

# PRELIMINARY ECOLOGICAL APPRAISAL & PRELIMINARY BAT ROOST ASSESSMENT OF:

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STORM COTTAGE  
LITTLE PORTH  
HUGH TOWN  
ST MARY'S  
ISLES OF SCILLY  
TR21 0JG

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*Client: Mr David Cliffe*

*Our reference: BS22-2019*

*Report date: 23<sup>th</sup> August 2019*

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## Non-Technical Summary

- On 22<sup>nd</sup> August 2019, the Isles of Scilly Wildlife Trust (IoSWT) conducted a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) of Storm Cottage, Little Porth, Hugh Town, St Mary's, Isles of Scilly, TR21 0JG (BS22-2019), for which there is a proposal to convert the roof space of the existing double garage into a one and a half-storey accommodation block, by increasing the height of the garage roof to tie-into the existing main building.
- This report outlines the findings of the PEA and PRA assessment and provides advice based on the surveys' conclusions.
- During the PRA an external/internal inspection of the building was undertaken (where accessible).
- All areas could be accessed and evaluated for roost potential and for evidence of bats.
- No evidence of nesting birds was found.
- No vegetation of conservation interest was found in the immediate surrounding habitat
- Brown Rat and House Mouse droppings were found during the inspection.
- The habitat surrounding the proposed development suggests limited opportunity for bats to feed and to commute to and from, primarily due to the street-lighting to the north. However, species such as Common Pipistrelle may well use the strand-line of Porthcressa beach to the south to reach more favourable foraging areas.
- The proposed project, both externally and internally presented with minimal features that bats may use as a roost, with only one feature identified at the north-east eaves. However, this is well-lit by street lighting approximately 1.5m away.
- Therefore, the characteristics of the building and the surrounding habitat suggest negligible roost potential for bats.
- **The recommendations of this PEA and PRA suggest that no further surveys are recommended and there should be no further ecological constraints to the development proposals.**

## **1.0 Introduction**

### **1.1 Survey and reporting**

This report details the results of a preliminary ecological appraisal and a preliminary bat roost assessment of Storm Cottage, Little Porth, Hugh Town, St Mary's, Isles of Scilly, TR21 0JG (BS22-2019), for which there is a proposal to convert the roof space of the existing double garage into a one and a half storey accommodation block, by increasing the height of the garage roof to tie-into the existing main building, maintaining the same aspect with only a slight increase in pitch.

### **1.2 The application site**

The development is located in the centre of Hugh Town, St Mary's (National Grid Reference SV9024710476). The application sites comprises of a large, detached one and a half storey house, with adjoining double garage. The proposed development (garage) has an east/west aspect (see Photo 1.), with the house set perpendicular. The footprint of the building is approximately 118m<sup>2</sup> and the sites total footprint being approximately 168<sup>2</sup> (red area, see Figure 1).

### **1.3 Details of proposed works**

The proposal is to convert the roof space of the existing double garage into a one and a half storey accommodation block, by increasing the height of the garage roof to tie-into the existing main building, maintaining the same aspect with only a slight increase in pitch



Figure 1. Location



Photo 1.

## 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 and a high-powered torch 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<sup>1</sup>, 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 of the Isles of Scilly Wildlife Trust. Darren has undertaken professional Bat Licence Training to permit him to undertake professional surveys and is currently gathering sufficient 'working hours' to achieve a Natural England Class Level 2 licence.



**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**

|                            | Roost status | Description   | Survey effort required to determine the likely presence or absence of bats  |
|----------------------------|--------------|---|---|
| <b>Bat Roost Potential</b> | High         | Numerous features potentially suitable for use by roosting bats, optimal or good quality bat foraging habitat nearby and good habitat connectivity. Alternatively, a building with fewer features potentially suitable for use by roosting bats and optimal foraging habitat nearby.    | 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     | More than a few features potentially suitable for use by roosting bats, good foraging habitat nearby and limited habitat connectivity. Alternatively, a building with a few features potentially suitable for use by roosting bats but optimal foraging habitat nearby.                 | 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          | Only a few features potentially suitable for use by roosting bats but good bat foraging habitat nearby. Alternatively, a building with more than a few features potentially suitable for use by roosting bats but sub-optimal foraging habitat nearby and limited habitat connectivity. | 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   | Very few features potentially suitable for use by roosting bats and / or in an area (such as a densely populated urban area) which has limited habitat connectivity and poor foraging habitat.  | 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 (3<sup>rd</sup> edn). The Bat Conservation Trust

## 3. Results

### Preliminary Ecological Appraisal

#### 3.1 Pre-existing information on bat species

The desk study showed that no species of bat had previously been recorded within the building. A data search of LRC records for bats revealed information on 5 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 Nathusius Pipistrelle (*Pipistrellus nathusii*). Several bat roosts are known to exist within the 2km of the proposed development, with 2 known roosts 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.) **Peninnis Head SSSI** – Lying 580m south east 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.
- ii.) **Lower Moors SSSI** – Situated 505m due east of 7 Garrison lane 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 regalis*) and Southern Marsh Orchid (*Dactylorhiza praetermissa*) and is particularly important feeding for passage and wintering birds including Corncrake (*Crex crex*) and Spotted Crake (*Porzana porzana*).
- iii.) **Higher Moors & Porth Hellick Pool SSSI** – 1.61km east 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*).

### 3.3 Habitats surrounding the application site

Storm Cottage lies within the Built-Up Areas Boundaries<sup>2</sup> (2011) for England and Wales (published by the Office for National Statistics, Geography). Sitting at the base of the eastern slopes of the Garrison, Storm Cottage is situated at the western end of Hugh Town. The street lighting throughout the town is intermittent, consisting of orange sodium lighting. Though intermittent, the amount of lighting does increase around the area of Little Porth and particularly along the lower slopes of the Garrison approximately 120m away. The nearest light is situated on the very north-east boundary of Storm Cottage, spilling light onto the eastern aspect of the roof of the proposed development.

The nearest potential foraging feature to the proposed development lies immediately to the west, consisting of the small enclosed gardens of the houses on Little Porth. These houses offer a corridor to the eastern wooded slopes of the Garrison approximately 300m away, consisting of large areas of rough and improved grassland, heathland and scrub interspersed with small mixed species shelterbelts. Directly to the south of the property is the strandline of Porthcressa beach stretching that runs west to east. To the east lies Buzza Hill, an open area of grassland and scrub, which is linked to the wider countryside and to the SSSI of Lower Moors by a range of mature gardens, the old school site at Carn Thomas and the small allotments below Pilot's Retreat. For a further 2km north and east the countryside consists of a mixture of small, enclosed fields bounded by hedgerows, linked to small linear shelterbelts, beyond the SSSI. One hundred metres north-east lies a small park on the Strand, comprising of open lawn, small flowered borders and occasional mature trees which are lit by a single street light. Here, and to the east for approximately 250m comprises the main town, with scattered streetlights and very little in terms of mature gardens, before reaching a dark corridor, of minimal lighting leading to an alternative way to the summit of Buzza Hill.

In summary, the habitat surrounding the proposed development has limited opportunity for bats to commute and feed. Commuting routes to the east are hampered by the main built up area of Hugh Town, with limited mature gardens and those areas available to feed, such as the small park at the Strand are lit by streetlights. It has been shown that street lighting can negatively impact upon a bats commuting and foraging routes<sup>3</sup> however this may be dependent on the species, for example species such as Common Pipistrelle will feed around street-lighting to take advantage of the insectivorous prey that congregates around them. However, this has been shown to be dependent on the light emitting from the lamps, with

orange sodium light (found here in this instance) having the greatest negative impact on feeding opportunities<sup>4</sup>.

Though Soprano Pipistrelle have been shown to utilise more built up areas, compared to Common Pipistrelle<sup>5</sup> all species of bat require 'edge' habitat like hedgerows to both feed from and commute to other feeding areas<sup>6, 7&8</sup>. This type of habitat is limited, particularly to the north and to the west and quickly breaks down after approximately 150m, where the landscape becomes very open, which most species of bat prefer not to utilise<sup>9</sup>. In contrast edge habitat is almost continuous to the east and north-east for at least two kilometres, providing access to a wider variety of habitats for which Common Pipistrelle are known to take advantage of<sup>10</sup>, including the strand-line along the beaches<sup>11</sup> to the south. The former commuting routes would also be important for both Soprano and Nathusius Pipistrelle as they provide a feeding corridor to their preferred habitat of open water and watercourses<sup>6, 7&8</sup>, habitats such as those found at both Lower and Higher Moors SSSIs and Holy Vale. The location of Storm Cottage also falls within the core sustenance zones of all three species being 1.7km, 1.5km to 3km respectively<sup>12</sup>. However, these latter species may be limited by the lack of mature gardens and street lighting arrangement 250m east of the Cottage.

In contrast, Whiskered Bat in Britain has been shown to favour more open areas of semi-natural grassland and pasture with scattered hedgerows, or small woodland blocks<sup>13&14</sup> in which to feed. Habitat such as the Garrison to the west and the golf course to the north-east are typical examples of such habitat which they could exploit and fall within the typical core sustenance zone for this species<sup>13</sup>. Brown Long-eared bat have been shown to prefer to feed in open canopy deciduous woodland typically located close to their roosts, which would also have larger tracts of woodland available to feed no greater than .5km away<sup>15</sup>, making the Garrison to the west and the former school site at Carn Thomas potential sites to feed. Both sites fall within this species core sustenance zone of 1.1km<sup>16</sup>, however the lack of trees in the immediate area of the complex may limit the site use as a roost.

### **3.4 Habitats within the application site**

Storm Cottage is set within its own grounds, with the southern aspect of the cottage forming the southern boundary and the garage the eastern boundary. The boundaries to the north and west respectively are comprised of wooden palisade fencing. The main area of garden to the north is laid to concrete, with a small area to the west laid to timber decking. Here can be found a small selection of potted shrubs,

ornamental in nature including Australian Tree Ferns (*Cyathea* sp.), *Geranium* sp., Catnips (*Nepeta cataria*) and Bamboo (*Bambusoideae* sp.).

In summary, the habitat within Storm Cottage's footprint has very limited species that may attract a wide variety of invertebrates which bats may prey upon. However, the gardens to the west along Little Porth provide greater habitat diversity and structure which could be taken advantage of.

## Preliminary Roost Assessment

### 3.5 External

The proposed development is a single-storey double garage with an east/west aspect that ties into the main building at its southern end. The garage is a block built, smooth rendered building. The roof is constructed of concrete tiles, including the ridge with mortar filling the gap between the tiles and the gable end block-work. The approximate pitch of both roofs is 27°. The northern gable end is closed, with wooden fascia laid directly onto the render with no soffit or barge boards. The southern aspect is tied into the main building, with a valley of zinc flashing between the two roofs. The eastern aspect is solely smooth render, with wooden fascia, again tight against the facade. The western aspect is dominated by the double doors of the garage. The tiling throughout (garage and northern aspect of main building) is in good condition, laid flat with minimal gaps. The flashing between the two structures is well formed, with the tiles laid over the top creating minimal gaps. The fascia is bound tightly to the smooth render of the exterior of the garage on all three sides.

The proposed development has minimal features potentially suitable for roosting bats which are:

- Small gap between the north-east eaves roof tile and the gable end block-work where a skim of mortar has come away, permitting access into the interior of the building (see photo 2).
- Small gap between the north-west eaves roof tile and the gable end block-work where a skim of mortar has come away, permitting access into the interior of the building (see photo 3.)

Examination below these features revealed no droppings, no urine stains on the render or oil marks at the entrance in the north-west corner.



Photo 2.



Photo 3.

### 3.6 Internal

The double garage was completely open, with a vaulted ceiling exposing all the joists and underlying roof felt. The trussed roof structure was formed with two sets of braces, no ridge board, no purlins and no mortice joints and had been constructed using tie straps. The felt appeared to be original, with several tears at eaves level along the eastern edge and in both the north-west and north-east corners of the eaves (see photo 4. and photo 5.)

Examination along the full length of the wall plates revealed mammal droppings of both Brown Rat (*Rattus norvegicus*) and House Mouse (*Mus musculus*). These droppings were particularly prevalent in the north-west and north east eaves, the latter showing Brown Rat tooth marks in the torn roof felt. Examination behind the felt at both eaves and along the eastern aspect revealed no evidence of bats, many mature cobwebs covered in dust and their associated spiders. Examination of the trussed roof revealed no claw marks, or oil stains in the corners. No joints were present to be examined.

Along the southern aspect, part of the eastern internal wall and north east corner was a mixture of shelving units for tools and diving gear. Examination of the tops of these, particularly in the north-east corner revealed no evidence of bat droppings. Likewise, the floor revealed no evidence of bat activity.

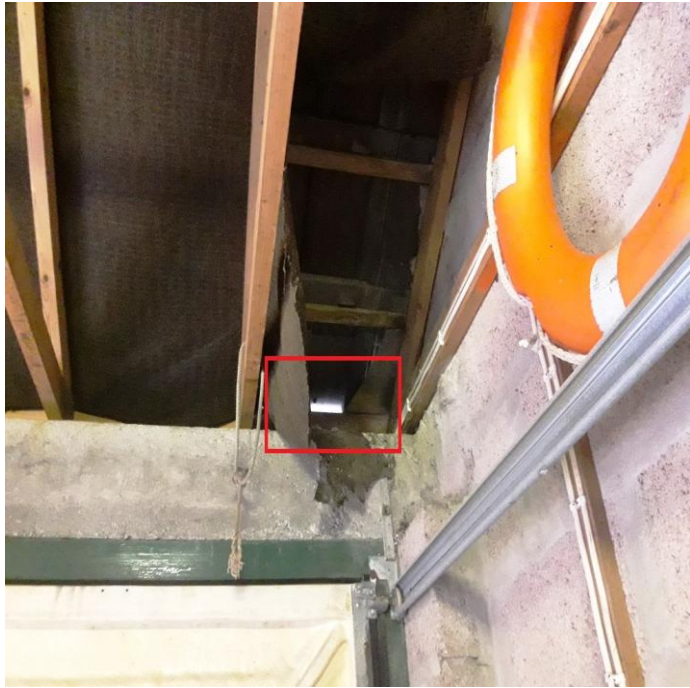


Photo 4.



Photo 5.

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<sup>14 & 17</sup> including, crevices, cracks, holes etc either as individuals up to several hundred at a time. The two features at Storm Cottage provide small cracks and holes that could be utilised by such species. However, the north-east feature in the eaves has street lighting which illuminates the feature, which may have implications on its use. It has been shown that bat activity, particularly emergence is affected by light levels and that too much light intensity can negatively impact upon emergence times, or roost selection in pipistrelle bats and Whiskered bat<sup>18</sup>. These species have also shown to choose roosts that have cover within 50m of a roost, typically trees over 10m tall thereby allowing them to emerge earlier and forage longer, by using cover to avoid diurnal prey<sup>17</sup>. In respect to Storm Cottage cover within 50m is of very limited value.

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, features typically found in much older buildings<sup>15 & 17</sup> compared to Storm Cottage. Brown Long-eared bats are also known to emerge later than pipistrelle species, coinciding their emergence at peak moth activity times<sup>19</sup>, therefore increased light intensity from the surrounding street may also have an effect on roost

selection. Brown Long-eared bats also show high roost fidelity where it would be expected to see concentrations of droppings<sup>15</sup>, which was not found during the roost assessment.

Finally, the presence of mammal droppings at the site, particularly in the areas where the roost features are present may also have an effect on roost selection. Though not confirmed, there is growing circumstantial evidence to suggest that predation by rat, including Brown Rat may have an impact on bat populations<sup>20</sup>. Though no evidence in this instance suggests that this is the case, the use of these features by bats may be reduced when there is such high activity by known predators around these areas.

## **4. Evaluation of Results**

### **4.1 Protected sites**

The proposed development falls into the SSSI Impact Risk Zones of Lower Moors, Higher Moors & Porth Hellick Pool and Penninis Head SSSIs. 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 impact in this zone is for large-scale residential developments and therefore the development is not likely to impact on the surrounding SSSIs.

### **4.2. 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<sup>21</sup>. 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 |
|---|----------------------|----------------------------|----------------------|--------------|
| <b>Habitats:</b>  |                      |                            |                      |              |
| Building (roost sites)  | CHSR, W&CA           | Negligible                 | A                    | Low          |
| <p><b>Impacts:</b></p> <p><b>Demolition:</b> – None predicted as long as Reasonable Avoidance Measures (RAM) are followed (see section 5)</p> <p><b>Construction:</b> – None.</p> <p><b>Operational impact:</b> - None predicted</p> <p>Please note a summary of criminal offences with respect to bats and their roosts. This can be found at:</p> <p><a href="http://www.bats.org.uk/pages/bats_and_the_law.html">http://www.bats.org.uk/pages/bats_and_the_law.html</a></p>  |                      |                            |                      |              |
| <b>Species:</b>   |                      |                            |                      |              |
| Bats  | CHSR, W&CA           | International              | A, E                 | Low          |
| <p><b>Impacts:</b></p> <p><b>Demolition</b> – None predicted as long as Reasonable Avoidance Measures (RAM) are followed (see section 5)</p> <p><b>Construction/post-construction</b> –None. Positive impact may result through enhancement by increased roost availability<sup>22</sup></p> <p><b>Operational impact:</b> - None predicted, however please note a summary of criminal offences with respect to bats and their roosts. This can be found at:</p> <p><a href="http://www.bats.org.uk/pages/bats_and_the_law.html">http://www.bats.org.uk/pages/bats_and_the_law.html</a></p> |                      |                            |                      |              |
| Key to Legislation and Mitigation Hierarchy   |                      |                            |                      |              |
| <p>CHSR – Conservation of Habitats and Species Regulations 2017<sup>23</sup> - <a href="http://www.legislation.gov.uk/uksi/2017/1012/made">http://www.legislation.gov.uk/uksi/2017/1012/made</a></p> <p>W&amp;CA – Wildlife &amp; Countryside Act 1981 (as amended)<sup>24</sup> - <a href="http://www.legislation.gov.uk/ukpga/1981/69/contents">http://www.legislation.gov.uk/ukpga/1981/69/contents</a></p> <p><b>A</b> – Avoid, <b>M</b> – Mitigate, <b>C</b> – Compensate, <b>E</b> - Enhancement</p>  |                      |                            |                      |              |

Table 1.

## 5. Recommendations and Mitigation (bats)

The recommendations in this section are provided as information only and are the professional opinions of the author. Note; if building works are delayed for more than one year, then re-assessment may be required.

### 5.1 Further survey requirements

In the professional opinion of the author **no further surveys are required**. BCT guidance suggests that for buildings with negligible roost potential no further surveys are required. 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.

### 5.2 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 (see Appendix A for details). In this instance based on sufficient survey work **no EPS licence is required**. If in the unlikely event a bat were found during the demolition phase of the project, Reasonable Avoidance Measures (RAM) must be followed and will determine any further action, such as licensing.

### 5.3 Mitigation – Further Action

As there is a low risk that bats may roost within the building (due to the identification of 1 or 2 small roost features), prior to demolition, precautions should be taken to reduce the probability of committing an offence. If affected RAM should include:

#### Avoidance (A) - Bats

- i. 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
- ii. Aim to carry out the work when the risk of disturbance is least likely to affect the main breeding season of bats (typically between 1<sup>st</sup> November and the 1<sup>st</sup> April inclusive).
- iii. Carry out careful checks of any cracks/crevices and cavities in or on the building prior to demolition. Signs of usage include; bat droppings, discoloration 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. If 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. 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

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

### **Enhancement (E) – Bats**

The Isles of Scilly have the most southern population of Common Pipistrelle (*Pipistrellus pipistrellus*) bats in the United Kingdom. Any loss of roosting, commuting or foraging sites could have a detrimental effect on this species distribution 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<sup>25</sup> (NERC 2006) to have due regard for biodiversity when carrying out their functions and must contribute to achieving sustainable development by protecting and enhancing our natural environment and helping to improve biodiversity under Section 2 of the National Planning Policy Framework 2019 (NPPF 2019)<sup>26</sup>. Therefore, this planning application should be permitted with the following being considered and at least two options being undertaken:

- i. All new roofing felt laid to be traditional Type 2 bitumen felt, as modern breathable membranes have been shown to kill bats<sup>27</sup>.
- ii. Select 5 tiles on each roof aspect (10 in total) and raise their leading edge by 25mm (using mortar) to create a wedge shaped crevice that provides access to the underlying felt, to provide potential roost space
- iii. Alternatively, Erect two free-standing bat boxes developed for crevice-dwelling species (see figure 2 for examples and Appendix B for supplier details) 1 under the gable end of the north-west dormer extension and one at the top of the closed gable end of the west aspect of the main building

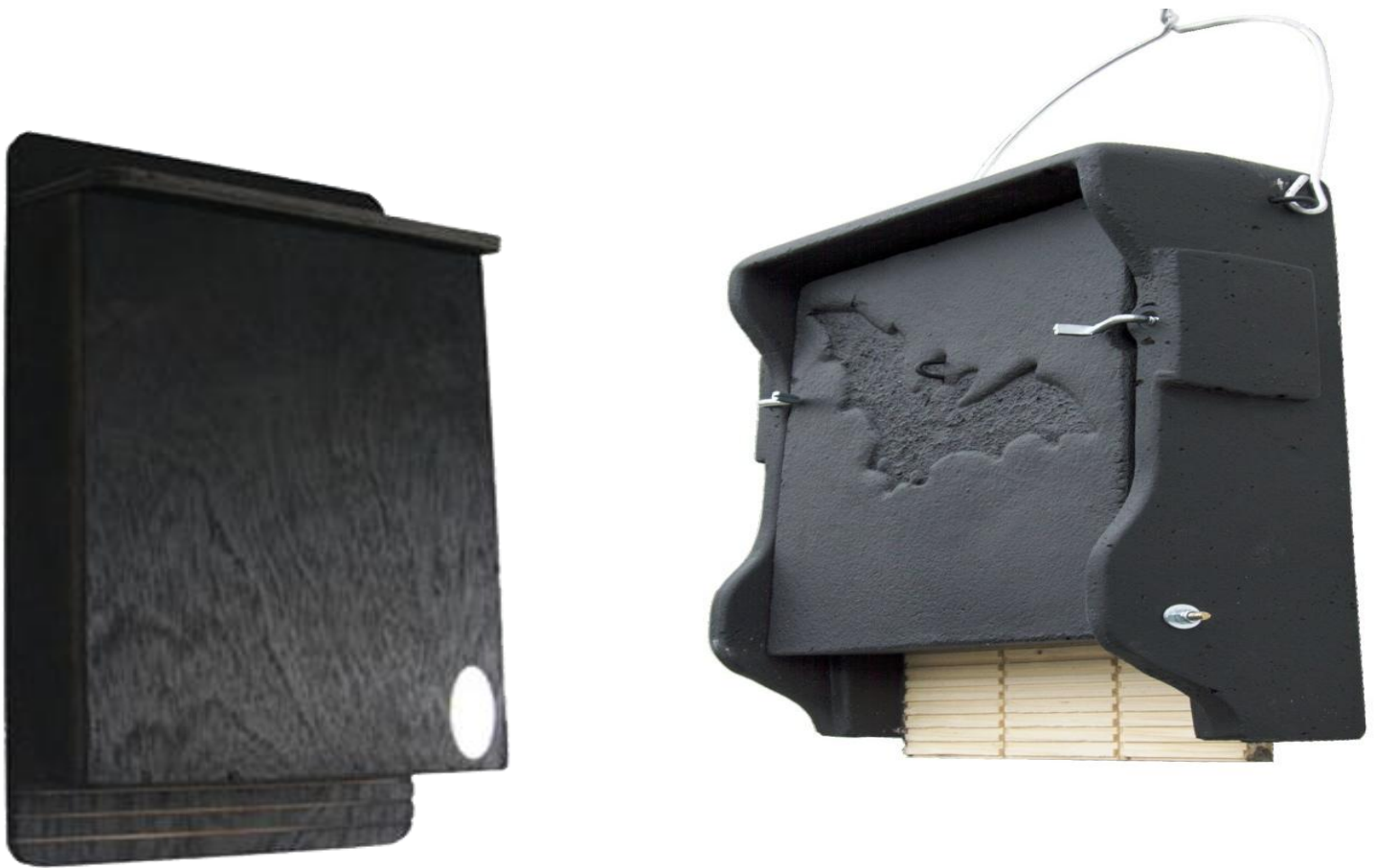


Figure 2. free-standing bat box examples

[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%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

It is believed that Storm Cottage offers negligible roost potential and limited favourable foraging habitat immediately surrounding the development and has limited potential for linking with more favourable habitat, particularly to the west. In the professional opinion of the author **no further surveys are required and no EPS licence is required.**

If the recommendations given in this report regarding bats are adhered to, there should be no further ecological constraints to the proposal.

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## APPENDIX A – LEGISLATION AND LICENSING

### a) Legislation

All species of bats receive special protection under UK law making it a criminal offence under Schedule 5 section 9 (4) (b) and (c) of the Wildlife and Countryside Act 1981 (as amended) to *"intentionally or recklessly disturb a bat at a roost"* or *"intentionally or recklessly obstruct access to a roost"* and under Regulations 43 (1) and (2) of the Conservation of Habitats and Species Regulations 2017 (The Habitat Regulations) to *"deliberately disturb a bat in a way that would affect its ability to survive, breed or rear young or, affect the local distribution or abundance of the species; or to " damage or destroy a roost"* without first having obtained the relevant licence for derogation from The Habitat Regulations from the Statutory Nature Conservation Organisation (the SNCO – Natural England in England).

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording in law is 'any structure or place which any wild animal...uses for shelter or protection' or 'breeding site or resting place'. Because bats tend to re-use the same roosts after periods of vacancy, legal opinion is that the roost is protected whether or not the bats are present at the time.

**Penalties on conviction of a bat-related crime - the maximum fine is £5,000 per incident or per bat, up to six months in prison, and forfeiture of items used to commit the offence, e.g. vehicles, plant, machinery.**

### b) Licensing

In order to obtain such a licence (as set out above) the SNCO must apply the requirements of the Regulations and, in particular, the three tests set out in sub-paragraphs 55(2)(e), (9)(a) and (9)(b). These are as follows:

(1) Regulation 55 (2)(e) states that a licence can be granted for the purposes of *"preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment"*.

(2) Regulation 55 (9)(a) states that the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied *"that there is no satisfactory alternative"*.



(3) Regulation 55 (9)(b) states that the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied " *that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.*"

The licence would permit an otherwise unlawful activity to take place, and it requires of the licensee measures to ensure that negative impacts are prevented, reduced or offset, and that the favourable conservation status of the bats is maintained. **Once a licence is granted, failure to comply with its contents, including its attached Method Statement is a Criminal Offence with fines of a maximum of £5,000 per infringement.** A licensed bat consultant must be appointed to assist in the preparation and the delivery of the mitigation proposals that ensure the species protection requirements (Favourable Conservation Status 'FCS' test) can be met.

Additional information on the tests is available from the Natural England website.

<http://publications.naturalengland.org.uk/publication/4727870517673984?category=12002>

The ecologist is responsible for providing evidence to meet Test 3. The evidence to satisfy tests 2 and 3 is submitted on a part of the license application called the Reasoned Statement. The Reasoned Statement must be filled in by the client or their agent. Applicants often approach planning consultants, architects or similar for advice regarding completion of the Reasoned Statement.

- **Permissions**

The development must have **full permission** before the licence application will be registered including any ecology-related conditions or reserved matters that can be discharged before the date of application.

- **Further bat surveys**

If a full active bat season is going to pass between the granting of planning permission and the licence application period, Natural England will require **update survey(s)** (March-Aug) prior to application submission. The number of surveys required will vary by site depending on the size and complexity of the site as well as the species and roost types present.

- **Land ownership**

If mitigation, compensation or monitoring is anticipated to be on land not owned by the applicant, then written consent from the landowner will be required by Natural England. Responsibility for management and maintenance must also be agreed.

- **Commitments**

Applications should not give any commitments to undertake licensed works (or actions relating to the licence) that cannot be delivered.

- **Multi-phased projects**

If a plan is phased, Natural England will require a Master Plan with all mitigation and timetables included on it.

### c) Licence timescales:

- **Licensing decision**

The licence application pack can take anywhere from **2 to 3 weeks** to produce and Natural England allow themselves **30 working days** from the date of receipt to respond to applications, a window which can be extended if further information is requested by themselves. It is important that clients, developers, contractors, agents, etc. keep this in mind when designing work timetables. Occasionally, further information will be requested by NE, which can result in additional delays; therefore application as soon as possible is advised.

- **Timing of works**

In most cases, the works most likely to affect bats (bat exclusion work, soft strip, re-roofing, ecologist-advised timber treatment, etc.) will normally be timed to avoid the hibernation and maternity periods. Thus, these works tend to be timed for either the **September-October period** or the **March-April period**. This means licence application is normally completed 3 months prior to these periods, and cannot be submitted any earlier.

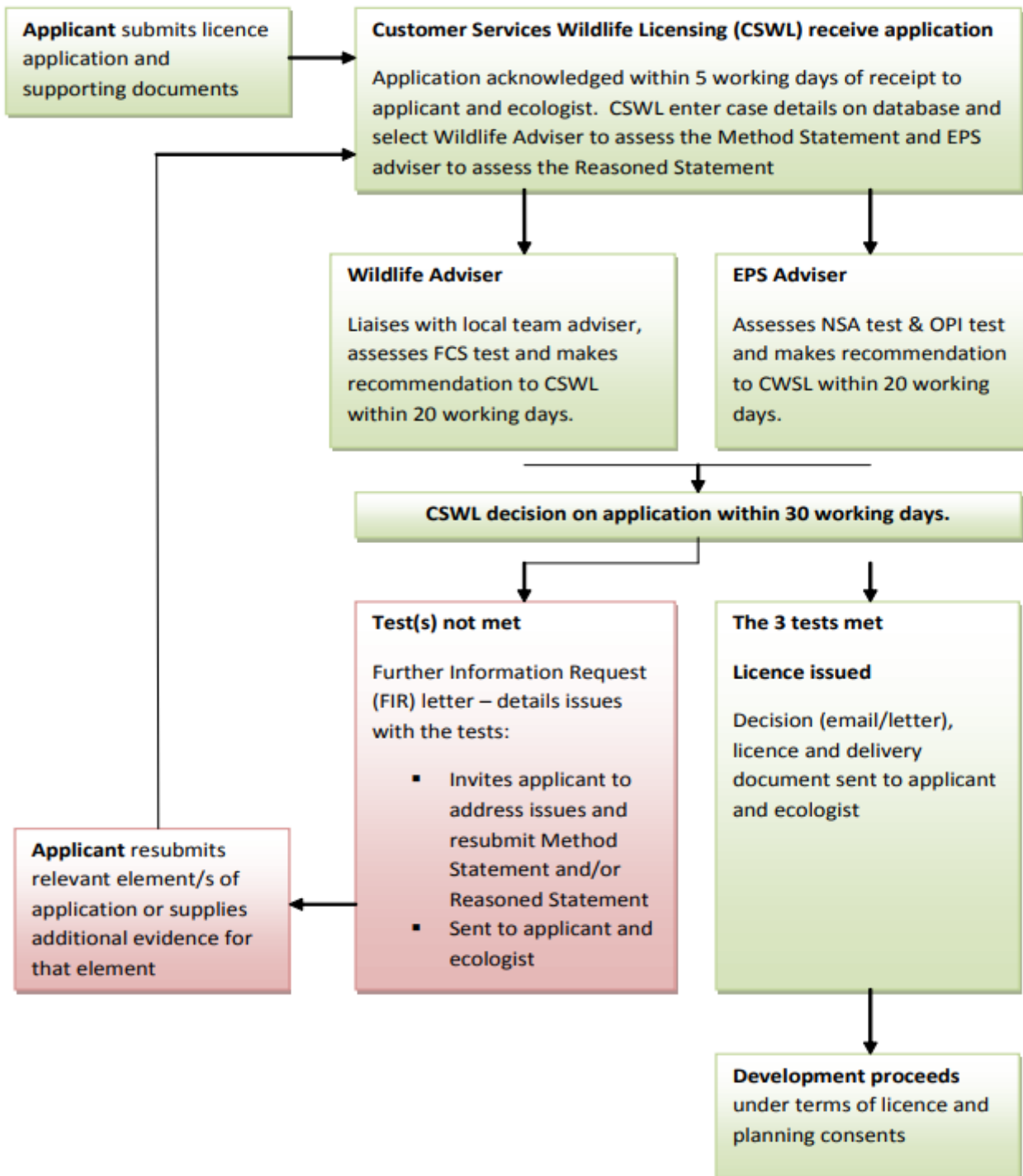
- **Other Timing**

All timescales are weather-dependent (e.g. 5 days post-exclusion period extended due to inclement weather) and also may be impacted by other aspects of the project not related to ecology. In some situations license periods can be extended, but this involves more work and is not guaranteed as they must ensure that Test 3 is still met.

#### d) Scale of work involved:

- **Mitigation** Production and submission of the license application pack as well as the completion of the licensed works themselves are time intensive and involve inspections, exclusions, site induction and other works requiring onsite supervision such as bat roost creation, soft strip and other necessary checks under the terms of the license. Costs for materials and equipment including bat boxes, exclusion materials, lifts/scaffolding to carry out soft strips, roost construction materials, etc. needs to be considered. Costs can vary considerably by project, but the applicant should ensure provision for all aspects of the licensed works is well-budgeted.
- **Monitoring** Most mitigation schemes require some sort of post-development monitoring, the type and extent of which would be confirmed in the license method statement. A contract with the ecologist for all survey, mitigation and post-development monitoring surveys needs to be agreed for this at the application stage.

## EPS Process



EPS application procedure flowchart (updated December 2011). Taken from WML-G12-EPS Mitigation Licensing – How to get a licence Version December 2013

## APPENDIX B – SUPPLIERS

1. Natural History Book Service  
1-6 The Stables  
Ford Road  
Totnes  
Devon, TQ9 5LE  
Tel: 01803 865913  
Email: [customer.services@nhbs.com](mailto: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](http://www.habibat.co.uk)
  
3. Dreadnought Tiles  
Dreadnought Works  
Brierley Hilly  
West Midlands, DY5 4TH  
Tel: 01384 77405  
Email: [sales@dreadnought-tiles.co.uk](mailto:sales@dreadnought-tiles.co.uk)  
Website: [www.dreadnought-tiles.co.uk](http://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](mailto:support@wildlifeservices.co.uk)  
Website: [www.wildlifeservices.co.uk](http://www.wildlifeservices.co.uk)
  
5. Wildcare  
Eastgate House  
Moreton Road  
Longborough  
Gloucestershire, GL56 0QJ  
Tel: 01451 833181  
Email: [sales@wildcare.co.uk](mailto:sales@wildcare.co.uk)  
Website: [www.wildcare.co.uk](http://www.wildcare.co.uk)