moor Farm, including gardens, an equestrian centre and a residential house, immediately surround the Application Site in all directions. In the wider area, agricultural pasture is present in all directions.

1.3 Plans have been submitted to Wiltshire Council for the conversion of the existing barn into a two-bedroom holiday cottage.

1.4 This interim report and the associated surveys have been carried out to inform this planning application.

1.5 The barn has been confirmed to support six common pipistrelle day roosts and one feeding roost (species yet to be confirmed). Hibernation surveys are required and are currently scheduled for Winter 2023/2024. DNA analysis is also required to confirm the species utilising the feeding roost.

1.6 The renovation works will lead to the damage and/or destruction of bat roosts. An EPS licence application will be required from Natural England prior to the commencement of works in order for the works to proceed lawfully. Following the results of the further surveys a detailed bat mitigation strategy will be outlined within an updated report. This will form the basis of the EPS licence application.

1.7 Nesting birds are present within the Application Site. Timings of work and bird boxes have been outlined to mitigate and compensate for impacts.

1.8 Precautionary measures have also been outlined to protect the adjacent stream during the construction phase. If the proposals are to be modified and the stream impacted, the professional opinion of an ecologist must be sought.

2.0 INTRODUCTION, CONTEXT AND PURPOSE

Introduction

2.1 In August 2023, ACD Environmental Ltd was commissioned by Mr A Millar to carry out a suite of bat emergence surveys at Moor Farm, Ashton Road, Minety, SN16 9QP (Grid reference: SU 02874 91821).

2.2 The location of the Application Site is shown in **Image 1** below.



Image 1: Application Site location and approximate boundary shown in red[1].

Context

2.3 A planning application to convert the existing barn into a two-bedroom holiday cottage has been submitted to Wiltshire Council.

2.4 The proposed layout of the conversion can be found at **Appendix 1.**

[1] Map Data, Google 2023.

Purpose

2.5 The purpose of this assessment is to:

- Ascertain the value of the Application Site for bats: and
- Assess any ecological impacts/likely impacts of the proposed scheme and recommend appropriate mitigation, compensation and enhancements.

3.0 METHODOLOGY

Names and qualifications of surveyors

3.1 The Preliminary Roost Assessment was carried out by Hannah Smith ACIEEM and Ross Hellier of Ecology by Design. Hannah is an Ecologist and holds a Level 2 bat licence (licence no: 2015-12267-CLS-CLS). Ross Hellier is a Seasonal Ecologist.

3.2 The suite of emergence surveys were undertaken by Ryan Yeates ACIEEM, Lisa Durrant MCIEEM, Hayley Roberts and Dominic Lambert Qualifying CIEEM of ACD Environmental Ltd. Ryan is a Senior Ecologist and holds a Level 1 bat licence (no: 2020-50201-CLS-CLS). Lisa and Hayley are both Senior Ecologists who hold Level 2 bat licences (nos: 2017-27578-CLS-CLS; 2022-10531-CL18-BAT). Dominic is a Graduate Ecologist. The hibernation surveys were undertaken by Hayley Roberts.

3.3 This report has been produced by Ryan Yeates.

3.4 A Technical Review of this report has been undertaken in line with ACD Environmental Ltd's Quality Assurance procedures. The Technical Review was undertaken by Hayley Roberts. Hayley is a Senior Ecologist with over 5 year's of commercial consultancy experience. Hayley has extensive experience of habitat and protected species survey along with producing associated reports including Ecological Impact Assessments and European Protected Species (EPS) mitigation Licence applications. Hayley holds Natural England Class Licences for great crested newts, bats (Level 2) and barn owl *Tyto alba* and is a FISC Level 4 botanist with UK Habitat Classification Training and is accredited to undertake River Condition Assessments.

Preliminary Roost Assessment

3.5 A Preliminary Roost Assessment (PRA) is an external and internal inspection survey, the purpose of which is to search for bats/evidence of bats and assess the likelihood of bats being present and the need for further survey and/or mitigation.

3.6 As outlined above, the PRA of the Application Site was undertaken by Ecology by Design on 26th June 2023. As per their report[2], the methodology for the PRA was

[2] Ecology by Design (2023) *Moor Farm – Bat Survey: Preliminary Roost Assessment.*

as follows:

"The assessment was based on the guidance included in the Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn) (Collins, 2016) and standing advice (Gov.UK, 2015).

The building was inspected for potential bat use by examining the internal and external structures for active roosts or roosting sites and suitable entry and exit points on the outside of the building, and by searching for other evidence of bat activity such as droppings, urine stains, carcasses or food remains.

A torch was used to illuminate any dark recesses inside to carefully inspect any features of potential value to roosting bats.

Equipment used included:

- *Close focusing binoculars;*
- *3m Telescopic ladder; and*
- *High powered LED Lenser spotlight torch.*

During the survey, the building was thoroughly inspected including the roof structure, gaps under eaves, crevices in brickwork, around the roofing beams and windows. Internally the walls and roof were inspected for cracks and crevices and potential access points into the building."

Bat Dusk Emergence Surveys

3.7 In line with published guidance[3], three dusk emergence surveys were conducted. Three surveyors were positioned to cover the full extent of the building. The survey was conducted in optimum weather conditions (**Table 1**) and commenced 15 minutes before sunset.

[3] Collins J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. The Bat Conservation Trust, London.

Table 1: Emergence survey conditions and equipment.

Date and Time	Weather	Equipment
17/08/23 Sunset time: 20:27 Survey period: 20:12 – 21:57	19ºC – 18ºC Cloud cover: 60% - 70% Wind speed: 0 - 0	Anabat Scout Canon HD Camera Infra-Red Sony 4K Camera Infra-Red
30/08/23 Sunset time: 20:00 Survey period: 19:45 – 21:30	15ºC – 14ºC Cloud cover: 40% - 0% Wind speed: 2 - 0	Anabat Scout Canon HD Camera Infra-Red Sony 4K Camera Infra-Red
14/09/23 Sunset time: 19:25 Survey period: 19:10 – 20:55	16ºC – 16ºC Cloud cover: 100% -100% Wind speed: 0 - 0	Anabat Scout Canon HD Camera Infra-Red Sony 4K Camera Infra-Red

3.8 Infra-red technology was used during the emergence surveys to accurately pinpoint any potential bat emergence locations and numbers of bats. Footage was reviewed following the survey to ensure no quiet/non-calling bats were missed during the

survey.

Limitations

3.9 Due to the often-transient nature of bat roosts, the results of bat surveys are generally considered to be valid for approximately 12 months. If over 12 months passes between the surveys and applying for planning permission, an update survey or surveys are likely to be required to update the baseline.

3.10 The Bat Survey Guidelines generally recommend that at least one dawn survey is carried out for surveys on structures with a confirmed roost. However, in this case a dawn survey was not undertaken for the following reasons:

- Published data[4] suggests that with typical timing of dawn surveys many bats will have already returned to the roost and therefore roosts could be missed.
- It is considered that late-emerging species would have been picked up by infra-red technology.

Species Evaluation and Impact Assessment

3.11 The habitats and species evaluations are made with reference to CIEEMs guidelines for EcIA. These guidelines aim to give a degree of consistency in approach to evaluating the importance of the ecological features within a site and any effects or impacts a scheme would have upon them.

3.12 Firstly, the species or habitats must be valued and a commonly used framework involves assigning a level of geographical importance to ecological receptors. This framework incorporates a wide range of legislation and governmental guidance in assessing each feature's value.

3.13 Next, the impacts of the proposed scheme have to be predicted, taking into account different stages and activities within the development process. These impacts then have to be assessed for their significance, based upon the value of the habitat or species in question. The assessment of impact significance is done before and after

[4] AEcol. (2016). *A Review of Empirical Data in Respect of Emergence and Return Times Reported for the UK's 17 Native Bat Species*. AEcol, Bridgewater.

any proposed mitigation to give an overall indication of significance.

3.14 The value of specific ecological receptors (sites, habitats or species) is assigned according to their level of importance using the following terms:

- International value;
- UK value;
- National value (i.e. England/Northern Ireland/Scotland/Wales);
- Regional value;
- County value;
- District value (or Unitary Authority, City, or Borough);
- Local or Parish value; and
- Of value within a defined zone of influence or a larger defined area.

3.15 When describing ecological impacts, consideration should be made (where applicable) to the following characteristics:

- Beneficial or adverse (positive or negative);
- Extent (spatial or geographical area);
- Magnitude (minor, moderate, major, extreme);
- Duration/timing – short and medium term (construction phase) and long term (operational phase);
- Frequency (in relation to number of years/lifecycles); and
- Reversibility (temporary or permanent).

Significance Criteria

3.16 In accordance with the current CIEEM guidance and terminology, a significant effect, in ecological terms, is defined as an effect that either supports or undermines

biodiversity conservation objectives for ‘important ecological features’ (which could be species or habitats), or for biodiversity in general. Effects can be considered significant at a wide range of scales, from international to local.

3.17 A significant effect is a positive or negative ecological effect that should be given weight in judging whether to authorise a project. It can influence whether permission is given or refused and, if given, whether the effect is important enough to warrant conditions, restrictions or further requirements such as monitoring.

3.18 A significant effect does not necessarily equate to an effect so severe that consent for the project should be refused planning permission. For example, many projects with significant negative ecological effects can be lawfully permitted, as long as the mitigation hierarchy has been applied effectively as part of the decision-making process.

3.19 In broad terms, significant effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).

3.20 Significant effects should be qualified with reference to an appropriate geographic scale. For example, a significant effect on a Site of Special Scientific Interest (SSSI) is likely to be of national significance. However, the scale of significance of an effect may not be the same as the geographic context in which the feature is considered important. For example, an effect on a species which is on a national list of species of principal importance for biodiversity may not have a significant effect on its national population. Examples of other relevant scales include regional and county. It should be noted that effects may be significant at the local scale, particularly in view of policies for no net loss of biodiversity.

3.21 When seeking mitigation or compensation solutions, efforts should be consistent with the geographical scale at which an effect is significant. For example, mitigation and compensation for effects on a species population significant at a county scale should ensure no net loss of the population at a county scale. The relative geographical scale at which the effect is significant will have a bearing on the required outcome which must be achieved.

Precautionary Principle

3.22 The evaluation of significant effects is based on the results of the ecological surveys carried out in the Application Site and other available evidence. In cases of reasonable doubt, where it is not possible to robustly justify a conclusion of no significant effect, a significant effect is assumed. Where uncertainty exists, it has been duly acknowledged.

4.0 RESULTS AND EVALUATION

4.1 Set out below are the results of the background data search and surveys.

Context

4.2 The Application Site is located approximately 1.25km north-west of the village of Minety. The curtilage of Moor Farm, including gardens, an equestrian centre and a residential house, immediately surround the Application Site in all directions. In the wider area, agricultural pasture is present in all directions.

Data Search Results

4.3 The nearest statutory designated nature conservation sites within 5km of the Application Site are as follows:

- Acre Farm Meadow SSSI - located approximately 0.8km north of the Application Site and is designated for its unimproved neutral grassland habitat. The grassland supports a wide variety of grasses and sedges characteristic of unimproved neutral meadows, such as common bent *Agrostis capillaris*, sweet vernal grass *Anthoxanthus odoratum*, crested dog's-tail *Cynosurus cristatus*, red fescue *Festuca rubra*, glaucous sedge *Carex flacca*, hairy sedge *Carex hirta*, and quaking grass *Briza media*.

- Pike Corner SSSI – located approximately 1.4km north-east of the Application Site and is designated for its low-lying meadows and calcareous tributary. The site supports a rich diversity of flora, of which several species are rare in Wiltshire and southern England, including bog pimpernel *Anagallis tenella*, pepper saxifrage *Silaum silaus* and southern marsh orchid *Dactylorhiza praetermissa*.

- Cotswold Water Park SSSI – located approximately 1.5km north of the Application Site and designated for its diverse assemblage of breeding bird, non-breeding bird and aquatic plant populations. Breeding species include great crested grebe *Podiceps cristatus* and little ringed plover *Charadrius dubius*, and an assemblage of over 20,000 waterbirds are present during the non-breeding season. Aquatic plant species include stonewort *Nitellopsis*

obtusa, pointed stonewort *Nitella mucronata* and lesser bearded stonewort *Chara curta*.

European Protected Species Mitigation Licenses

4.4 The nearest EPS bat licenses which have been granted within 5km of the Application Site are as follows:

- 2018-36926-EPS-MIT - located immediately to the north of the Application Site within the curtilage of Moor Farm and granted for the destruction of a common pipistrelle *Pipistrellus pipistrellus* and Natterer's *Myotis nattereri* resting place in 2018.

- EPSM2019-40661-EPS-MIT-2 - located approximately 0.5km south-west of the Application Site and granted for the destruction of a brown long-eared *Plecotus auritus*, lesser horsehoe *Rhinolophus hipposideros* and Natterer's resting place in 2020.

- 2018-37931-EPS-MIT - located approximately 1.2km south-west of the Application Site and granted for the damage of a serotine *Eptesicus serotinus* and soprano pipistrelle *Pipistrellus pygmaeus* breeding and resting place in 2018.

Preliminary Roost Assessment

4.5 As previously mentioned, the Preliminary Roost Assessment was undertaken by Ecology by Design in June 2023. The below information has been taken from their report[2].

4.6 The barn is a single-storey building constructed from stone blocks on the northern, eastern and southern elevations, with bricks on the western elevation. The roof is pitched and comprises corrugated iron. Timber barge boards are present on the northern gable end. The neighbouring stables and laundry room adjoin the barn on the eastern elevation with an interlinked corrugated iron roof. A small area of timber cladding is present at the apex of the southern elevation, with a window below. The western elevation has a number of timber-framed open doorways and a partially open window.

4.7 Externally, at the western elevation, gaps are present between the brickwork and timber window frames. Small gaps are also present within the corrugated iron roof and the eaves are open. The barge board at the northern elevation and the timber cladding at the southern elevation both have large gaps underneath and there is also a dense covering of ivy at the south-eastern corner of the barn. Numerous gaps, cracks and crevices are located in the stone and brickwork on all external elevations.

4.8 Internally, the barn is split into two distinct sections by an internal partitioning wall. The northern section is open with no roof void. The corrugated metal roof is exposed with no lining membrane. The barn has a timber frame with a timber ridge beam. The internal walls have been rendered; however, much of the render is now peeling away leaving exposed cracks and crevices. Gaps are also present between the timber frame and the stone elevations. Low numbers (<10) of suspected pipistrelle *Pipistrellus* sp. droppings were scattered along the eastern elevation in this section with more droppings (approximately 30) identified on the brickwork of the northern side of the partitioning wall and on the ground below. Droppings varied in age with some fresh droppings present. A sample of droppings was taken for DNA analysis should it be required.

4.9 The southern section of the barn has a roof void; however, safe access was not possible. No bat droppings or evidence was observed from the vantage point of the void entrance; however, it would have been difficult to locate any evidence if present due to the level of debris. Again, all internal walls within this section contain numerous cracks and crevices suitable for crevice dwelling bats. Suspected pipistrelle droppings were recorded on the sofa on the ground floor with a few moth wings caught in a cobweb near the window on the western side of the barn. A couple of larger droppings, possibly brown long-eared *Plecotus auritus* were present below the roof void entrance. A sample was taken for DNA analysis. A couple of older droppings were also present at the entrance to a small crevice within the stonework on the southern elevation.

4.10 Following the PRA, the barn was classified as a confirmed roost and three emergence/re-entry surveys were required to obtain additional information on the roosts present. In addition, hibernation surveys were required to establish if hibernating bats are present, given the hibernation suitability (cracks/gaps in

stonework/brickwork and warped timber beams) of the barn.

4.11 A series of bird nests were present on the beams and in the apex within the roof void. Swallows *Hirundo rustica* and collared doves *Streptopelia decaocto* were observed exiting the barn during the survey. Rat droppings were also observed in the barn.

Emergence surveys

4.12 The following provides a description of the bat activity recorded during the emergence surveys. Detailed roost locations are outlined within **Table 2** below.

Survey of 17.08.23

4.13 At 20.46, a single common pipistrelle *Pipistrellus pipistrellus* was recorded emerging from the timber lintel above the window on the western elevation **(Roost A)**.

4.14 At 21.06, a single common pipistrelle was recorded emerging from the stonework on the northern elevation **(Roost B)**.

4.15 Moderate common pipistrelle activity was recorded throughout the survey. Soprano pipistrelle, myotis *Myotis spp.* and brown-long eared bats were also recorded.

Survey of 30.08.23

4.16 At 20.32, a single common pipistrelle was recorded emerging from underneath the eaves on the western elevation **(Roost C)**.

4.17 At 20.42, a single common pipistrelle was recorded emerging from the layer of dense ivy on the south-eastern corner of the barn **(Roost D)**.

4.18 Moderate common pipistrelle and soprano pipistrelle activity was recorded throughout the survey.

Survey of 14.09.23

4.19 Before the survey commenced, approximately 30 fresh droppings were noted on the sofa and down the partitioning wall within the southern section of the barn. Feeding remains, including moth wings, were also recorded. The bat droppings were

collected for DNA analysis and were confirmed to be Natterer's bat **(Roost E)**.

4.20 During the survey, at 19.40, a single common pipistrelle was recorded emerging from the layer of dense ivy on the south-eastern corner of the barn. **(Roost D)**. This was the same location as recorded during the survey of 30.08.23.

4.21 At 19.47, a single common pipistrelle emerged from a gap between the masonry on the western elevation, adjacent to the south-western corner of the barn **(Roost F)**.

4.22 At 19.51, a single common pipistrelle emerged from underneath the eaves on the western elevation of the barn **(Roost G)**. This roost location was different from that recorded during the survey of 30.08.23.

4.23 Droppings indicative of *Pipistrellus* sp. were also recorded within the external stonework on the northern elevation of the barn, though no bats were seen to emerge from this feature at any time during the surveys.

4.24 Moderate common pipistrelle and soprano pipistrelle activity was recorded throughout the survey. Noctule *Nyctalus noctula* was also recorded during the survey.

Hibernation Survey

4.25 The barn supports numerous internal cracks and crevices, which are suitable for hibernation purposes, along with exposed beams and rafters capable of supporting free hanging bats. Hibernation surveys were undertaken in February of 2024, using high powered torches, Rigid CA-150 Inspection cameras (2x), ladders and binoculars. Given bats typically wake and move every four days during hibernation, an Anabat Xpress was also left to record internally for two 1-week periods to record any active bats using the barn over winter.

4.26 During the surveys, no free hanging or void dwelling species were observed using the internal structures at any stage. The cracks and gaps in the walls were systematically endoscoped to search for bats or evidence of recent/historic occupation by bats. No further observations of bats were identified, however it is likely that small numbers of bats transitionally/opportunistically use the numerous features provided as winter roosts, however the Application Site does not support

any known or significant hibernacula.

4.27 During the first week (6th - 12th February 2024), the Anabat Xpress was deployed and there was a minor activity recorded internally, with common pipistrelle and soprano pipistrelle featuring dominantly, though there was three evenings with five or fewer recordings of a *Myotis* sp., and one night with a single registration of a big bat. During the second period (27th - 3rd March 2024), registrations were noted only one evening and comprised six registrations of common pipistrelle. This decrease in activity is likely the result of cooler weather during this period compared with the first week when the detector was deployed with night temperatures dropping to a more typical 6°C, compared with 9-11°C during the first week.

4.28 Given the results of the survey, the barn does not appear to support hibernating bats, however night activity was noted and it is likely to be opportunistic use in favourable conditions.

Summary of results

4.29 Throughout the suite of three surveys, six common pipistrelle day roosts were recorded.

4.30 In addition, one feeding roosts has been confirmed within the barn on the southern elevation of the internal partitioning wall. This roost was confirmed by ACD Environmental Ltd in September 2023 and was found to be Natterer's bat.

4.31 Droppings indicative of *Pipistrellus* sp. were also recorded within the external stonework on the northern elevation of the barn.

4.32 A number of bird nests were recorded during the surveys, especially on the timber beams and at the roof apex. The majority of these nests were considered to belong to barn swallow; however, wren *Troglodytes troglodytes* and collared dove were observed leaving and entering the barn during the surveys.

Table 2: Summary of bat roosts identified within barn to-date.

Roost name	Species	Count	Roost type	Roost location	
Roost A	Common pipistrelle	1	Day	Timber lintel above window on western elevation.	 *Photo: Ecology by Design (2023)*
Roost B	Common pipistrelle	1	Day	From crevice in stonework on northern elevation.	 *Photo: Ecology by Design (2023)*

Roost C	Common pipistrelle	1	Day	Underneath eaves on western elevation directly above window.	 *Photo: Ecology by Design (2023)*
Roost D	Common pipistrelle	1	Day	Underneath dense layer of ivy on south-eastern corner.	

Roost E	Unknown – awaiting DNA analysis	N/A	Feeding	Above southern elevation of internal partition wall on timber beams.	 *Photo: Ecology by Design (2023)*
Roost F	Common pipistrelle	1	Day	From a gap between the masonry on the western elevation, adjacent to the south-western corner of the barn.	

Roost G	Common pipistrelle	1	Day	Underneath eaves on western elevation directly above open doorway.	 *Photo: Ecology by Design (2023)*

5.0 LEGISLATION AND PLANNING POLICY

5.1 This section summarises the legislation and national, regional and local planning policies, as well as other reference documents, relevant to the baseline ecology results.

Legislation

5.2 Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:

- The Conservation of Habitats and Species (Amendment; EU Exit) Regulations 2019;
- The Natural Environment and Rural Communities Act 2006;
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Countryside and Rights of Way (CROW) Act 2000;
- The Hedgerows Regulations 1997; and
- The Protection of Badgers Act 1992.

5.3 Where relevant, the assessment takes account of the legislative protection afforded to specific habitats and species.

5.4 The Conservation of Habitats and Species (Amendment; EU Exit) Regulations 2019 affords protection to European sites, such as SACs, and EPS, which are detailed further within this report with regard to designated sites and specific species respectively.

5.5 The WCA 1981 (as amended) lists invasive plant and animal species under Schedule 9[5]. This means that it is an offence to plant or allow species on this list to be released into the wild. It is also an offence for animals not ordinarily resident or a regular visitor to Great Britain or listed on Schedule 9 to be released into the wild.

5.6 The UK Post-2010 Biodiversity Framework, which supersedes UK Biodiversity

[5] Available at: https://www.legislation.gov.uk/ukpga/1981/69/schedule/9

Action Plan (UK BAP) priority habitats and species, provides the 'broad enabling structure for action across the UK', which in England is interpreted into Biodiversity 2020: A strategy for England's wildlife and ecosystem services; however, some authorities do still refer to BAPs. Protecting habitats and species listed on Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006 is an outcome of this strategy. The lists of priority habitats and species in England required under S41 were published by Natural England in May 2014[6]. These measures are given due acknowledgement where relevant.

Wildlife Legislation

5.7 All animals, irrespective of their conservation status, are subject to protection from cruelty under the Animal Welfare Act 2006 and wild mammals are also protected from cruelty under the Wild Mammals Protection Act 1996.

European Protected Species

5.8 EPS are protected under the Conservation of Habitats and Species (Amendment; EU Exit) Regulations 2019 as well as the WCA 1981 (as amended).The Countryside and Rights of Way Act 2000 amended the WCA 1981 and added 'or recklessly' to existing mentions of 'intentionally' as detailed below. These species include great crested newt, all bat species, hazel dormouse and otter. This level of protection for these species (at all stages of their life cycle) makes it an offence to do the following:

- Intentionally or recklessly capture or kill a wild animal of an EPS;
- Intentionally or recklessly disturb any such animal;
- Intentionally or recklessly to take or destroy the eggs of such an animal;
- Intentionally or recklessly to damage or destroy a breeding site or resting place of such an animal; or
- To keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal of an EPS, or any part of, or anything derived from, such an animal.

[6] Available at: http://publications.naturalengland.org.uk/publication/4958719460769792

Planning Policy

National Planning Policy Framework 2021[7]

5.9 Paragraph 174-182 of the NPPF relates to 'Conserving and enhancing the natural environment'. Paragraph 180 of the NPPF states that when determining planning applications, local planning authorities should apply the following principles:

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

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

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

- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

[7] Great Britain. *National Planning Policy Framework (2021)*. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2

6.0 IMPACT ASSESSMENT

6.1 The barn is due to be converted into a two-bedroom holiday cottage, with a vaulted ceiling above the kitchen/lounge, and a mezzanine above the bedrooms. The renovation works will lead to the damage and/or destruction of bat roosts.

6.2 The barn has been confirmed to support six common pipistrelle day roosts and one feeding roost of Natterer's bat. Feeding roosts are of low conservation significance with respect to Natterer's bats, which are widespread in Wiltshire, and common pipistrelles are common and widespread, displaying low roost fidelity. Given this, the day roosts confirmed during the emergence surveys are of low conservation significance.

6.3 Due to the widespread nature and high suitability of external roosting features, it is considered highly likely that the features on the barn are dynamically and transiently used by bats depending upon the conditions. This was evidenced by the identification of bat droppings within crevices and gaps in the stonework in locations where bats were not observed to be using during the emergence surveys.

6.4 Hibernation surveys found no individual bats using the barn overwinter, however general activity was noted with bat calls recorded internally. It is not possible to categorically rule out presence of bats hibernating, however given the lack of additional evidence found the barn is not of conservation significance with respect to hibernating species.

6.5 Notwithstanding these survey results, an EPS licence will be required from Natural England prior to the commencement of works.

Other ecological considerations

6.6 A number of bird nests were recorded within the barn, especially on the timber beams and at the roof apex. The majority of these nests were considered to belong to barn swallow; however, wren and collared dove were observed leaving and entering the barn during the surveys, and wrens are known to readily adopt unused barn swallow nests. The proposed renovation will lead to a loss of bird nests and suitable nesting habitat.

6.7 A stream is present immediately to the south of the barn. Although the proposals

are not due to impact the watercourse, precautionary measures have been outlined in **Section 7** below. If the proposals are to be modified and the stream impacted, the professional opinion of an ecologist must be sought.

7.0 MITIGATION AND COMPENSATION

7.1 An EPS licence application will be required from Natural England prior to the commencement of works in order for the works to proceed lawfully. A bat mitigation strategy required is outlined below and will form the basis of the EPS licence application. As a minimum the following will be required:

- Prior to the commencement of any works affecting the barn; contractors will be made aware of the potential presence of roosting bats, their legal protection and safe working practices to avoid harming bats.

- Although it is not anticipated that a large-scale external lighting scheme will be required, a sensitive lighting scheme will be designed for the construction and operation phases to avoid impacts on roosting and commuting/foraging bats.

- Timing constraints will be put in place on the works affecting areas where roosting bats have been confirmed. Depending on the nature of the roosts, it is best practice to avoid the bat maternity season (generally May to August inclusive) and the hibernation season (generally December to February inclusive).

- A class 2 licenced bat ecologist will be in attendance to supervise works to areas which are known to support roosting bats, or which have high potential to support roosting bats.

- Prior to works affecting the barn, a thorough internal inspection will be undertaken by the Named Ecologist or Accredited Agent to check for roosting bats. Once the roosts are confirmed to be empty, the barn will be subject to a full strip of its roof.

- Due to the nature of the proposed works, much of the repair/replacement of stonework/brickwork will take place by hand over the course of several weeks. Removal of stonework/brickwork by hand will serve to protect any bats that are roosting in crevices during this period. Contractors will be informed and regularly reminded that an ecologist must be immediately informed if they encounter bats/evidence of bats.

- To compensate for the loss of six day roosts and one feeding roost, roosting provision comprising seven Habibat 001 Bat Box (or similar) will be integrated into the masonry of the renovated building.

7.2 Due to the presence of nesting birds within the barn, renovation works should be timed to avoid the nesting bird season (March-August). If works must be undertaken between March and August it will be preceded by a check for active birds' nests by an ecologist. If no birds' nests are found then works can proceed within 24 hours, however, if an active birds' nest is found then works must stop and an appropriate buffer installed around the nest (usually 5m). The buffer must remain in place until the ecologist confirms the young have fledged. However, it must be noted that, due to climate change, the season for breeding birds is no longer as predictable, with species such as robin and blackbird now known to nest as early as January.

7.3 In addition, to compensate for the loss of nesting habitats for species which nest in association with buildings, such as swallows, the following bird boxes (or similar) will be installed within the building:

- 2 x No.10 Schwegler Swallow Nest (to be installed within open doorway on eastern elevation)

- 2 x Habitat Small Bird Nest Box (to be installed within the masonry of building)

7.4 In order to protect the adjacent stream during the construction phase, the following precautionary measures will be followed:

- A buffer must be provided for the stream if possible, which is to be marked with Heras fencing or similar throughout the course of the development. No spoil, building materials or machinery may enter or be stored in this buffer.

- No material of any kind may be disposed of using the watercourse during or following enabling works or construction.

- All works must be carried out in accordance with Guidance for Pollution Prevention (GPPs), paying particular attention to GPPs 5: Works and

maintenance in or near water[8].

[8] Available at: https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/gpp-5-works-and-maintenance-in-or-near-water/

8.0 CONCLUSIONS

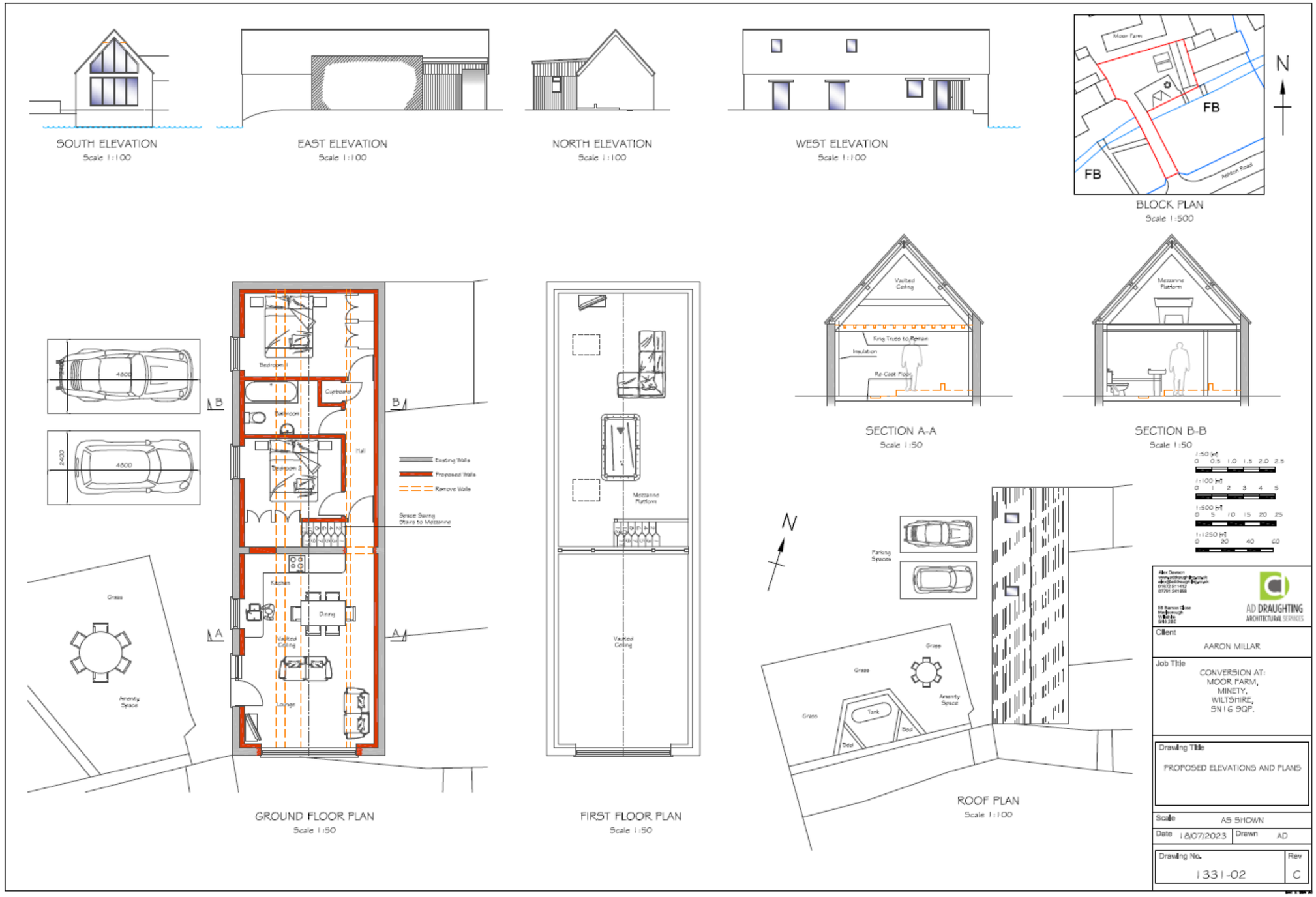
8.1 The barn has been confirmed to support six common pipistrelle day roosts and one feeding roost of Natterer's bat.

8.2 Hibernation surveys found no hibernation roosts though given the nature of the defects in the building and general activity found by the remote detector overwinter, it is possible that bats may hibernate in low numbers, however the Application Site is not considered a significant hibernaculum. Mitigation measures have been detailed in this report and will form the basis of an EPS licence.

8.3 Mitigation and compensation measures, comprising timing of works and bird boxes, have been outlined for nesting birds.

8.4 Precautionary measures have also been outlined to protect the adjacent stream during the construction phase. If the proposals are to be modified and the stream impacted, the professional opinion of an ecologist must be sought.

APPENDIX 1: PROPOSED CONVERSION



APPENDIX 2: SITE PHOTOGRAPHS



Photograph 1: Northern elevation of barn. Photo by Ecology by Design.



Photograph 2: Eastern and southern elevation of barn. Photo by Ecology by Design.



Photograph 3: Western elevation of barn.



Photograph 4: Cracks and crevices in internal stonework. Photo by Ecology by Design.



Photograph 5: Internal view of northern section of barn with no roof void. Photo by Ecology by Design.



Photograph 6: Internal view of southern section of barn . Photo by Ecology by Design.



Photograph 7: Roof void within southern section of barn.



Photograph 8: Stream adjacent to southern elevation of barn. Photo by Ecology by Design.

Head Office
Rodbourne Rail Business Centre
Grange Lane
Malmesbury
SN16 0ES
Tel: 01666 825646

Surrey Office
Unit 7
Godalming Business Centre
Woolsack Way
Godalming
GU7 1XW
Tel: 01483 425714

Hampshire Office
Suite 6
Crescent House
Yonge Close
Eastleigh
SO50 9SX
Tel: 02382 026300

Email: mail@acdenv.co.uk
Website: www.acdenvironmental.co.uk

ECOLOGICAL SURVEYS * PROTECTED SPECIES LICENSING * MITIGATION * IMPACT ASSESSMENT
ARBORICULTURAL SITE MONITORING AND SUPERVISION * ARCHAEOLOGY
LANDSCAPE & VISUAL IMPACT ASSESSMENT * LANDSCAPE AUDIT * PROJECT MANAGEMENT
EXPERT WITNESS* LANDSCAPE DESIGN & PLANNING LANDSCAPE MANAGEMENT