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PRELIMINARY ECOLOGICAL APPRAISAL & PRELIMINARY BAT ROOST ASSESSMENT OF:

CASTLE FARM WORKSHOP
OLD TOWN
ST MARY'S
ISLES OF SCILLY
TR21 0NN

Client: Mr Steve Harding

Our reference: BS43 - 2021

Report date: 16th April 2021

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Report peer reviewed: Sarah Mason

Report signed off: Sarah Mason

REPORT ISSUED IN ELECTRONIC FORMAT ONLY

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Contents

Non-Technical Summary

- On 16th April 2021, the Isles of Scilly Wildlife Trust (IoSWT) conducted a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) of Castle Farm Workshop, Old Town, St Mary's, Isles of Scilly, TR21 0NN (BS43-2021), for which there is a proposal to convert the existing barn to provide 1st floor accommodation and ground floor workshop, including raising of the existing ridgeline by approximately 1m.
- This report outlines the findings of the PEA and PRA assessment and provides advice based on the surveys' conclusions.
- The findings from the desk study revealed that 6 species of bat have been recorded and 21 known roosts are found within 2km within the zone of interest 3 within 500m of the proposed development.
- The desk study found that no bats had been recorded at Castle Farm Workshop in the past.
- During the PRA an external/internal inspection of the building was undertaken (where accessible).
- The immediate area around the development provides optimal feeding and commuting habitat for bats which is also linked to the wider countryside and falls within the typical core sustenance zones of all 6 species of bat.
- No evidence of nesting birds was found.
- House Mouse and Lesser White-toothed Shrew droppings were found during the inspection.
- The proposed development, both externally and internally presented with negligible roost features for all recorded species of bat; therefore, the characteristics of the building and the surrounding habitat suggest **negligible roost potential for bats**.
- To assist in meeting both national and local planning policy obligations for net gains in biodiversity the proposed development should undertake at least one of the suggested enhancement measures outlined in this report.
- The recommendations of this PEA and PRA are that no further surveys or an EPS license application are required.
- Other than bats, if the recommendations given in this report are adhered to, there should be no further ecological constraints to the proposal.
- **This report is sufficient to support a planning application.**

1.0 Introduction

1.1 Survey and reporting

This report details the results of a preliminary ecological appraisal (PEA) and a preliminary bat roost assessment (PRA) of Castle Farm Workshop, Old Town, St Mary's, Isles of Scilly TR21 0NN. The survey, carried out on 16th April 2021.

1.2 The application site

Castle Farm Workshop is located on the north-west edge of Old Town, St Mary's (National Grid Reference SV9144910360). The application site is comprised of a 1 and half storey, semi-detached barn set back from the main throughfare (see Figure 1 below).

Figure 1. Castle Farm Workshop general location

1.3 Details of proposed works

The application proposes to convert the existing one and a half storey barn to provide 1st floor accommodation and a ground floor workshop, which includes raising the existing ridgeline by approximately 1m to match the semi-detached property to the north-east.

Photo 1. Castle Farm Workshop south-east elevation

2.0 Methodology

2.1 Preliminary Ecological Appraisal - Desk Study

A desk study data search was undertaken. This involved carrying out a review of the Local Records Centres (LRC) available records for bat species and publicly available datasets and citations of statutory designated sites of importance for nature conservation for sites within the zone of influence (ZOI) of the survey area (considered to be a maximum of 2km in this case). The desk study was also undertaken to identify habitats and features that are likely to be important for bats and assess their connectivity through the use of aerial photographs.

2.2 Preliminary Bat Roost Assessment

The Preliminary Bat Roost Assessment comprised a survey of the building for bats, signs of bats and features potentially suitable for use by roosting bats, and an assessment of the surrounding habitat in terms of its suitability for commuting and foraging bats.

The survey consisted of a ground-based inspection and a detailed search of the interior and exterior of the building (from ground level), looking for bats and/or evidence of bats including droppings (on walls and windowsills and in roof and loft spaces), rub or scratch marks, staining at potential roosts and exit holes, live or dead bats and features, such as raised or missing tiles, potentially suitable for use by roosting bats. Binoculars, a ladder a high-powered torch and endoscope were used as required.

2.3 Classification of building

The building was classified according to its suitability for use by roosting bats. The classification was dependent on a number of factors including (but not limited to):

- Bats and/or signs of bats
- External and internal features potentially suitable for use by roosting bats (e.g. raised or missing tiles, gaps behind fascia boards etc).
- Setting
- Night-time light levels
- Disturbance levels
- Proximity of suitable foraging habitat and commuting routes (e.g. ponds, streams, woodland, large gardens, hedgerows).

The categories used to classify buildings and the survey effort required to determine the presence or absence of bats (as per the Bat Conservation Trust's Bat Survey Guidelines[1], referred to by Natural England in their standing advice to planning officers) are described in Table 1 (see below).

2.4 Surveyor details

The survey was undertaken by Darren Mason BSc (Hons) of the Isles of Scilly Wildlife Trust. Darren has undertaken professional Bat Licence Training and holds a Natural England WML-A34-Level 2 (Class 2 License); registration number: 2020-46277-CLS-CLS which permits him to survey bats using artificial light, endoscopes, hand and hand-held static nets.

Table 1 – Description of the categories used to classify a building's bat roost potential and the survey effort required to determine the likely presence or absence of bats

Bat Roost Potential	Roost Potential	Description	Survey effort required to determine the likely presence or absence of bats
	High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat	Three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey.
	Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat	Two or three dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
	Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. But these sites do not provide appropriate conditions or surrounding habitat to be used on a regular basis or by larger number of bats	One or two dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
	Negligible	Negligible habitat features on site likely to be used by roosting, commuting or foraging bats	No further surveys required.

Table 1. Categorising and classifying a building's bat roost potential

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

3. Results

Preliminary Ecological Appraisal

3.1 Pre-existing information on bat species

The desk study showed that no bats have previously been recorded within Castle Farm Workshop. A data search of LRC records for bats also revealed information on 6 species of bat recorded within the 2km ZOI of the site. The species conclusively identified were Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Brown Long-eared Bat (*Plecotus* auritus) both UK Biodiversity Action Plan (BAP) priority species, Whiskered Bat (*Myotis mystacinus*) and the rare Leisler's Bat (*Nyctalus leisleri)* and Nathusius Pipistrelle (*Pipistrellus nathusii*). 21 bat roosts are known to exist within 2km of the proposed development, with 3 within 500m of the property.

3.2 Statutory and non-statutory sites

In addition, the desk study revealed the presence of the following statutory designated sites within the 2Km ZOI of the site:

i.) **Lower Moors SSSI –** Situated 365m due west of Mainland Marketing lies Lower Moors SSSI. A topogenous mire that has a range of wetland habitats supporting a diverse range of wetland wildflower species, including the Nationally Scarce Tubular Water-dropwort (*Oenanthe fistulosa*). The site also holds locally important populations of Royal Fern (*Osmunda reglis*) and Southern Marsh Orchid (*Dactylhoriza praetermissa*) and is particularly important feeding for passage and wintering birds including Corncrake (*Crex crex*) and Spotted Crake (*Porzana porzana*).

ii.) **Higher Moors & Porth Hellick Pool SSSI –** 445m north-east of the proposed development is Higher Moors SSSI. A topogenous mire designated for several rare and notable plant species) including; Bog pimpernel (*Anagallis tenella*), Star Sedge (*Carex echinata*) and Marsh St John's-wort (*Hypericum elodes*).

iii.) **Peninnis Head SSSI –** Lying 915m south-west of the proposed development is Peninnis Head SSSI. The site designated primarily for its maritime heathland, maritime grassland and scrub habitats together with good populations of a number of rare plant and lichen species, in addition to its significant quaternary geomorphology.

iv.) **Porthloo SSSI –** Situated 1.1km north-west of the proposed development lies Porthloo SSSI designated for its geology, particularly for its Quaternary sediments in the cliffs that show changes in the climates and environments of the Quaternary period in Scilly.

v.) **Watermill Cove SSSI –** Lying 1.8km north-east of Mainland Marketing, Watermill Cove SSSI is designated for its cliff exposures of Quaternary sediments, that clearly show the sequence of changes in the climate and environment during the Quarternary period.

3.3 Habitats surrounding the application site

Castle Farm Workshop is found in the south of St Mary's, sitting on the north-west edge of Old Town, a small conurbation of approximately 75 dwellings, gardens and associated outbuildings. The land east of the development comprises solely of the airport apron, including the tower, main building, runways and its surrounding open, well-mown neutral grassland that extends to approximately 500m. Further east lies the open, conservation grazed coastal headland of Salakee Down, along with Inner and Outer Blue Carns which consist of a mosaic of coastal grassland, heathland and scrub. To the north-east the habitat consists primarily of small, cultivated fields used for flower-farming. These fields which are bound by mature hedgerows of Pittosporum (*Pittosporum tenufolium*). These hedgerows make an almost contiguous habitat which adjoins the linear shelterbelts of Montery Pine (*Pinus radiata*), Lodgepole Pine (*Pinus contorta*) and rarely Sitka Spruce (*Picea sitchensis*) along with mature copses of Dutch Elm (Ulmus x hollandica) and English Elm (*Ulmus procera*).

The two wetland SSSI's of Lower & Higher Moors both lie within 500m and due north-west and north-east of the workshop. These sites consist of a mosaic of fen, bog, reedbed, willow carr and open water habitats. Both sites are connected to the wider countryside by the flowe- fields and their hedgerows. Further west of Lower Moors SSSI the habitat becomes more urban with the wider conurbation of Hugh Town. An urban area which has a variety of sized properties and gardens. 256 and 1000 metres south-west and east respectively are the shingle beaches of Old Town and Porth Hellick Bay with their well-developed strandlines. These connect with the farmed grazed pasture on the eastern slopes of Penninis Head SSSI and its conservation-grazed coastal headland and wind-pruned 'waved heath habitats of Porth Hellick and Normandy Downs.

Street lighting is at a relatively low level within the conurbation of Old Town, however the nearest to the proposed development is set 22m east of the property and with the main concentration of street lighting located south-east of the property.

In summary, the habitat surrounding the proposed development provides optimal foraging habitat for species in the Pipistrellus genus, Leisler's Bat and Whiskered Bat, as it has been shown that these species of bat require 'edge' habitat such as hedgerows, tree-lined lanes or woodland edge to both feed from and to use as commuting routes to other feeding areas[2,3&4]. The continuity of small hedgerow-bound fields, particularly to the north and north-east is also important for both Soprano and Nathusius Pipistrelle as it provides feeding corridors to their preferred habitat of open water and water courses[2,3&4]; habitats such as those found at both Lower and Higher Moors SSSIs and Holy Vale. The location of Castle Farm Workshop makes it suitable as a potential roost site as it falls within the core sustenance zones of all 3 pipistrelle species these being 1.7km, 1.5km and 3km respectively[5].

Brown Long-eared bat have been shown to prefer to feed in open canopy deciduous woodland typically located close to their roosts, with larger tracts of woodland available to feed no greater than .5km away[6]. Therefore, the large willow carr blocks 500m to the north-west at Lower Moors SSSI and the linear shelterbelts immediately to the north-east that link to the large Elm woodland at Holy Vale, are potential feeding sites. All these sites fall within this species core sustenance zone of 1.1km[7], but the lack of tree cover in the immediate area of the property may limit the sites' use as a roost. However, Brown Long-eared bats are known to emerge from their roosts much later than other species of bat due to their method of feeding and the prey taken which reduces the need for cover to avoid the risk of predation[8]. Likewise, both Leisler's and Whiskered Bat will also take advantage of woodlands, particularly woodland edge, making these woodland blocks suitable as sites to feed as would the woodland blocks at the Garrison 1.7km due west and the large shelterbelt at Trenoweth 2km due north for the former species as is known to have a large core sustenance zone of 4.2-4.7km[9].

In England both Leisler's Bat and particularly Whiskered Bat utilise open areas of semi-natural grassland and grazed pasture with scattered hedgerows to feed[10,&11], making the airstrip and Salakee down immediately to the south potential feeding sites. However, though the maximum core sustenance zone of Whiskered Bat has been shown to be 2.3km[11], which would provide a greater selection of feeding sites

such as Penninis Head and Porth Hellick and Normandy Downs, typical foraging distances are normally within the region of 0.8km which may limit their ability to utilise these sites. However, the adaptability of Whiskered Bat to use small woodland blocks and scattered hedgerows may enable them to travel further afield[11&12]. Feeding in open areas is in contrast to most other species of bat which typically avoid this type of habitat, particularly during peak times of prey abundance (dusk and dawn) to avoid predation[13&14]. However, it has been shown that island species of bat including Common Pipistrelle in the UK will utilise open spaces to feed, including the strandline along beaches[15], thereby providing further feeding opportunities for this species within 500 to 1000m of the proposed development.

Lighting levels from street lighting which has been shown to negatively impact upon a bats commuting and foraging routes[16] is minimal both within the immediate area of the proposed development as well as further afield, therefore likely not to impact upon bats which might be at the property. Instead, the location of the nearest streetlights, the habitat they are found in and their relatively low light emitting levels may provide feeding opportunities for both Common Pipistrelle and Leisler's bat which are both known to take advantage of the insectivorous prey that often congregates around them[17].

3.4 Habitats within the application site

Castle Farm Workshop is semi-detached, with buildings on both its north-west and north-east elevations. These buildings face the main road and have no gardens. Immediately to the south-east of the property the area is laid to grass, consisting of typical improved grassland species including Perennial Rye-grass (*Lolium perenne*), Broad-leaved Plantain (*Plantago major*) and the occasional Dandelion (*Taraxacum officinale*) and Three-cornered Leek (*Allium triquetrum*). Immediately to the south-west a small garden of raised beds, lawn and hardstanding is present. However, no planted species where present. Within 10m of the property to the south-west and 5m to the south several mature, regularly pollarded Elm trees are present. Those to the south-west link to a much larger copse which has developed on Ennor Castle. The understorey here consists of young Elm regeneration and occasional Alexanders (*Smyrnium olusatrum*) and hybrid Bluebell (*Hyacinthoides hispanica x non-scripta*). Immediately south-east is the two-storey building of Castle Farm, with 4 windows on its north-west elevation that could spill light directly onto the south-east elevation of the workshop.

In summary, the immediate habitat within the proposed development footprint is of limited ecological value with few species that may attract a wide variety of invertebrates which bats may prey upon. The

south-east aspect will also be illuminated by the windows of the adjacent Castle Farm building, which may also limit roosting opportunities. However, the shelter provided by trees to the south-west and southeast could provide cover for bats leaving the roost as well as providing a link to the wider countryside, particularly the copse immediately to the south-west of the property to more suitable feeding and commuting habitat.

Preliminary Roost Assessment

3.5 External

Castle Farm Workshop is one and a half storeys, single block-built, smooth-rendered (in parts) in construction. Set back from the main throughfare the workshop is semi-detached with buildings on its north-west and north-east elevations. Its main entrance has a south-east aspect, open gable ended and is part rendered and part timber clad with vertical hanging tiles (see Photo 1). The render is in good order throughout, with no cracks or lifting for bats to roost behind. The timber frames around each of the double doors fitted well to the surrounding blockwork and revealed no obvious gaps which bats may utilise to roost between. Likewise, the timber vertical hanging tiles where closely knitted together presenting with no gaps for bats to crawl behind. A small gap between the vertical tile and the fascia at the apex of the gable was present, but when inspected provided insufficient space for a bat to occupy.

The south-west elevation was built into the ground with the eaves level at almost ground level. The roof of the property has a south-west/north-east aspect with a pitch of approximately 30^0. The roof is laid with interlocking concrete pantiles and capped with glazed cement ridge tiles. Throughout the tiles ae tightly laid to one another. The ridge tiles are well mortared in place, with no obvious loss of cement to create a void and no ventilation to provide access into the internal space of the barn. On the south-west aspect there are two large velux windows. The flashing tying the windows into the roof is in good condition, with no obvious lifting that would provide a suitable roosting space for bats. On the north-east aspect a further 3 velux are present. The most south-easterly had lost two courses of tiles revealing the plywood sarking below and exposing gaps below the ridges of the interlocking tiles above, which could provide a suitable roosting space (see photo 2). The remaining windows appeared in good order, with no obvious potential roosting sites.

Photo 2. Gap between underlying sarking and roof tiles

3.6 Internal

Castle Farm Workshop is split into two distinct internal spaces. The first on the southwest of the workshop is fully open and used as a garage and for storage (see Photo 3.). The roof structure is exposed throughout the whole interior and is constructed of modern square-cut timbers and attached using modern butt joints. The roofing membrane throughout is in good condition with no obvious tears. Inspection of the joints revealed no staining and the gaps between the rafters and the gable end of the buildings where congested with many dust-laden cobwebs. Inspection of the roof plate at the eaves, the flooring below the rafters, the floor of the mezzanines and workbench surface revealed small mammal droppings of House Mouse (*Mus musculus*) and Lesser White-toothed Shrew (*Crocidura suaveolens), but no bat droppings.*

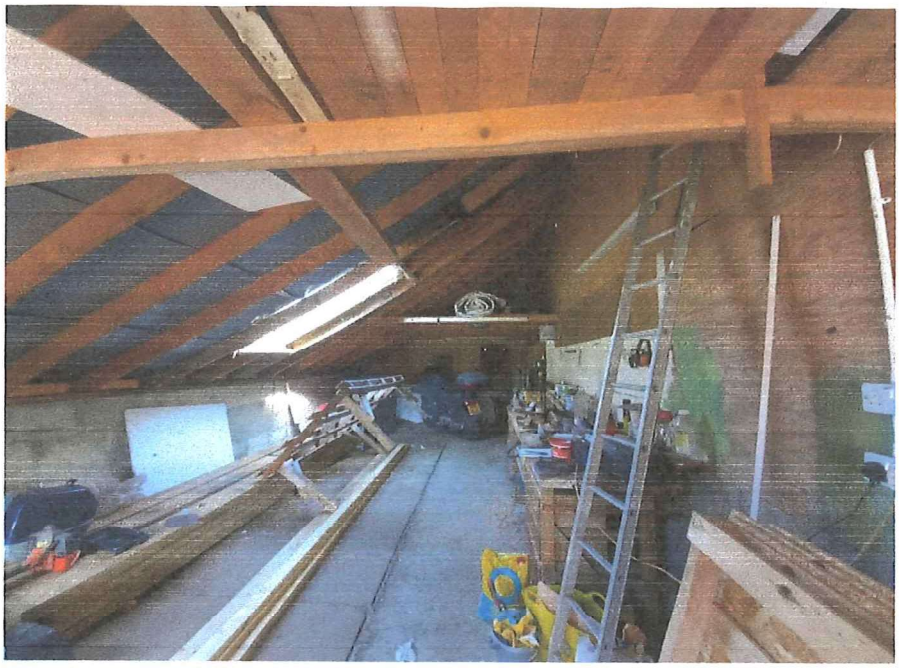

Photo 3.

The north-east half of the barn was larger internally (see Photo 4.), with the central section containing stairs leading to an enclosed mezzanine that comprised the buildings accommodation. The remaining area of the barn was taken up with a joinery workshop. Here, the roof construction was exposed revealing its modern trusses, the associated joints and roofing membrane. All were in a similar condition as the south-west internal roof space.

The regular use of this space as an active workshop has resulted in a large accumulation of dust which was revealed in the heavy dust laden cobwebs, which were prevalent throughout. Inspection of the machinery, floors, shelving and workbenches revealed no small mammal droppings. Climbing the mezzanine enabled the inspection of the gaps between the exposed tiling and plywood sarking above the velux window recorded from the north-east aspect externally. The result revealed a very limited space between the tile and the plywood which a bat could occupy as a roost or gain entry into the building. At the same level of this velux a pendant light illuminating the steps up from the ground floor to the accommodation was present.

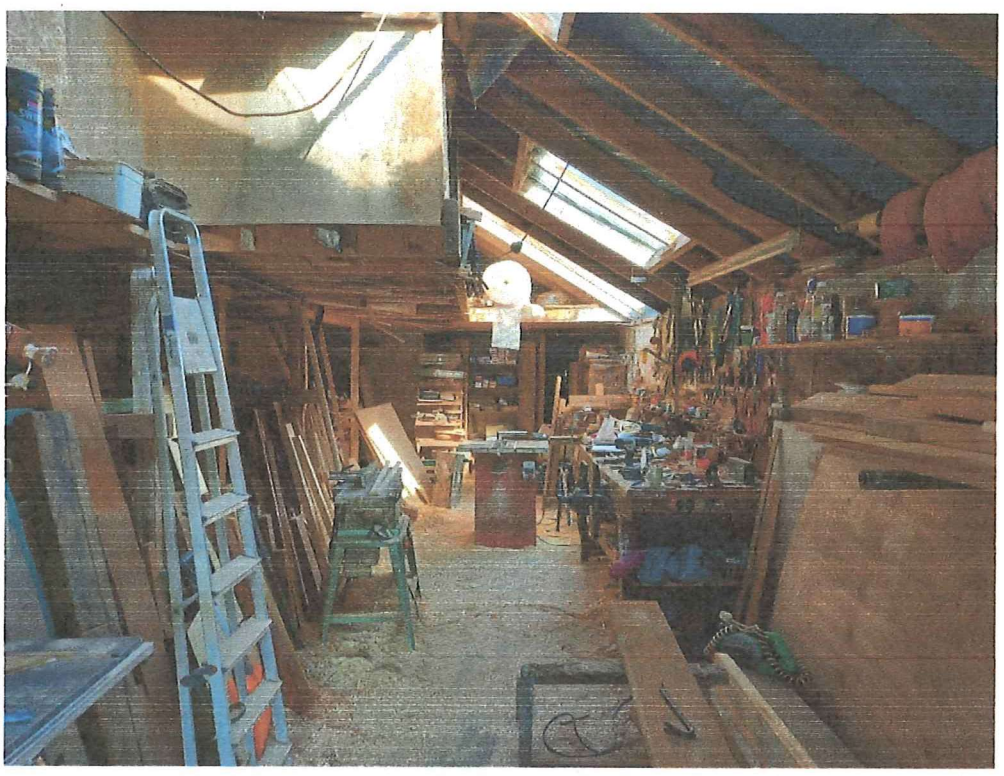

Photo 4.

In summary, it has been shown that all 3 pipistrelle species of bat along with Whiskered bat typically roost within buildings, utilising a very wide variety of features[12 & 18] including, crevices, cracks, holes etc either as individuals up to several hundred at a time. However, the feature identified of the gap between the interlocking tiles and the plywood sarking below above the velux window on the north-east aspect was very limited in size to use as a roost. Though these gaps could provide access into the interior of the building the regular heavy use of the building as a workshop, the high levels of dust created (which is highlighted by the large amount of dust laden cobwebs) and the use of the light used to illuminate the stairs to the accommodation which is regularly used suggests the level of disturbance limits the opportunity for bats to utilise the interior of the building as a roost.

In contrast, Brown Long-eared bats prefer to roost in roof voids that provide flight space within their chosen roost, or roofs that are divided into several smaller compartments. Brown Long-eared bats also typically roost between the joints where the rafters meet the ridge board, or along the ridge board itself[6]. Due to the likely day time disturbance and the lack of droppings below favoured roosting perches suggests that Castle Farm Workshop is not likely to be used by Brown Long-eared Bats.

Leisler's bat in contrast to the other species is a typical tree dwelling species, particularly during the non-breeding season with roosts typically found in cavities such as mechanical breaks, rot cavities, loose bark and woodpecker holes of large live trees, in open conditions[19]. However, it has been shown that nursery roosts of Leilser's bat show a limited preference for buildings, but only those with lined with roof felt and are constructed of stone, rather than of block and brick[20]. Therefore, the potential use of Castle Farm Workshop by Leisler's Bat is very limited.

Castle Farm Workshop therefore presents with negligible features suitable for crevice-dwelling and perch dwelling species of bat.

Assessment and recommendations (excluding bats)

4.1 Protected sites

The proposed development falls within the main SSSI Impact Risk Zones of Lower Moors and Higher Moors. Impact zones are used in the assessment of planning applications for likely impacts on SSSI's, Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar Sites (England). However, the likely impact in this zone is for residential developments of 100, or 50 or more houses outside existing settlements/urban areas. Therefore, in this instance the development is not likely to impact on the surrounding SSSIs.

4.2 Nesting birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). Section 1 of this Act makes it an offence to kill, injure or take any wild bird, or intentionally to take damage or destroy the nest of any wild bird while that nest is in use or being built[21]. During this survey, no evidence of nesting birds was found. If demolition or building works are to commence between the months of March and August inclusive, the site would need to be checked first for nesting birds and if any evidence of breeding activity was found or other nests are identified, works which would disturb the adults, the nest or young must be postponed until all young have fledged the nest and it is no longer in use.

4.3 Ecological features of importance

To identify which ecological features are important and which could potentially be affected by the proposed project, an evaluation of their importance for example in a geographical context, degree of scarcity or level of protected status needs to be undertaken[23]. The table below outlines those features identified as important, the nature conservation legislation relevant to those features and an assessment of the level of impact from the proposed development on those features.

Ecological Feature	Relevant Legislation	Evaluation (of importance)	Mitigation Hierarchy	Impact Level
Habitats:				
Building (roosts)	CHSR, W&CA, NPPF	Local	A & E	Low
	Impacts: **Demolition:** – None predicted as long as Reasonable Avoidance Measures (RAM) are followed (see section 5) **Construction:** – None. Positive impact may result through enhancement by creating/incorporating new nests in the building[24] **Operational impact:** - None predicted, however please note a summary of criminal offences with respect to bats and their roosts. http://www.bats.org.uk/pages/bats_and_the_law.html			
Species:				
Bats	CHSR, W&CA, NPPF	International	A & E	Medium
	Impacts: **Demolition –** None predicted as long as Reasonable Avoidance Measures (RAM) are followed (see section 5) **Construction/post-construction -** Positive impact may result through enhancement by increased roost availability[24, 25] **Operational impact:** - None predicted, however please note a summary of criminal offences with respect to bats and roosts. http://www.bats.org.uk/pages/bats_and_the_law.html			

Key to Legislation and Mitigation Hierarchy

CHSR – Conservation of Habitats and Species Regulations 2017[6] - http://www.legislation.gov.uk/uksi/2017/1012/made
W&CA – Wildlife & Countryside Act 1981 (as amended)[22] - http://www.legislation.gov.uk/ukpga/1981/69/contents
NPPF – National Planning Policy Framework 2019[25] - https://www.gov.uk/government/publications/national-planning-policy-framework--2
A – Avoid, **M** – Mitigate, **C** – Compensate, **E** - Enhancement

5. Recommendations and Mitigation

The recommendations in this section are provided as information only and specialist legal advice may be required. If works are delayed for more than one year, then re-assessment may be required.

5.1 Survey constraints

The survey was undertaken at a time of year suitable for undertaking preliminary bat roost assessments and it was possible to survey the whole area of the proposed development.

5.2 Further survey requirements

In the professional opinion of the author there are **no further surveys required**. The justification for this is; BCT guidance suggests that for buildings with negligible roost potential no further surveys are required[1]. The survey carried out to date follows this guidance, is proportionate to the scale of the development and the information provided is believed to be sufficient to inform the planning decision.

5.3 EPS Licence requirement

For any development that is likely to commit an offence (or offences) in respect to a European Protected Species (EPS) i.e bat, or their habitat, a licence will be required. In this instance based on sufficient survey work **no licence is required**. If, in the unlikely event a bat was found during the demolition phase of the project, Reasonable Avoidance Measures (RAM) must be followed and will determine any further action, such as licensing if necessary.

5.4 Mitigation – Further Action

As there is a very low risk that bats may roost within the building, prior to demolition, precautions should be taken to reduce the probability of committing an offence. By undertaking Reasonable Avoidance Measures (RAM), if affected RAM should include:

Avoidance – Bats

i. When roofing works are planned these should (wherever possible) avoid the main breeding and mating season of *Vespertilionidae* bats, **work should typically take place between the 1st November and 1st May inclusive.**

ii. Ensure all workers on site (including sub-contractors) are made familiar with bat legislation and agree to work in accordance with and fully follow best practice measures.

iii. Carry out prior to demolition careful checks of any cracks/crevices and cavities in or on the building. Signs of usage include bat droppings, dis-colouration or polishing of access points where bats rub against them, urine stains and a lack of cobwebs, particularly if other crevices around them have plenty.

iv. Individual bats may be found in/under; cladding, between timber boards, between corrugated sheeting, in soffit boxes, behind lead flashing and sometimes just clinging to timber beams around joins as well as others areas. When any of these are removed, please do so carefully, lifting outwardly, and checking for bats continually. If in doubt, consult a licensed bat worker.

v. Try to minimise any dust generated from demolition works from entering off-site buildings and gardens

vi. In the unlikely event that a bat is found please see below:

1. At no point should a worker handle a bat. Untrained handling may cause undue stress and injury to the bat, and if bitten may expose the worker to rabies-related European Bat Lyssavirus
2. Where possible replace any covering without damaging the bat, then halt works and contact **Natural England** (Tel: 0845 601 4523), or the **Bat Conservation Trust Helpline** (0845 1300 228), or **IoSWT** (01720 422153) for advice.
3. Any bats that go to ground should be covered with a box and left alone until a licensed bat worker arrives to assess the condition of the bat
4. If the bat attempts to fly at any point allow it to do so. Preventing natural behavior will cause unnecessary stress and may cause injury. Attempt to see where bat goes. If the bat returns to the building, halt works and report the escaped bat to the local bat worker

Enhancement (E) – Bats

The Isles of Scilly have the most southern population of Common Pipistrelle (*Pipistrellus pipistrellus*) bats in the United Kingdom. The islands also hold small populations of Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Brown Long-eared Bat (*Plecotus* auritus) both UK Biodiversity Action Plan (BAP) priority species and holds records for the rare Nathusius Pipistrelle (*Pipistrellus nathusii*). Any loss of roosting, commuting or foraging sites could have a detrimental effect on these species distributions as a whole and cause a net loss in biodiversity on the islands.

Each local planning authority in England and Wales has a statutory obligation under Part 3 Section 40 of the Natural Environment & Rural Communities Act 2006[27] (NERC 2006) to have due regard for biodiversity when carrying out their functions and under Section 15 paragraph 170(d) of the NPPF 2019, all planning policies and decisions shall contribute to and enhance the natural and local environment by providing net gains in biodiversity. **Therefore, to assist in meeting these obligations the following suggestion could be undertaken:**

i. Erect one free-standing bat box developed for crevice-dwelling species (see figure 2 for example and Appendix A for supplier details) at the apex of the south-east gable end of the development.

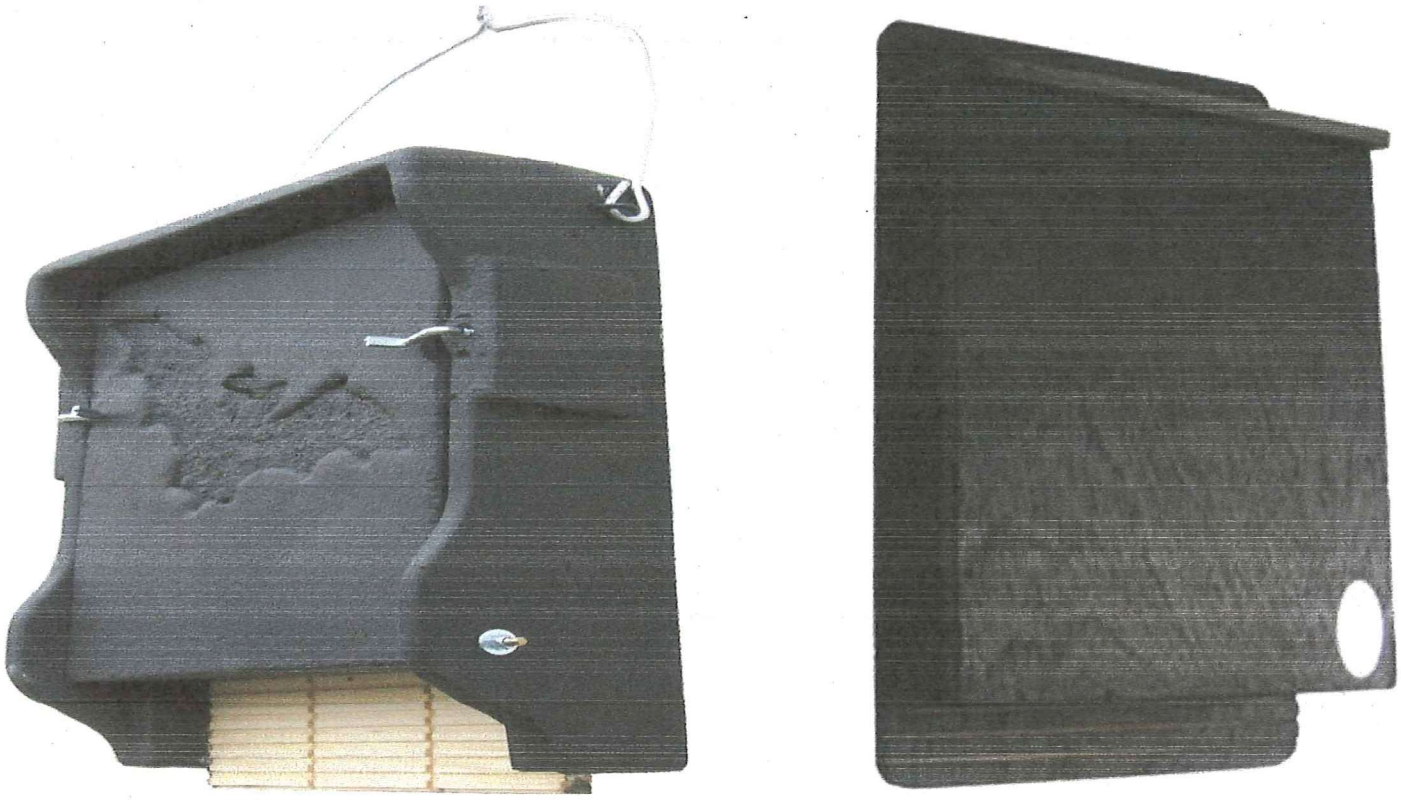

Figure 2. free-standing bat box examples

https://www.nhbs.com/browse/search?q=bat%20boxes&hPP=30&idx=titles&p=0&is_v=1&qtview=158636

https://www.nhbs.com/browse/search?q=bat+boxes&qtview=176916

6. Summary

Castle Farm Workshop is found to have no suitable features likely to be used by roosting bats, therefore is deemed to have negligible roost potential. In the professional opinion of the author no further surveys are required, and no EPS license is required. However, to minimise the very low risk of disturbing bats during the demolition phase of the project reasonable avoidance measures should be undertaken. To enhance the area for local populations of bat and assist the local authority's obligation to provide net gain in biodiversity the erection of 1 free-standing bat box should be undertaken.

Aside from nesting birds, if the recommendations given in this report are adhered to, there should be no further ecological constraints to the proposal.

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APPENDIX A – SUPPLIERS

1. Natural History Book Service
   1-6 The Stables
   Ford Road
   Totnes
   Devon, TQ9 5LE
   Tel: 01803 865913
   Email: customer.services@nhbs.com
   Website: https://www.nhbs.com/

2. Habibat
   Tel: 01642 724626
   Email: http://www.habibat.co.uk/contact
   Website: www.habibat.co.uk

3. Dreadnought Tiles
   Dreadnought Works
   Brierley Hilly
   West Midlands, DY5 4TH
   Tel: 01384 77405
   Email: sales@dreadnought-tiles.co.uk
   Website: www.dreadnought-tiles.co.uk

4. Wildlife & Countryside Services
   Covert Cottage
   Pentre Lane
   Rhuddlan
   North Wales, LL18 6LA
   Tel: 0333 9000927
   Email: support@wildlifeservices.co.uk
   Website: www.wildlifeservices.co.uk

5. Wildcare
   Eastgate House
   Moreton Road
   Longborough
   Gloucestershire, GL56 0QJ
   Tel: 01451 833181
   Email: sales@wildcare.co.uk
   Website: www.wildcare.co.uk