

**Checklist - Devon Householder / Building Applications with only bat roost / bird nesting issues (please note that the Devon Wildlife Trigger Table must also be filled in a submitted)**

To speed up assessment by the LPA, this form should be completed by the Ecological Consultant and submitted at the beginning of the Ecology Report.

**Ecological consultant:** Bryony Wilgar-Jones MScRes, Qualifying Member of CIEEM, Orbis Ecology

**Date:** 13/12/2023

<b>1. Impact assessment / survey effort</b>		
Have all required impact assessments / surveys been done within the last 12 months, <u>and</u> does it meet national guidance requirements? If there have been any deviations from national guidance, please select No in the right-hand column.	Yes <input checked="" type="checkbox"/> Dates: 15/08/2023	No <input type="checkbox"/>
<b>2. Ecological impacts</b>		
<b>2a.</b> Proposal impacts on bats / birds and mitigation measures are specified.	Yes (conditions needed) <input checked="" type="checkbox"/> No (no conditions needed) <input type="checkbox"/>	
<b>2b.</b> Proposal has other ecological impacts which the LPA needs to consider (inc. potential impacts from internal or external lighting)	No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>
<b>2c.</b> Is the proposal, with mitigation, likely to result in an offence under the Conservation of Habitats and Species Regulations, therefore requiring a licence from Natural England?	Yes (go to 2.d) <input type="checkbox"/> No (go to 2.e) <input checked="" type="checkbox"/>	
<b>2d. If YES (an offence IS likely)</b> Does the roost meet any of the following criteria*: <ul style="list-style-type: none"> <li>• Three or fewer roosts are impacted by the proposals, and</li> <li>• The proposal will have a low or temporary impact, and</li> <li>• The proposal only effects: <ul style="list-style-type: none"> <li>- Low conservation status roosts for low numbers of: common pipistrelle, soprano pipistrelle, brown long-eared, whiskered, Brandt's, Daubenton's Natterer's and/or</li> <li>- Feeding, day, night and/or transitional roosts for low numbers of serotine and/or</li> <li>- Day and/or transitional roosts for low numbers of lesser horseshoe.</li> </ul> </li> </ul> <p>*note that these criteria are used by Natural England for the Low Impact Bat Class Licence CL21</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<b>2e. If NO (an offence is NOT likely)</b> Does the roost meet any of the following criteria: <ul style="list-style-type: none"> <li>• maternity or hibernation roost</li> <li>• greater horseshoe bat roost</li> <li>• grey long-eared bat roost</li> <li>• more than three species of bat found in small numbers</li> </ul>	No (none are met) <input checked="" type="checkbox"/>	Yes (one or more are met) <input type="checkbox"/>
<b>2f.</b> Does the proposal potentially impact on barn owls or other Schedule 1 birds?	No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>
<b>3. Expertise</b>		

<p>Are you, the ecological consultant, registered under either the Level 1 or the Level 2 Bat Survey Class Licence?</p> <p>If 'Yes', please enter your licence number: 2022-10414-CL17-BAT</p>	<p>Yes <input checked="" type="checkbox"/></p>	<p>No <input type="checkbox"/></p>
<p>Are you a member of CIEEM or a Registered Consultant under Annex B of the Low Impact Class Licence for bats (or under Annex C or D for a serotine or lesser horseshoe roost where relevant)?</p>	<p>Yes <input checked="" type="checkbox"/></p>	<p>No <input type="checkbox"/></p>

Devon Wildlife Checklist (to be filled in by the ecological consultant and included in the front of the Wildlife Report)

A.1 Protected and priority species (relates to question 13a in the planning application form).

A tick or cross must be placed in all boxes in column two (shaded) and then, where there is a tick, all other boxes in that row. Where species are present please email this form to Devon Biodiversity Records Centre - [DBRC@dbrc.org.uk](mailto:DBRC@dbrc.org.uk).

Location: Sanders Farm, Kentisbeare

Grid reference for centre of site (6 digit): ST 072 101

Planning Application reference: n/a

Name of surveyor and consultancy: Bryony Wilgar-Jones, Orbis Ecology

Date that surveys carried out: PRA 09/02/23, Emergence 15/08/2023

Sent to DBRC: N

Species - terrestrial, intertidal, marine	Walkover shows that suitable habitat present and reasonably likely that the species will be found? Tick or cross	Detailed survey needed to clarify impacts and mitigation requirements?	Detailed survey carried out and included?	Species Present or Assumed to be present on site Indicate with P or A and name the species	Impact on species?	Detailed Conservation Action Statement included? Sets out actions needed in relation to avoidance / mitigation / compensation / enhancement	EPS offence committed? Three tests met?	Grid reference for specific location of species (if required for large sites)
Bats (roost)	✓	✓	✓	None	None	n/a	n/a	n/a
Bats (flight line / foraging habitat)	x							
Dormice	x							
Otters	x							
Great crested newts (*check consultation zone)	x							
Cirl buntings (*check consultation zone)	x							
Barn owls	x							
Other Schedule 1 birds	x							
Breeding birds	✓	Not required						
Reptiles	x							
Native crayfish	x							
Water voles	x							
Badgers	x							
Other protected species	x							
UK BAP priority species	x							
Devon BAP key species	x							
Invasive species	x							

- Devon consultation zones for cirl buntings and great crested newts - <http://www.devon.gov.uk/index/wildlife.htm>
- UK BAP priority species - <http://jncc.defra.gov.uk/page-5717>
- Devon BAP key species - [http://www.devon.gov.uk/dbap-section\\_e.pdf](http://www.devon.gov.uk/dbap-section_e.pdf) (note that this list is currently being updated)

## A.2 Designations / important habitats / sites of geological importance (relates to questions 13 b & c in the planning application form)

A tick or cross must be placed in all boxes in column two and then, where there is a tick, all other boxes in that row.

Designation Terrestrial, intertidal, marine	Within site or potential impact Tick or cross	Name of site / habitat	Detailed Conservation Action Statement included in Report?	Habitat balance sheet included (showing area of habitats lost, gained and overall net gain)	Relevant organisation consulted & response included in the application?
<b>Statutory designations</b>					
European designations - Special Area of Conservation (SAC), Special Protection Area (SPA) and RAMSAR site or within Greater Horseshoe consultation zone	x				
Site of Special Scientific Interest (SSSIs)	x				
Marine Conservation Zone (MCZ)	x				
Local Nature Reserve (LNR)	x				
<b>Non-statutory wildlife designations</b>					
County Wildlife Site (CWS)	x				
Ancient woodland	x				
Special Verge	x				
UK BAP Priority habitat	x				
Local Biodiversity Network (mapped by Devon Wildlife Trust / through Green Infrastructure work)	x				
<b>Non-statutory geological designation</b>					
County Geological Site (CGS or RIGS)	x				

- List of UK BAP priority habitats - <http://jncc.defra.gov.uk/page-5718>

Table headings last updated: 22nd September 2014



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## **Final Bat Survey Report**

**Proposed Restoration and Conversion**

Sanders Farm

Croyle

Kentisbeare

Devon

EX15 2AN

**Prepared on behalf of:**

Mr Will Sanders



## Quality Assurance Record

This report has been produced in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Report Writing 2017<sup>1</sup> and the BCT Bat Surveys for Professional Ecologists Good Practice Guidelines (Collins 2016)<sup>2</sup>. The report has been prepared in line with current best practice guidance and survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance<sup>3</sup>.

Quality Assurance	
Description:	Final Bat Report
Produced For:	Mr Will Sanders
Issue:	1
Report Reference:	ORB_3051_BWJ
Date of Issue:	13 December 2023
Date of Survey Works:	PRA: 9 <sup>th</sup> February 2023 Bat emergence survey: August 2023
Author:	<b>Bryony Wilgar-Jones MScRes</b> Ecologist <a href="mailto:bryonywj@orbisecology.co.uk">bryonywj@orbisecology.co.uk</a>
Checked and Reviewed by:	<b>Bryony Gillett MSc MCIEEM</b> Senior Ecologist <a href="mailto:bryony@orbisecology.co.uk">bryony@orbisecology.co.uk</a>

## Disclaimer

This is a technical report which does not represent legal advice. You may wish to seek legal advice if this is required. This report may or may not be suitable to support a planning application. Should this report contain recommendations for further survey work or assessment, the results of this would be required in the form of an Ecological Impact Appraisal in order to support a planning application.

## Copyright

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<sup>1</sup> Chartered Institute of Ecology and Environmental Management (2017). *Guidelines for Ecological Report Writing. Technical Guidance Series.* [https://www.cieem.net/data/files/Publications/Ecological\\_Report\\_Writing\\_Dec2017.pdf](https://www.cieem.net/data/files/Publications/Ecological_Report_Writing_Dec2017.pdf)

<sup>2</sup> Collins, J, (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).* The Bat Conservation Trust, London.

<sup>3</sup> <https://www.cieem.net/sources-of-survey-methods-sosm>

## Contents

	Page
<b>1</b>	<b>Executive Summary..... 6</b>
<b>2</b>	<b>Introduction..... 8</b>
2.1	Purpose of Survey..... 8
2.2	Site Location ..... 8
2.3	Site Description..... 10
2.4	Proposed Development..... 10
2.5	Conclusions of the Preliminary Ecological Appraisal..... 15
<b>3</b>	<b>Dusk Emergence Surveys ..... 17</b>
3.1	Survey Details ..... 17
3.2	Survey Information..... 17
3.3	Survey Constraints..... 17
<b>4</b>	<b>Results..... 19</b>
4.1	Bats..... 19
4.2	Birds..... 19
<b>5</b>	<b>Evaluation and Impact Assessment..... 20</b>
5.1	Bats..... 20
5.2	Birds..... 20
<b>6</b>	<b>Required Actions..... 21</b>
6.1	Bats..... 21
6.2	Birds..... 22
<b>7</b>	<b>Biodiversity Enhancement..... 23</b>
7.1	Bats..... 23
7.2	Nesting Birds..... 23
<b>8</b>	<b>References..... 25</b>
<b>9</b>	<b>Appendix I: Relevant Wildlife Legislation ..... 26</b>
<b>10</b>	<b>Appendix II: Site Photos ..... 27</b>
<b>11</b>	<b>Appendix III: Camera Stills ..... 45</b>

# 1 Executive Summary

<b>Site Location</b>	<p>Sanders Farm, Kentisbeare Grid reference: ST 07261 10185</p>
<b>Survey Dates and Scope</b>	<p>Final bat survey comprising one dusk emergence survey undertaken on the 15<sup>th</sup> of August 2023.</p>
<b>Surveyor and Equipment</b>	<p>PEA survey: Amber Morgan MSci. Natural England Level 1 Bat Survey Licence 2022-10559-CL17-BAT. Dusk emergence survey: led by Bryony Gillett MSc MCIEEM 2015-14233-CLS-CLS BER0183 and assisted by 3 surveyors. Titley Scientific Anabat Scout bat detectors, one Track IR Guide Pro 19 thermal scope, three Canon XA11 video cameras and six pairs of infra-red floodlights were used during the survey.</p>
<b>Purpose of Works</b>	<p>To assess the presence/absence of crevice roosting bats as recommended by the Preliminary Ecological Appraisal (PEA) undertaken on the 19<sup>th</sup> of February 2023 undertaken by Amber Morgan, Orbis Ecology. It is proposed to convert Barn 1 into a dwelling. The structure of the farmhouse will be protected and strengthened using scaffolding, timber frames, polythene and lime mortar capping. In the long-term, the farmhouse will be rebuilt.</p>
<b>Summary of Results and Assessment</b>	<p>No bats were recorded emerging from the building during the emergence survey. It is therefore concluded that bats are not roosting within the buildings during the summer. External and internal crevices in the cob and stone walls of the house and Barn 1 are suitable for use by hibernating bats and may be used opportunistically. Infilling of crevices during the winter may result in harm to hibernating bats. Timing of works is required to avoid impacts on hibernating bats (see Section 6). Birds may nest inside the buildings or in vegetation covering the buildings. There may be impacts on nesting birds if works to the buildings or to remove vegetation are carried out during the breeding season (1st March to 31st August).</p>
<b>Required Actions and Recommendations and Enhancement</b>	<p>Bats can arrive at any time and may enter partially built or renovated buildings and therefore be at risk of injury or killing. A precautionary approach to works is required. Crevices in exterior walls will be retained where structurally possible to retain features suitable for hibernating bats. No works to fill crevices will take place during the hibernation season (November to March). If any filling of crevices is required, works will take place during April to the end of October. Crevices should be carefully checked prior to filling and any walls should be dismantled carefully by hand. If bats are discovered during development work, the contractor must stop work and gain advice before proceeding. Bats should not be handled or removed in any way. Advice can be sought from:</p> <ul style="list-style-type: none"> <li>• Orbis Ecology 01626 638042 <a href="http://www.orbisecology.co.uk">www.orbisecology.co.uk</a></li> </ul> <p>To prevent impacts on bats as a result of light spill and exterior lighting, guidance on lighting in Section 6 must be followed.</p>



	<p>Works to the buildings or to remove vegetation on the buildings should commence outside of the bird nesting season 1st of March to 31st of August inclusive, or when the last young have fledged should that be later. No works should commence during the bird nesting season unless a competent ecologist has undertaken a careful, detailed check of the property for active birds' nests immediately before works commence and provided written confirmation that no birds will be harmed or that there are appropriate measures in place to protect nesting bird interest on site. To enhance the Site for bats and nesting birds, bat and bird boxes will be installed. The suggested locations can be found in Section 7.</p>
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## 2 Introduction

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### 2.1 Purpose of Survey

2.1.1 The report was commissioned by the client, Mr Will Sanders and has been prepared by Bryony Wilgar-Jones MScRes. Bryony is a Qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follows the institutes Code of Professional Conduct when undertaking ecological work. Bryony holds a Bat Level 1 Survey Class Licence reference number 2022-10414-CL17-BAT.

2.1.2 The purpose of the appraisal is to assess the conservation value of the site and the presence or likely presence of protected species which may constitute a potential constraint to the proposed works. Where relevant, recommendations to avoid and mitigate anticipated ecological impacts have been given.

2.1.3 Relevant wildlife legislation is contained in **Appendix I**.

### 2.2 Site Location

2.2.1 The site is located around 2km north of Kentisbeare, Devon. The grid reference of the centre of the site is ST 07261 10185.

2.2.2 Fields, mature trees, mature hedgerows and woodland pockets lie within the wider landscape.

2.2.3 Ponds and associated watercourses lie to the east of the site and join the river Culm around 3km east of the site. The river Ken and associated ponds lie around 1.3km south of the site.

2.2.4 **Figure 2-1** and **Figure 2-2** below show the site location in the context of the wider surroundings.

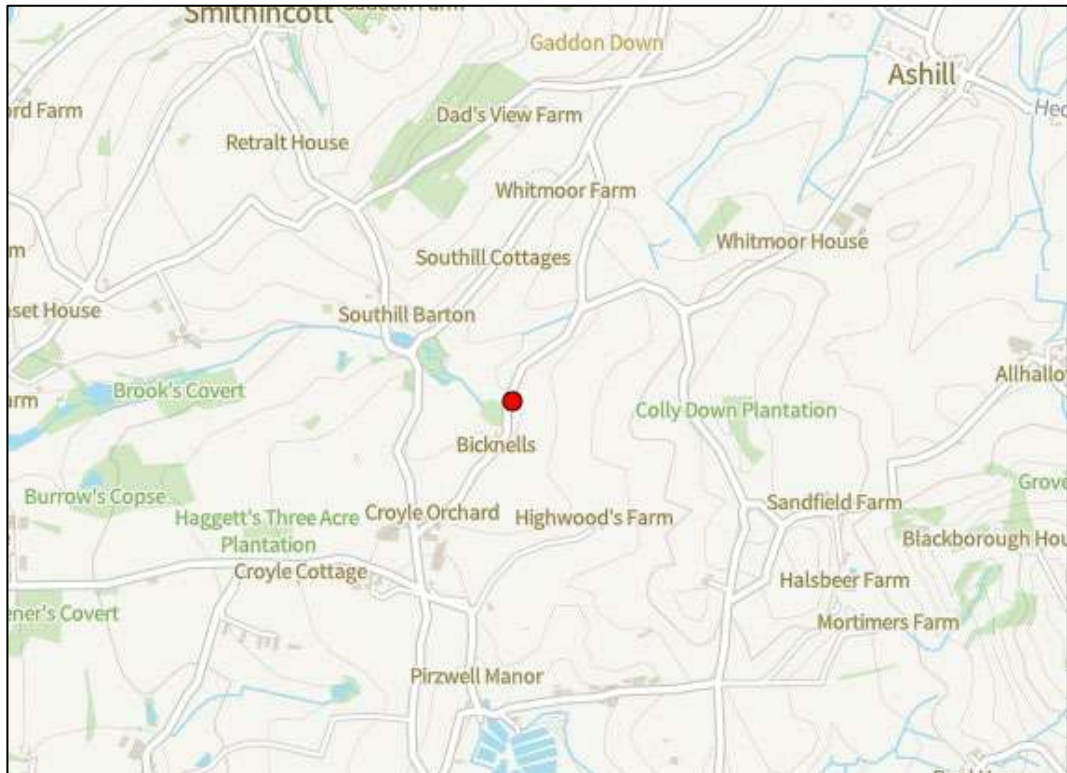


Figure 2-1: Site location. Ordnance Survey© Crown copyright. All rights reserved. Licence number 100060376.



Figure 2-2: The site in the context of the surrounding landscape.

## 2.3 Site Description

- 2.3.1 The site includes the remnants of a Grade II Listed farmhouse and three barns.
- 2.3.2 The Grade II Listed farmhouse comprises stone walls and chimney stacks. Bricks and concrete blocks are also present.
- 2.3.3 Barn 1 (The Hay Barn) is dilapidated and constructed of stone, cob and brick. Remedial works have started in response to instruction from the Highways Department who deemed the collapsed stone and cob walls on the road elevation to present a health and safety risk to the public. The original frame was dismantled as it was beyond repair and a new oak frame was built in its place.
- 2.3.4 Barn 2 is a working barn that is constructed of brick and corrugated asbestos sheeting. A wooden overhang extends to the east.
- 2.3.5 Barn 3 is a working barn that is constructed of brick and stone with a corrugated asbestos sheet roof.
- 2.3.6 A site plan is provided in **Figure 2-3**. Existing elevations of the Hay Barn and Working Barn 2 are provided in **Figure 2-4**. Photos are contained in **Appendix II**.

## 2.4 Proposed Development

- 2.4.1 It is proposed to convert Barn 1 into a dwelling.
- 2.4.2 The structure of the farmhouse will be protected and strengthened using scaffolding, timber frames, polythene and lime mortar capping. Vegetation will be removed from the walls. In the long-term, the farmhouse will be rebuilt.
- 2.4.3 The proposed elevations are shown in **Figures 2-5 to 2-9**.
- 2.4.4 Barns 2 and 3 may be altered but will remain as working barns.

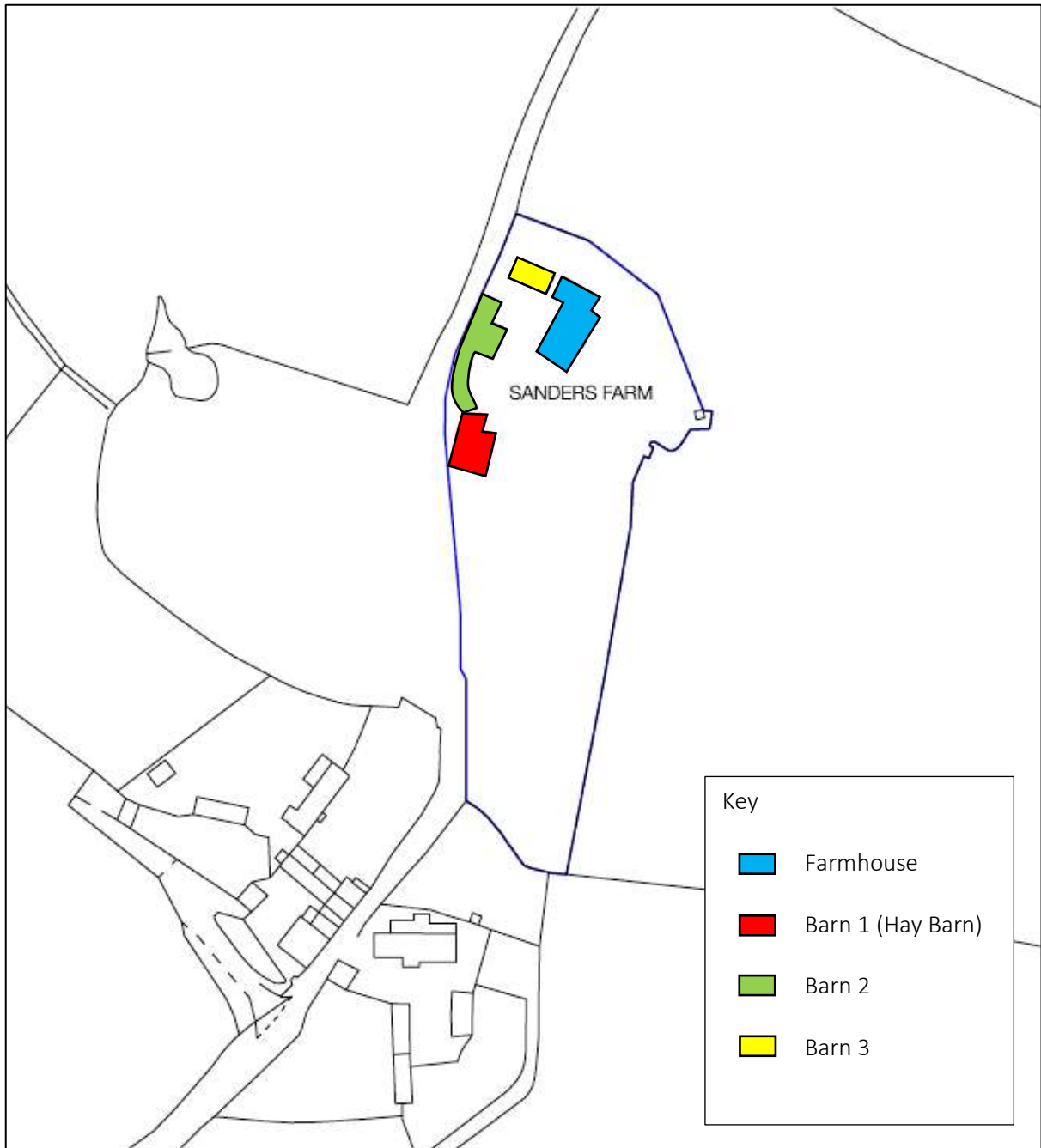


Figure 2-3: Site plan.

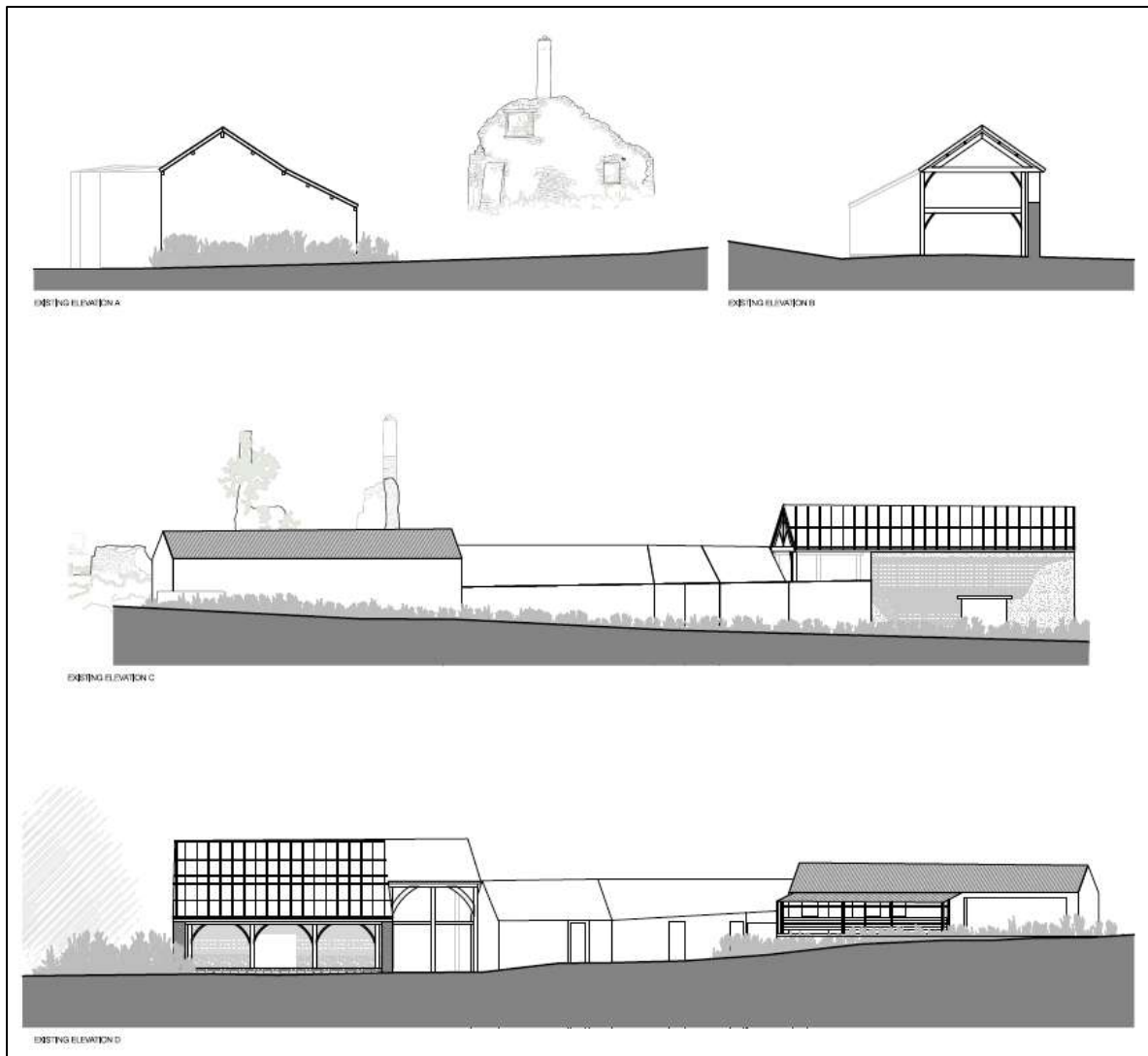


Figure 2-4: Existing elevations of Barns 1 and 2.



Figure 2-5: Proposed elevations of the hay barn, Barn 1

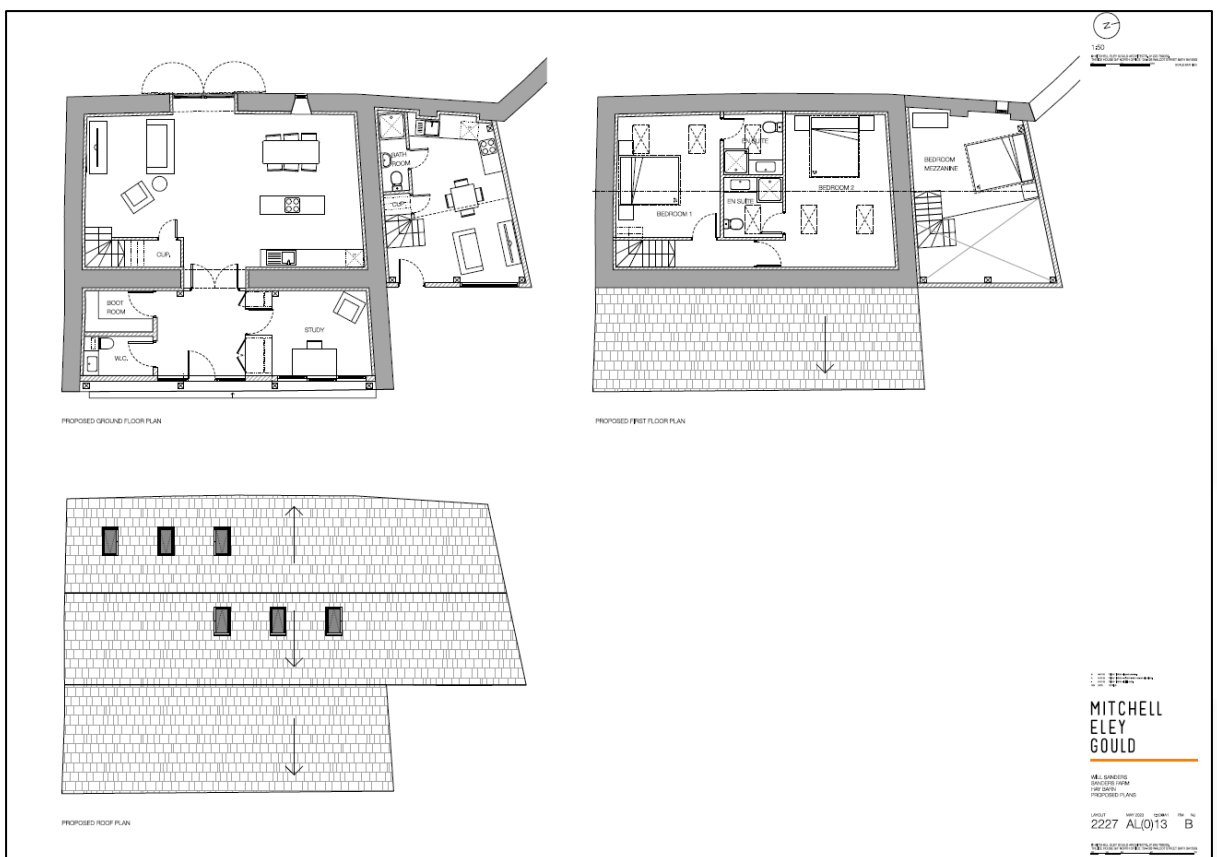


Figure 2-6: Proposed plan, Barn 1 (Hay Barn)



Figure 2-7: Farmhouse proposed plan

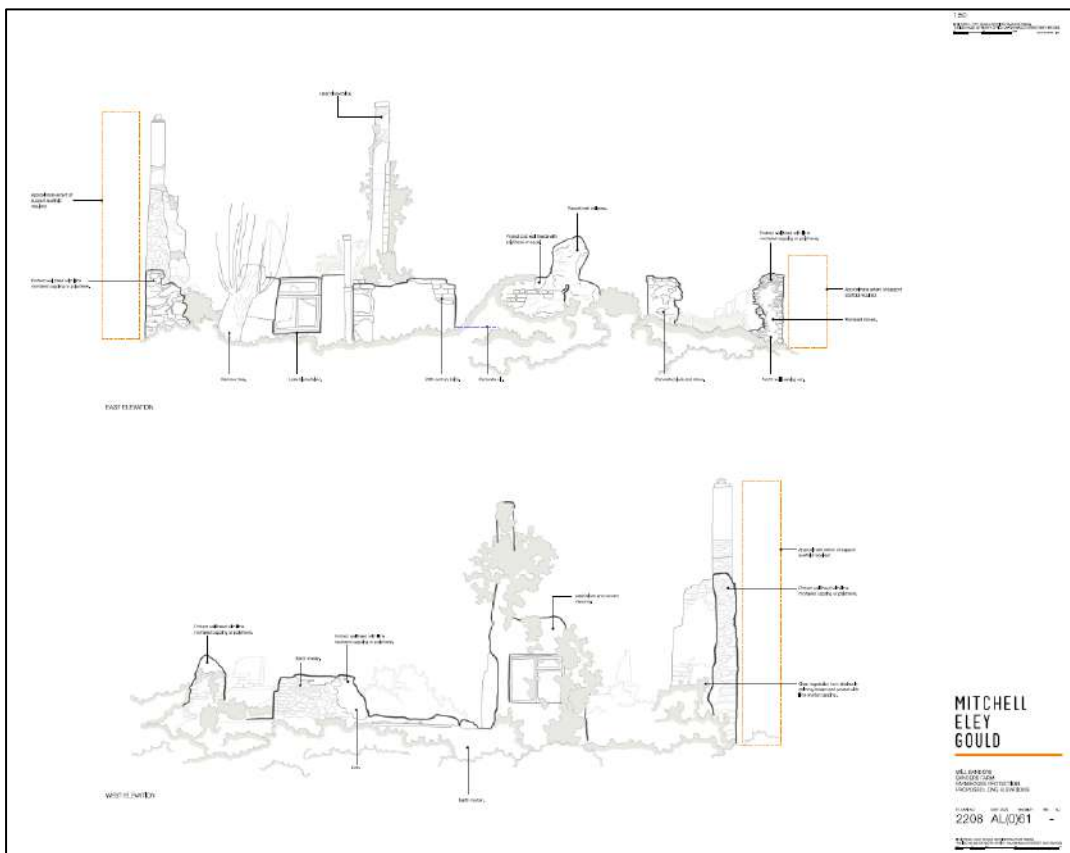


Figure 2-8: Farmhouse proposed long elevations



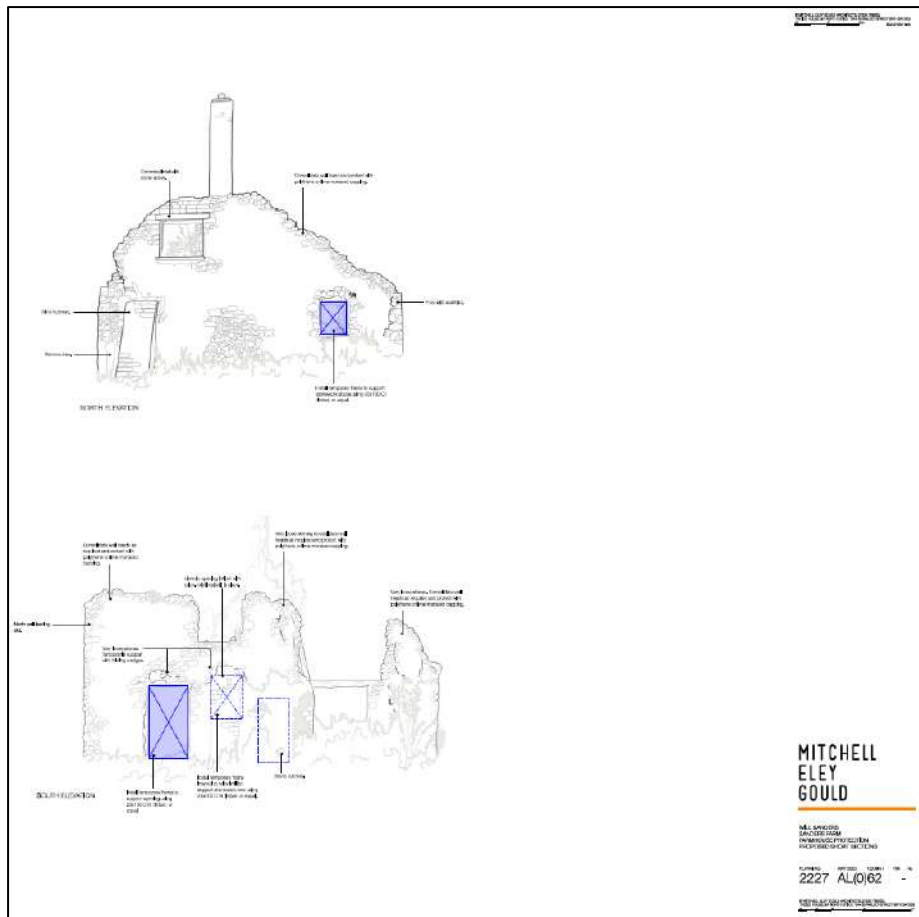


Figure 2-9: Farmhouse proposed short elevations

## 2.5 Conclusions of the Preliminary Ecological Appraisal

2.5.1 A Preliminary Ecological Appraisal was carried out at the site on the 9<sup>th</sup> of February 2023 by Amber Morgan MSci, Qualifying Member CIEEM, Orbis Ecology Ltd. The survey comprised a Preliminary Roost Assessment for bats and nesting birds.

### Bats

2.5.2 The Farmhouse and Barn 1 were assessed as having **low** suitability for roosting bats, defined in the guidelines as *'a structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status'*. This is due to the presence of external crevices suitable for low numbers of crevice dwelling bats. Crevice roosting bats can roost in these types of locations without leaving evidence of their presence.

2.5.3 Barns 2 and 3 were assessed as having **negligible** suitability for roosting bats due to the lack of features suitable for roosting bats.

2.5.4 In the absence of any mitigation the potential impacts from the proposed works are:

- Killing/injuring/disturbing of bats during building works.

- Loss of roost sites.
- Loss of access to roost sites.

2.5.5 In line with the guidelines for sites with low suitability for roosting bats, further survey was recommended to assess the presence/absence of crevice roosting bats and characterise the roost/s if present in the form of one dusk emergence survey.

#### *Nesting Birds*

2.5.6 Birds' nests were identified in Barns 1 and 2.

2.5.7 No evidence of nesting was identified in Barn 3 or the Farmhouse, however birds may nest in these structures.

2.5.8 Birds may nest in the dense vegetation covering Barn 2 and the Farmhouse.

2.5.9 There may be impacts to nesting birds if works are undertaken during the nesting bird season, taken to run from 1st March to 31st August inclusive. All wild birds are protected under part 1 of the Wildlife and Countryside Act 1981. Therefore, in the UK it is an offence to:

- Take, damage or destroy the nest of any wild bird whilst it is being built or in use.
- Kill, injure or take any wild bird
- Take or destroy the eggs of any wild bird.

### 3 Dusk Emergence Surveys

#### 3.1 Survey Details

3.1.1 The survey was carried out according to the guidelines from the Bat Conservation Trust (Collins 2016) and the Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys (Bat Conservation Trust, May 2022).

3.1.2 Survey details are shown in **Table 3-1** below.

**Table 3-1:** Survey details.

Date	Time			Temp (°C)		Wind (Beaufort scale)		Humidity (%)		Rain
	Sunset	Start	End	Start	End	Start	End	Start	End	
15/08/2023	20:35	20:30	22:06	19	12.3	0	0	69	94	Dry

#### 3.2 Survey Information

3.2.1 Two Titley Scientific Anabat Scout bat detectors were used during the surveys.

3.2.2 Three Canon XA11 video cameras with six pairs of infra-red floodlights and one Track IR Guide Pro 19 thermal scope were used to assist the surveyors in low light conditions during the emergence surveys.

3.2.3 Surveyor and camera locations are shown in **Figure 3-1** below.

3.2.4 Stills extracted from the video footage at the end of an emergence survey with infra-red floodlights are provided in **Appendix III**.

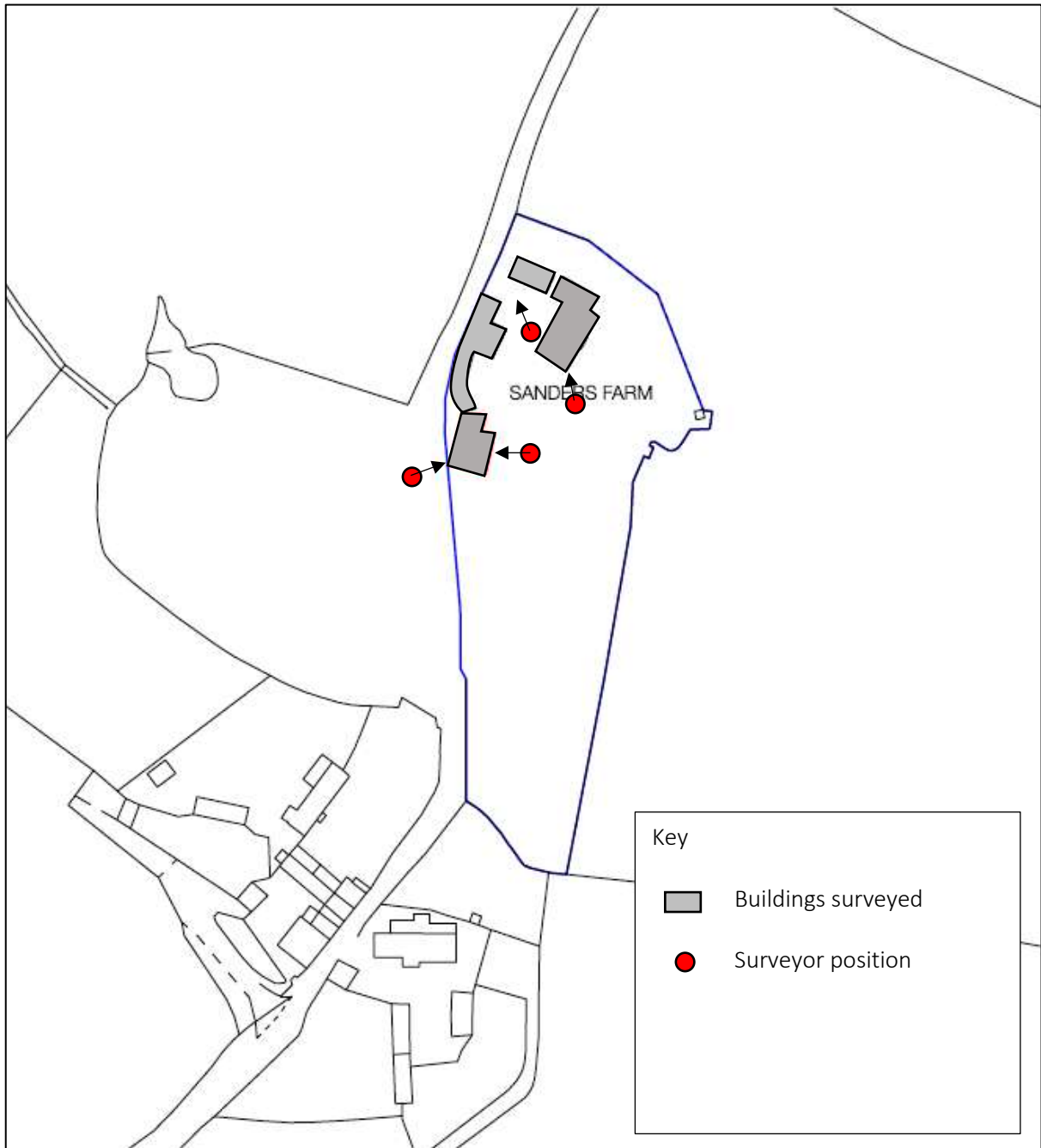
3.2.5 The surveyors employed in carrying out the surveys are listed in **Table 3-2** below:

**Table 3-2:** Surveyor details.

Date	Name	Licence/Experience
15/08/2023	Bryony Gillett MSc MCIEEM	2015-14233-CLS-CLS
	Bryony Wilgar-Jones MScRes	2022-10414-CL17-BAT
	Emma Frewin	Experienced bat surveyor
	Charlotte Frewin	Experienced bat surveyor

#### 3.3 Survey Constraints

3.3.1 Visibility of the farmhouse were restricted by dense brambles. Visibility of Barn 1 was restricted due to scaffolding and plastic sheeting covering the building.



**Figure 3-1:** Proposed locations of surveyors during dusk emergence surveys.

## 4 Results

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### 4.1 Bats

4.1.1 No bats emerged from the buildings during the emergence survey.

4.1.2 Long-eared bats were observed entering Barn 1 and flying within the barn, before exiting. No roosting behaviour was observed.

4.1.3 Activity was moderate overall, mostly comprising common pipistrelle *Pipistrellus pipistrellus* bats commuting along the road to the west of the barn. Soprano pipistrelle *Pipistrellus pygmaeus*, serotine *Eptesicus serotinus*, *Myotis* and noctule *Nyctalus noctula* bats were also recorded occasionally.

### 4.2 Birds

4.2.1 No additional evidence of nesting birds was recorded during the emergence survey.

## 5 Evaluation and Impact Assessment

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### 5.1 Bats

- 5.1.1 No bats were recorded emerging from the buildings during the dusk emergence survey and it is therefore concluded that bats are not roosting within the buildings during the summer.
- 5.1.2 External and internal crevices in the cob and stone walls of the house and Barn 1 are suitable for use by hibernating bats and may be used opportunistically. Infilling of crevices during the winter may result in harm to hibernating bats. Timing of works is required to avoid impacts on hibernating bats (see Section 6).
- 5.1.3 There are no further impacts predicted to bats or bat roosts as a result of the proposed works to convert barn 1 and stabilise/renovate the house.
- 5.1.4 Research has shown that inappropriate and intrusive lighting can impact bats and affect how they forage and travel across the landscape. In addition, it has been found that there are some competitive advantages for some species (such as pipistrelle bats) which can benefit from the increased foraging opportunities provided by moths attracted to UV lights. However, this may lead to competitive exclusion of those species unable to take advantage of new artificially illuminated areas (such as horseshoe species). The proposed design for Barn 1 has a low level of glazing with windows located at ground level. There are six small roof lights. The low level of glazing is unlikely to result in excess light spill onto habitats and is unlikely to impact foraging and commuting bats. Poorly designed exterior lighting could have an impact on commuting and foraging bats using the habitats.
- 5.1.5 Guidance on internal and external lighting should be followed to prevent impacts on bats as a result of light spill (see **Section 6**).

### 5.2 Birds

- 5.2.1 There are potential impacts to nesting birds if works to the buildings or to remove vegetation on the buildings is undertaken during the nesting season take place during the breeding season, taken to run from 1<sup>st</sup> March - 31<sup>st</sup> August. All wild birds are protected under part 1 of the Wildlife and Countryside Act 1981. Therefore, in the UK it is an offence to:
- Take, damage or destroy the nest of any wild bird whilst it is being built or in use.
  - Kill, injure or take any wild bird
  - Take or destroy the eggs of any wild bird.

## 6 Required Actions

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### 6.1 Bats

6.1.1 Bats can arrive at any time and may enter partially built or renovated buildings and therefore be at risk of injury or killing. A precautionary approach to works is required.

6.1.2 Crevices in exterior walls will be retained where structurally possible to retain features suitable for hibernating bats. No works to fill crevices will take place during the hibernation season (November to March). If any filling of crevices is required, works will take place during April to the end of October. Crevices should be carefully checked prior to filling and any walls should be dismantled carefully by hand. If bats are discovered during development work, the contractor must stop work and gain advice before proceeding. Bats should not be handled or removed in any way. Advice can be sought from:

- Orbis Ecology 01626 638042 [www.orbisecology.co.uk](http://www.orbisecology.co.uk)

6.1.3 Enhancements for roosting bats will be provided as detailed in Section 7.

#### *Lighting*

6.1.4 External lighting will be avoided to minimise impacts. Specifications and design of internal and external lighting (such as essential security lighting) will follow the recommendations laid out in the most recent guidance<sup>4</sup>.

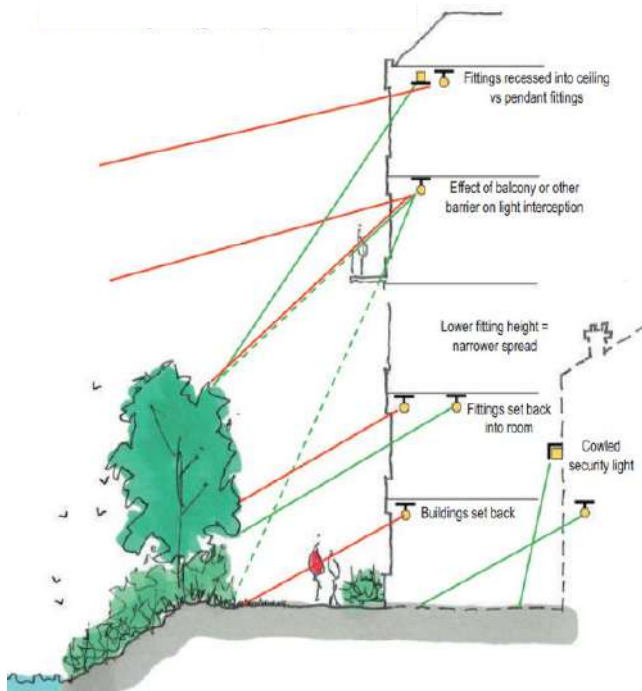
- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability
- A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats
- Internal luminaires can be recessed (as opposed to using a pendant fitting) where installed in proximity to windows to reduce glare and light spill
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt

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<sup>4</sup> Institute of Lighting Professionals (2023) *Bats and artificial lighting at night. ILP Guidance Note 08/23.*

- Where appropriate, external security lighting should be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.

6.1.5 Internal lighting should follow the principles set out in **Figure 6-1** below.



**Figure 6-1** : Internal lighting mitigation options (ILP 2023)

## 6.2 Birds

6.2.1 Works to the buildings or to remove vegetation on the buildings should commence outside of the bird nesting season 1<sup>st</sup> of March to 31<sup>st</sup> of August inclusive, or when the last young have fledged should that be later. No works should commence during the bird nesting season unless a competent ecologist has undertaken a careful, detailed check of the property for active birds' nests immediately before works commence and provided written confirmation that no birds will be harmed or that there are appropriate measures in place to protect nesting bird interest on site.

6.2.2 As an enhancement to the site, nesting provision for birds will be provided as detailed in **Section 7**.



## 7 Biodiversity Enhancement

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### 7.1 Bats

7.1.1 Provision for bats should be integrated into the development comprising a minimum of 2 bat box. The recommended bat box is the integrated Green and Blue Bat Block (see <https://www.greenandblue.co.uk/products/bat-block-bat-brick>). If it is not possible to use an integrated bat box, an external bat box such as the Beaumaris Woodstone Bat Box (<https://www.nhbs.com/beaumaris-woodstone-bat-box>) should be installed instead. Bat boxes should be located:

- Where bats are known to feed and navigate (close to hedges and tree lines);
- Ideally at least 4m above the ground (where safe installation is possible);
- Away from artificial light sources (to protect them from predation); and
- Sheltered from strong winds and exposed to the sun for part of the day (usually south, south-east or south-west).

7.1.2 The final location and design of all bat boxes will be agreed with the ecologist and drawn on the submitted plans. The suggested locations are shown in **Figure 7-1**.

### 7.2 Nesting Birds

7.2.1 Provision for nesting birds should be integrated into the new dwelling in the form of 2x swift blocks. Recent evidence suggests that swift blocks are a good multi-purpose option for nesting birds, with other small cavity nesting species (e.g. sparrows) making use of them, often in preference to species specific boxes such as sparrow terraces.

7.2.2 The recommended swift block is the Green and Blue Swift Block (available at <https://www.greenandblue.co.uk/products/bat-block-bat-brick>). The block is designed to create nesting space for swifts that can be easily integrated into new builds or retrofitted in existing properties. The front of the Swift Block is designed to sit flush with the outside bricks of a build, with the entrance slightly protruding. The Swift Block features an internal nesting bowl, a small entrance hole to deter larger birds and predators, full instructions cast into the surface for easy fitting, and a stylish entrance feature.

7.2.3 The Swift Block should be positioned at least 5m from ground level avoiding south facing walls, on the side of a building that gets shade during the day, or under an overhang or eaves. It should be mounted away from windows and vents and predator access. Swift Blocks should also be placed in a spot with clear adjacent access, allowing high speed, direct flight entry.

7.2.4 The final location and design of the bird boxes will be agreed with the ecologist and drawn on the submitted plans.

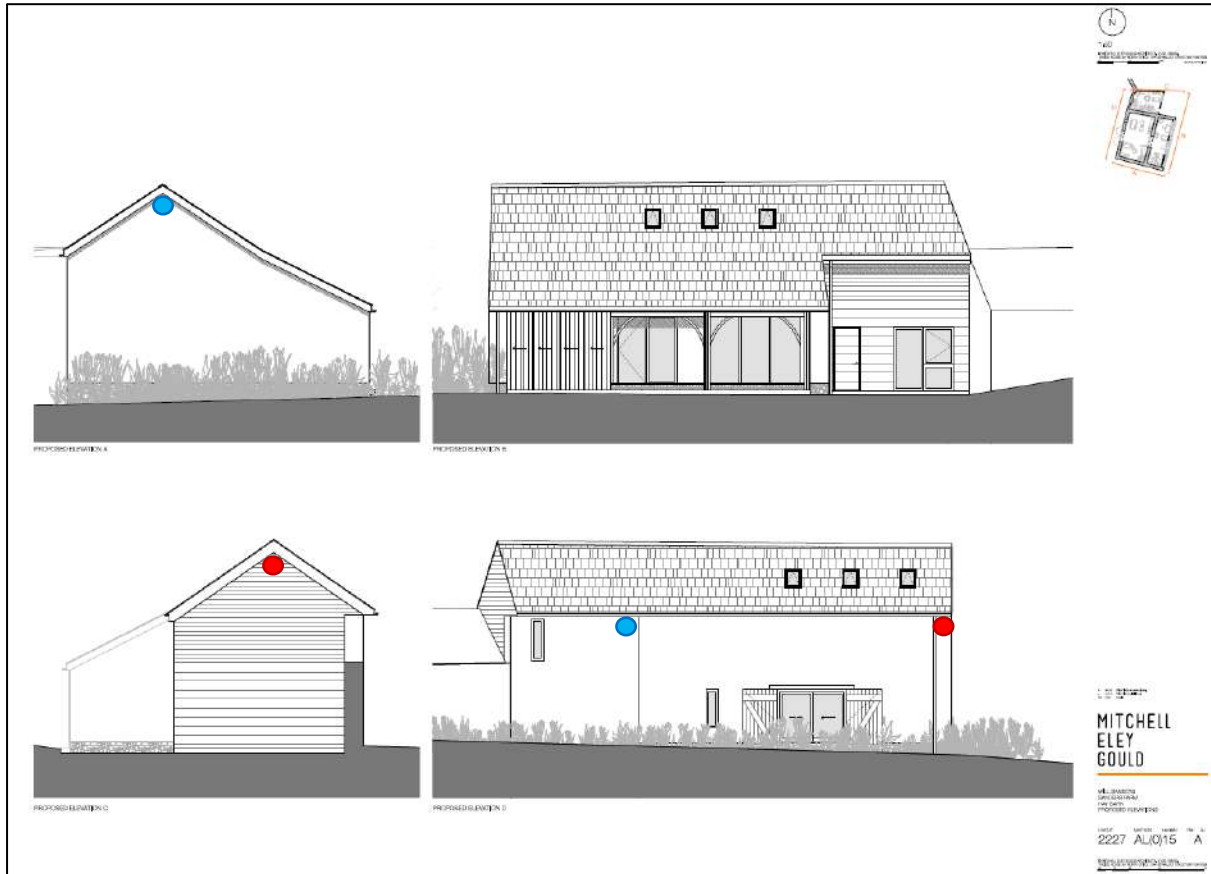


Figure 7-1: Proposed locations for bat (red) and bird (blue) boxes

## 8 References

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Bat Conservation Trust (2022) *Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys*. The Bat Conservation Trust, London.

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

## 9 Appendix I: Relevant Wildlife Legislation

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### Bats

The Bern Convention (The Convention on the conservation of European Wildlife and Natural Habitats) was adopted in 1979 and came into force in 1982. To implement this agreement, the European Community (EC) adopted the European Union (EU) Habitats Directive. The EC Habitats Directive has been transposed into UK legislation by the Wildlife and Countryside Act, 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010. The Countryside and Rights of Way Act (CROW), 2000 strengthened the existing wildlife legislation in the UK.

The UK has also signed the Bonn Convention (The Convention on the Conservation of Migratory Species of Wild Animals) and is therefore party to various agreements.

All UK species of bats are European Protected Species. In relation to a development a person commits an offence if they –

- Deliberately disturb European Protected Species in particular any disturbance which is likely to impair their ability to survive, breed or reproduce, or to rear or nurture their young.
- Intentionally or recklessly disturb any schedule 5 animal while it is occupying a structure or place which it uses for protection or shelter.
- Damage or destroy the breeding site or resting place (even if it is unintentional or when animals are not present).
- Deliberately capture, injure or kill any European Protected Species

### Nesting Birds

All wild birds are protected under part 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, in the UK it is an offence to:

- Take, damage or destroy the nest of any wild bird whilst it is being built or in use.
- Kill, injure or take any wild bird
- Take or destroy the eggs of any wild bird

To avoid committing an offence no works should be carried out on a structure/feature that is being used by nesting birds. Nesting is deemed to be over when the young have fully fledged.



**Photo 1:** Farmhouse photographed from the south.



**Photo 2:** Farmhouse photographed from the west.



**Photo 3:** North wall of Farmhouse photographed from the south.



**Photo 4:** North wall of Farmhouse photographed from the east.



**Photo 5:** Farmhouse photographed from the north-east.



**Photo 6:** South of Farmhouse photographed from the east.



**Photo 7:** South wall of Farmhouse photographed from the north.



**Photo 8:** South fireplace.





**Photo 9:** South chimney breast interior.



**Photo 10:** Farmhouse.



**Photo 11:** North and east elevations of Barn 1.



**Photo 12:** North elevation of Barn 1.



**Photo 13:** South elevation of Barn 1.



**Photo 14:** West elevation of Barn 1.



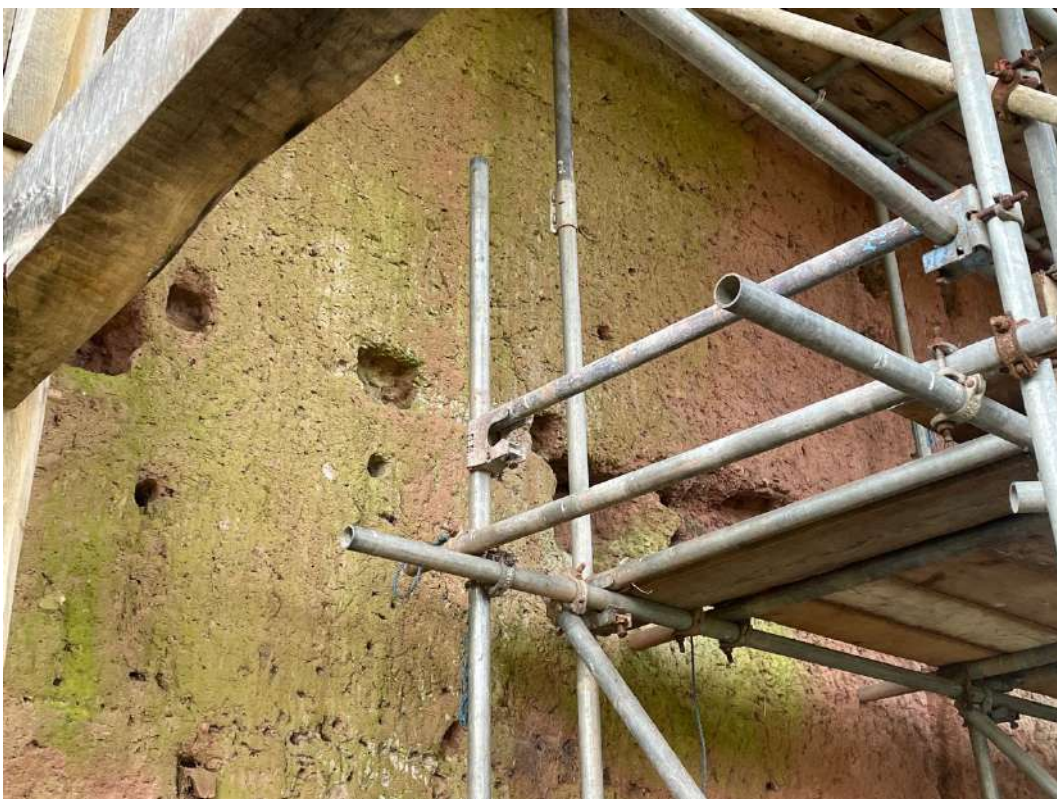
**Photo 15:** Collapsed west elevation of Barn 1.



**Photo 16:** Barn 1 interior (to north).



**Photo 17:** Crevices in Barn 1 stonework.



**Photo 18:** Crevices in Barn 1 cob.



**Photo 19:** Crevices in Barn 1 cob.



**Photo 20:** Crevices in Barn 1 cob.



**Photo 21:** Bird's nest in Barn 1.



**Photo 22:** East elevation of Barn 2.



**Photo 23:** East elevation of Barn 2.



**Photo 24:** East elevation of Barn 2.





**Photo 25:** East and north elevations of Barn 2.



**Photo 26:** North elevation of Barn 2.



**Photo 27:** West elevation of Barn 2.



**Photo 28:** West elevation of Barn 2.



**Photo 29:** Barn 2 interior.



**Photo 30:** Barn 2 interior.



**Photo 31:** Barn 2 interior.



**Photo 32:** Bird's nest in Barn 2.



**Photo 33:** South and west elevations of Barn 3.



**Photo 34:** North and east elevations of Barn 3.



Photo 35: Barn 3 interior.



Photo 36: Barn 3 interior.

## 11 Appendix III: Camera Stills

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Southeast surveyor, start of survey: 20:36



Southeast surveyor, end of survey: 22:06



North surveyor, start of survey: 20:35



North surveyor, end of Survey: 22:10





East surveyor, start of survey: 20:35



East surveyor, end of survey: 22:05



South surveyor start of survey 15.08.23



South surveyor, end of survey 15.08.23