

## BAT SURVEY REPORT

At

Willow Cottage  
Low Dales  
Hackness  
Scarborough  
YO13 0JU  
For

NYMNP

24/08/2020

Mr & Mrs Wharton

Date: 17<sup>th</sup> August 2020

Reference no: CE0716

Curtis Ecology

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## Document Control Sheet

Client: Mr & Mrs Wharton

Project: Willow Cottage, Low Dales, Hackness, Scarborough, YO13 0JU

Title: Bat Survey Report

## REPORT CONTROL SHEET

<b>General Report Information</b>	
Date of site risk assessment	13 <sup>th</sup> June 2020
Lead ecologist signature	
Date report issued	17 <sup>th</sup> August 2020
Report approved by	Roger Curtis FdSc

## Report Version Control

Version	Date	Author	Description
1.0	17 <sup>th</sup> August 2020	Roger Curtis	Original Version

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## EXECUTIVE SUMMARY

Curtis Ecology has been commissioned by the clients Mr & Mrs Wharton to undertake a Preliminary Roost Assessment and Nocturnal Surveys on the southern section of a two storey barn located within the curtilage of Willow Cottage, Low Dales, Hackness, Scarborough, YO13 0JU. The surveys are required to inform a proposed planning application, which is to be lodged with the local planning authority, in this case the North York Moors Planning Authority for the Conversion of the southern section of the two storey barn into a single unit holiday let.

The Preliminary Roost Assessment was undertaken on the 31<sup>st</sup> October 2019 which is an appropriate time of the year for this type of survey. During the Preliminary Roost Assessment, historical evidence of bat habitation in the form of bat droppings pertaining to Pipistrelle bat species, which were present in the first floor room of the southern section of the barn. In addition there are features in the external stone walls and roof structures which also have the potential to provide roosting opportunities, especially for crevice dwelling bat species, bearing in mind that a Pipistrelle bat species can quite easily squeeze into a 15 – 20mm gap. As a result of the desk top study and observations made during the daytime buildings assessment, the southern section room of the barn has been assessed as having High potential for bat habitation.

It was recommended that nocturnal surveys, in the form of dusk and dawn activity surveys are undertaken on the study building during the bat activity survey season generally accepted to be between May – mid September.

Results from the nocturnal surveys undertaken on the 13<sup>th</sup> June, 3<sup>rd</sup> July and 23<sup>rd</sup> July 2020 indicated the presence of the small Brown Long-eared *Plecotus auritus* maternity roost, along with day roosts for 2 Common pipistrelle *Pipistrellus pipistrellus* and 5 Soprano pipistrelle *Pipistrellus pygmaeus* within the roof structure of the study building. .

The Brown Long-eared *Plecotus auritus* maternity roost and Common pipistrelle *Pipistrellus pipistrellus* and Soprano pipistrelle *Pipistrellus pygmaeus* day roost found within the study building will be disturbed/destroyed as part of conversion phase of the southern section of the barn, therefore a European Protected Species Mitigation Licence, approved by Natural England will be required before conversion work can be undertaken. This licence can only be applied for once planning approval has been obtained from the Local Planning Authority in this case the North York Moors Planning Authority.

Results from the nocturnal surveys indicated that the study site and immediate surrounding habitat offers moderate foraging capacity and occasional commuting activity for only a small number of bats.

Informative: - With regard to an application for a European Protected Species Mitigation Licence (Bats). Natural England require dusk & dawn surveys to have been conducted within the current or most recent optimal survey season. If a European Protected Species Mitigation Licence (Bats), has not been applied for within this time period, then top up dusk & dawn surveys will be required during the proceeding bat activity survey seasons until such an application is made.

It should, however, be remembered that bats are a highly mobile and secretive species, their absence during a survey of this type undertaken at this time of the year does not preclude them from being present at other times of the year

During the Preliminary Roost Assessment a single House Martin *Delichon urbicum* nest was present on the first floor boarded window opening on the west elevation adjacent to the study section of the barn. As the proposed conversion work will impact upon the existing nesting site, a Mitigation Strategy has been drawn up in Section 7.3 of this report which should allow for the Continued Ecological Functionality and to maintain the Favourable Conservation Status for this bird species.

## 1.0 INTRODUCTION

Curtis Ecology has been commissioned by the clients Mr & Mrs Wharton to undertake a Preliminary Roost Assessment and Nocturnal Surveys on the southern section of a two storey barn located within the curtilage of Willow Cottage, Low Dales, Hackness, Scarborough, YO13 0JU. The survey is required to inform a proposed planning application, which is to be lodged with the local planning authority, in this case the North York Moors Planning Authority for the Conversion of the southern section of the two storey barn into a single unit holiday let.

### 1.1 Site Description

Willow Cottage is found in an isolated rural location within the North York Moors National Park. The study building within the curtilage of Willow Cottage is centred on Grid reference SE9535 9163 which is approximately 1.6km North West of Hackness village. The study site is comprised of the study building, a cottage, and a block of three garages both of which do not form part of the proposed planning application. The site is accessed from Low Dales Road with blocks of mature woodland encompassing most of the site boundaries. The surrounding habitat is predominantly grassland with boundary hedgerows and further large areas of mature woodland. Lowdales Beck also runs adjacent to the study site.

Figure 1. Aerial view of the study site location within the wider landscape.



© Google Earth 2020.

## **1.2 Proposed Works.**

It is understood that the development proposal relates to the conversion of southern section of the barn into a single unit holiday let.

## **1.3 Survey Objectives**

The aim of the Preliminary Roost Assessment and Nocturnal Surveys are as follows:-

- Perform a desk top study and data/record search for pre-existing records and data from third party repositories prior to the site survey.
- Determine the potential for bats and to search for evidence of their occupancy and signs of usage using a number of survey methods.
- Assess the survey results and evaluate any potential impact of the proposed work upon any bats which might be occupying any of the study buildings and immediate surrounding habitat.
- To produce a report detailing findings, the likely approach to mitigation and any recommendations for the proposed work.

## **2.0 SURVEY METHODOLOGY**

### **2.1 Desk Study**

A desk study was undertaken with records being obtained from the following third party repositories, the North & East Yorkshire Ecological Data Centre, North Yorkshire Bat Group, with a review of the Multi-Agency Geographical Information of Conservation (MAGIC) and Google Earth. The search area is a 2km radius from the centre of the application site located at Grid reference SE9535 9163.

### **2.2 Buildings Assessment**

The buildings were subject to a visual daytime inspection for evidence of and potential for bat species. The survey methodology will be undertaken as recommended by the Bat Conservation Trust - Bat Surveys for Professional Ecologists: *Good Practice Guidelines (3<sup>rd</sup> Edition 2016* and Natural England Standing Advice Sheet - *Bats (April 2012)*.

The visual survey involves assessment for: -

- An assessment of holes/crevices in the building structure.
- Slipped, lifted and or badly fitted tiles
- The presence of roofing felt or any form of internal roof lining.
- Signs of droppings on walls, windowsills, floors, roof spaces and below any suitable roosting features.

- Wing fragments of butterflies and moths on the floor/walls below beams and other internal structure.
- Scratch marks on beams, potential entrance and exits holes and any other internal structures.
- Dead bats
- Oil staining – the bat fur may leave an oily residue on surfaces
- Tracks in any dust
- Odour – certain bat species can have a distinctive odour, species such as soprano pipistrelle and noctule can have a pungent odour from urine and oily fur.
- Suitable foraging and or commuting habitat within close proximity to the study site, which would include woodland, shelter belts, hedgerows, ponds, watercourses and domestic gardens connected to one another.

### **2.3 Nocturnal Surveys**

Nocturnal bat surveys will be undertaken as recommended by the Bat Conservation Trust - Bat Surveys for Professional Ecologists: *Good Practice Guidelines 3<sup>rd</sup> Edition 2016* and English Nature *Bat Mitigation Guidelines (2004)*. The surveys are comprised of one dusk emergence survey and one dawn/ re-entry survey to assess any bat activity associated with the buildings and surrounding habitat of the site using equipment set out in 2.4.2 below.

The dusk/emergence survey will commence approximately fifteen minutes before sunset and cease approximately one and a half to two hours after sunset.

The dawn survey will commence approximately one and a half to two hours before sunrise and finished approximately fifteen minutes after sunrise.

Bats seen or heard during the nocturnal surveys will be recorded, noting the time of observation, estimated number of bats, direction of flight and type of activity. These observations will be presented in the form of an observation table and activity plan for each respective survey.

### **2.4 Survey Equipment.**

2.4.1 The following equipment when required was used during the building survey assessment:

- Clulite CB2 one million candle power torch
- Close focusing binoculars
- Dart Ridged See-Snake Endoscope



- Petsl Tikka Plus 2 head torch
- 3.6 m telescopic ladders
- FinePix S5600 digital camera
- Thermohygrometer

2.4.2 The following equipment when required was used during the emergence and return bat activity surveys: -

- Bat Duet Frequency Division Bat detectors
- Edirol R-09HR Wave/MP3 recorder
- Echo Meter Touch Full Spectrum bat detector
- Thermohygrometer
- Petsl Tikka Plus 2 head torches

## 2.5. Weather Conditions.

Table 1-Weather conditions at the time of the Preliminary Roost Assessment

Survey date	31 <sup>st</sup> October 2019
Wind speed	10 mph North West
Cloud cover	50%
Rainfall	None
Temperature	9°C
Humidity	65%

Table 2 - Weather conditions at the time of the nocturnal surveys

Survey date	13 <sup>th</sup> June 2020	3 <sup>rd</sup> July 2020	23 <sup>rd</sup> July 2020
Sunset / sunrise times	21.37hrs	04.34 hrs	21.16 hrs
Survey time	21.20 – 23.30 hrs	02.30 – 04.50hrs	20.55 – 23.00 hrs
Wind speed	Calm	5 mph SW	Calm
Cloud cover	100%	90%	10%
Rainfall	None	None	None
Temperature	12°C	12°C	15°C
Humidity	99%	90%	92%

## **2.6 Survey Personnel**

### *2.6.1 Daytime Building Assessment*

The buildings assessment was undertaken in suitable weather conditions and at an appropriate time of year on the 31st October 2019 by the following personnel:

Roger Curtis FdSc who has 12 years survey experience and holds the follow Natural England licences; -

Bats – WML-CL18 class licence 2015-12148-CLS-CLS

Bats - Personal licence for possession licence no 20131261

Great crested newts – WML-CL08 class licence, 2015-17362-CLS-CLS

Roger is also a committee member of the East Yorkshire Bat Group and County Bat Recorder.

With assistance from Beth Bell who has undertaken numerous dusk & dawn surveys over the past three years, as well as assisting with building and trees assessments. Beth is currently in the final stage of assessment for a Natural England level 2 class bat licence

### *2.6.2 Nocturnal Surveys*

Roger Curtis FdSc who has 12 years survey experience and holds the follow Natural England licences; -

Bats – WML-CL18 class licence, survey licence 2015-12148-CLS-CLS

Bats - Personal licence for possession licence no 20131261

Great crested newts – WML-CL08 class licence survey licence -2015-17362-CLS-CLS

Roger is also a committee member of the East Yorkshire Bat Group and County Bat Record

Beth Bell who has undertaken numerous dusk & dawn surveys over the past three years, as well as assisting with building and trees assessments. Beth is currently in the final stage of assessment for a Natural England level 2 class bat licence

### 3.0 SURVEY RESULTS

#### 3.1 Desk Top Study

##### 3.1.1 Figure 2. Pre-existing Site Designations



Our Ref: E04502  
Your Ref: CE0705  
Date: 22/10/2019  
Search area: 2km radius from SE934916

#### Site Data Search

##### **Internationally designated sites:**

The following sources were searched:

Special Areas of Conservation *published March 2016 - revised July 2019*  
Special Protection Areas *published March 2016 - revised June 2019*  
Ramsar sites *published March 2016 - revised June 2019*

There are no internationally designated sites within the search area.

##### **Nationally designated sites:**

The following sources were searched:

Sites of Special Scientific Interest *published 14/09/2017 - revised June 2019*  
National Parks *published 01/08/2016 - revised February 2019*  
Areas of Outstanding Natural Beauty *published 11/05/2015*  
National Nature Reserves *published March 2016 - revised May 2019*

The following nationally designated statutory sites are in or partly within the search area, and are shown on the accompanying map:

<i>Designation</i>	<i>Name or location of site</i>	<i>Grid Reference</i>
National Park	North York Moors	Whole of search area

We do not hold full details of Statutory sites. For further information please contact Natural England. Their website is at:

<https://www.gov.uk/topic/planning-development/protected-sites-species>

The Protected Areas Designations Directory and further information on Statutory sites can be found at: <http://ncc.defra.gov.uk/page-1527>

##### **Locally designated and non-Statutory sites**

The following sources were searched:

Local Nature Reserves *published 01/03/2016 - revised June 2019*

There are no LNR within the search area.

##### **North Yorkshire SINC [Sites of Importance for Nature Conservation]**

Version: NY\_SINCs V9.5

November 2018

There are no SINC within the search area.



Our Ref: E04502  
 Your Ref: CE0705  
 Date: 22/10/2019  
 Search area: 2km radius from SE934916

**Yorkshire Wildlife Trust Reserves**

Version: YWT Reserves January 2019

There are no YWT reserves within the search area.

**Site-based Habitat data:**

Areas of habitats in or partly within the search area occurring in the Natural England Ancient Woodland Inventories and/or Priority Habitats are shown on the accompanying map, and are listed below:

**Ancient Woodland Inventory**

Version: Ancient Woodlands July 2019

Habitat type	Location or comments
Ancient and Semi-Natural Woodland	Chapman Banks; Stony/Holm/Hagg Woods
Planted Ancient Woodland Sites	Backleys Wood; Chapman Banks; Cow Heights Wood; Spring Woods East & West; Stony/Holm/Hagg Woods; White Wood

**Priority Habitat Inventory**

Version: Priority Habitats Inventory August 2017

Habitat type	Location or comments
Deciduous woodland	Numerous parcels throughout search area
Good quality semi-improved grassland	Low Dales

The relevant 2km Designation & Habitat Maps are illustrated in Appendices 1 & 2 of this report.

3.1.2 Bat records

Table 3. Bat records were obtained from North & East Yorkshire Ecological Data Centre (NEYEDC) with reference to the North Yorkshire Bat Group.

Species	Site	Grid ref.	Quantity	Date	Comment
Natterer's Bat	Broxa Farm, Broxa	SE945915		Aug-10	Foraging in barn
Leisler's Bat	Broxa Farm, Broxa	SE945915		Aug-10	In flight
Common Pipistrelle	Broxa Farm, Broxa	SE945915	1	Aug-10	Roost
Common Pipistrelle	Broxa Farm, Broxa	SE945915	5	Aug-10	Foraging
Brown Long-eared Bat	Hackness	SE968906	1	02-Oct-02	
Brown Long-eared Bat	Hackness	SE968906	1	17-Aug-87	
Soprano Pipistrelle	Low Dale Farm, Hackness	SE955916	468	05-Jul-01	Maternity roost
Soprano Pipistrelle	12 Hackness Village	SE965900	50		2007 Maternity roost

Table 4. Bat records obtained from the North & East Yorkshire Ecological Data Centre.

Common Name	Location	Grid reference	Date	Comments
Common pipistrelle	Langdale End	SE9227 9149	01/01/ 2015	13 Count
Common pipistrelle	Langdale End	SE9227 9149	01/01/ 2015	10 Count

There were 10 historical bat records returned from the third party repositories. The nearest historical roost record is for a maternity roost of 468 Soprano Pipistrelle *Pipistrellus pygmaeus* in 2001 at Low Dale Farm, which either relates to the study site or the neighbouring Lowdale Cottage, which is approximately 40 metres south east of the study building.

### 3.2 Daytime Building Survey.

Plate 1. Shows west elevation of the study building, with the study area of the barn outlined in red.



The study building is a two storey solid stone barn with a pan tiled roof covering. At this stage for the purpose of this report the assessment survey only relates to the southern rooms of the barn as indicated in Plate 1 .The external walls look to be in good condition, however there are gaps in several areas where the mortar is missing at eaves level on the east elevation. There is a timber framed door to the ground floor and a timber framed boarded window at the first-floor level on the south gable, which has gaps between the window frame and surrounding stonework. Internally in the ground floor room the stonework is covered in a whitewash, there are however several gaps in the walls where the mortar has disintegrated over time. The first floor room stone walls are lined internally with a breeze block wall, however on the south gable the original stonework extends up to eaves level, with blockwork above to the ridge. The study rooms are separated from the remainder of the barn by a

225mm breeze block wall, which extends full height up to the ridge line. Large timber purlins with rafters support the pantile roof covering. There are numerous tiles lifted along with several gaps under the ridge tiles. An Impermeable Roofing Underlay is found throughout the roof structure. Internally there are gaps between the gable walls and adjacent rafters as well as where the ridge board is let onto the gable wall, which appears to allow access from the room into the cavities between the underlay and pantiles. Evidence of bat habitation was found on the first-floor room, with numerous droppings pertaining to Pipistrelle bat species on both the internal gable walls, along with a lighter scattering over the floor area.

From the observations made at this stage the study building has been assessed as having High potential for bat habitation for the following reasons:

- Evidence of bat habitation in the form of multiple bat droppings in the first-floor room
- Gaps around the timber hatch on the south gable
- Gaps surrounding header stones on east elevation
- Gaps in internal walls
- Lifted pantiles

Plate 2. Looking towards the south gable





Plate 3. Looking towards the west elevation



Plate 4. The interior of the first floor room



Plate 5. The interior of the ground floor room.



Plate 6. Shows evidence of bat habitation in form of bat droppings on south gable wall ledge.





Plate 7. Bat dropping found on the internal wall of the first floor room



### 3.3 Nocturnal Surveys.

Survey data results are presented below along with the relevant survey activity plan

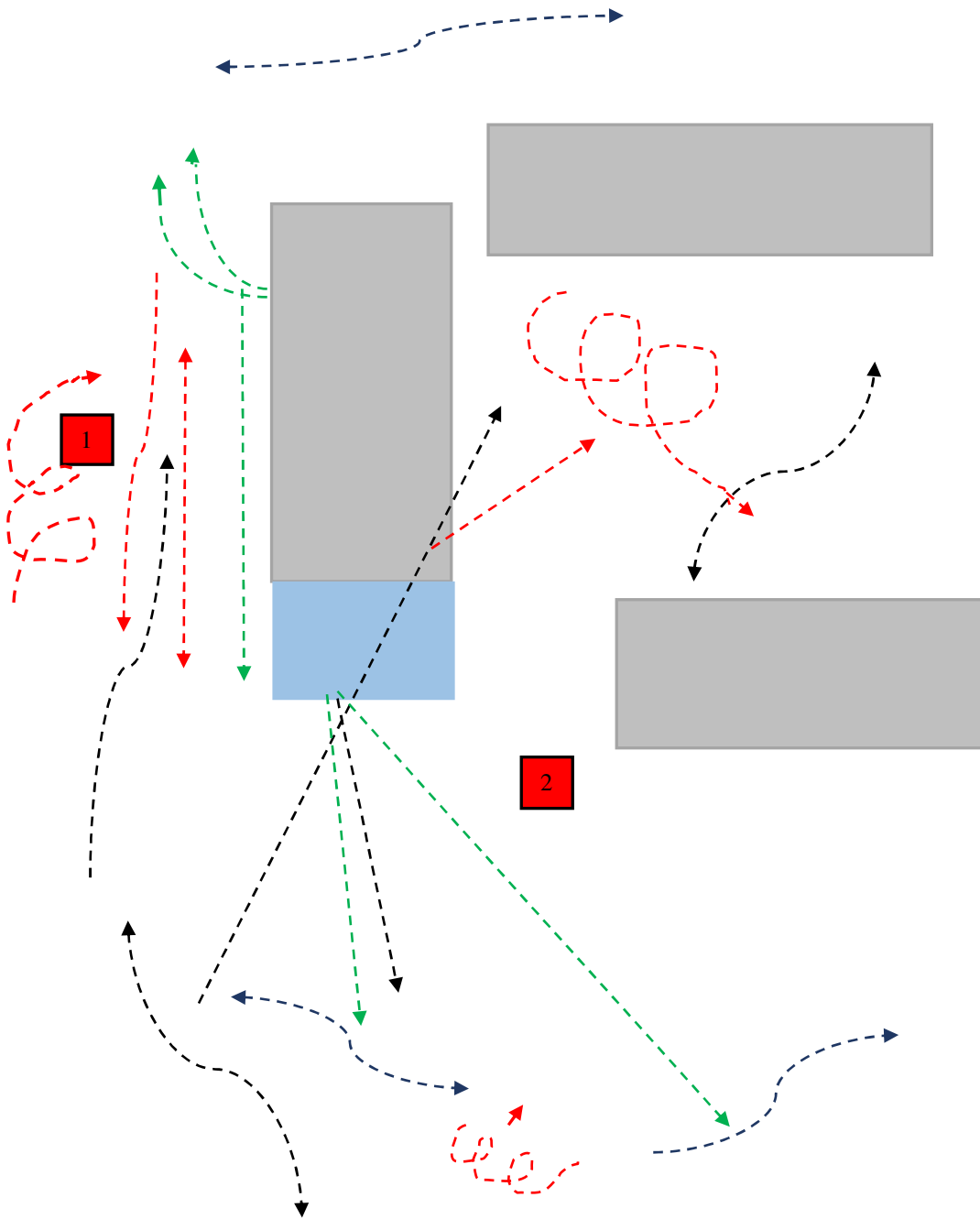
#### *Dusk Activity Survey for 13<sup>th</sup> June 2020*

Table 5. Results of the dusk emergence bat survey

<b>Location</b>	<b>Time</b>	<b>Observations made</b>
	21.20	Survey start
2	21.22	1 Common pipistrelle emerged from under tile on east elevation.
1 & 2	21.29 – 21.48	1 Noctule foraging over head
2	21.50	1 Common pipistrelle heard commuting; direction not ascertained
1 & 2	21.53 – 21.59	2 Noctule foraging over trees to north of site
1 & 2	22.00 – 22.10	1 or 2 Common pipistrelle foraging in garden to south of study site
1	22.00 – 22.30	1 Common pipistrelle foraging along west elevation of study building
2	22.10	1 Soprano pipistrelle emerged from under tile on the south gable of study building
1 & 2	22.11 – 22.30	1 Soprano pipistrelle foraging to the south west of study building.
1 & 2	22.12 – 22.24	1 Noctule foraging over head
1	22.16	1 Common pipistrelle heard commuting; direction not ascertained
1 & 2	22.17	1 Noctule foraging over trees and garden to the south of the site
2	22.24	1 or 2 Common pipistrelle foraging in yard to east of study building.
1	22.29	1 Soprano pipistrelle foraging south to north
1	22.22	1 Common pipistrelle foraging north to south
1 & 2	22.29	2 Soprano pipistrelle commuting south west to north
2	22.32	1 Soprano pipistrelle foraging in yard to east of study building
1	22.39 – 22.58	1 Common pipistrelle foraging to the west of the study building
2	22.40 & 22.43	2 Brown long ear emerged from ridge line of study building
1	22.55	1 Brown long eared emerged from stable door on the north west corner of barn
2	22.56	1 Brown long eared emerged from south gable of study building
1	22.58	1 Brown long eared emerged from stable door on the north west corner of barn
1 & 2	23.00	1 Brown long eared commuting north to south

1 & 2	23.07	1 Soprano pipistrelle heard foraging; direction not ascertained
2	23. 15	1 Common pipistrelle heard commuting; direction not ascertained.
	23.30	Survey End

Dusk bat activity plan 13<sup>th</sup> June 2020.



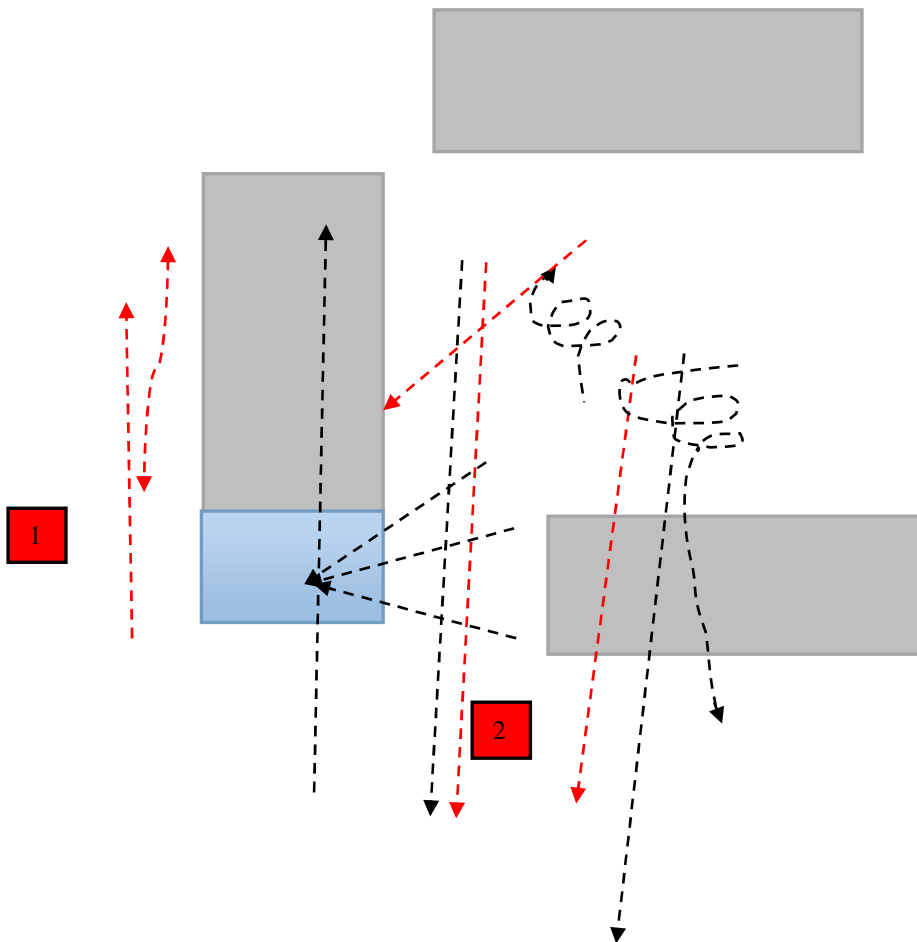
	Surveyor Location		Study Building		Other Buildings on Site
	Common Pipistrelle		Brown Long Eared		Noctule
	Soprano Pipistrelle				

*Dawn Activity Survey for 3<sup>rd</sup> July 2020*

Table 6. Results of the dawn re-entry bat survey

<b>Location</b>	<b>Time</b>	<b>Observations made</b>
	02.30	Survey Start
1	02.32	1 Common Pipistrelle foraging along west elevation of barn
2	02.40	1 Soprano pipistrelle heard commuting; direction not ascertained
2	02.57	1 Common Pipistrelle commuting north to south
1 & 2	03.14	1 Noctule heard foraging; direction not ascertained
1	03.17	1 Common pipistrelle commuting south to north
2	03.23	1 Soprano pipistrelle commuting north to south
1 & 2	03.26	1 Soprano pipistrelle commuting south to north
2	03.28	1 Soprano pipistrelle foraging in yard to east of study building
1 & 2	03.32 – 03.36	1 or 2 Common pipistrelle heard foraging; direction not ascertained
2	03.40	1 Soprano pipistrelle commuting north to south
2	03.45	1 Common pipistrelle commuting north to south
2	03.47 – 04.03	1 or 2 Soprano pipistrelle foraging to the east of study building
2	04.05	1 Common pipistrelle swarmed the east elevation of barn before entering a day roost @ 04.10
2	04.11 – 04.20	3 Soprano pipistrelle swarmed the east elevation of study building, before entering a day roost under a ridge tile on study building
	04.50	Survey End

Dawn bat activity plan 3<sup>rd</sup> July 2020



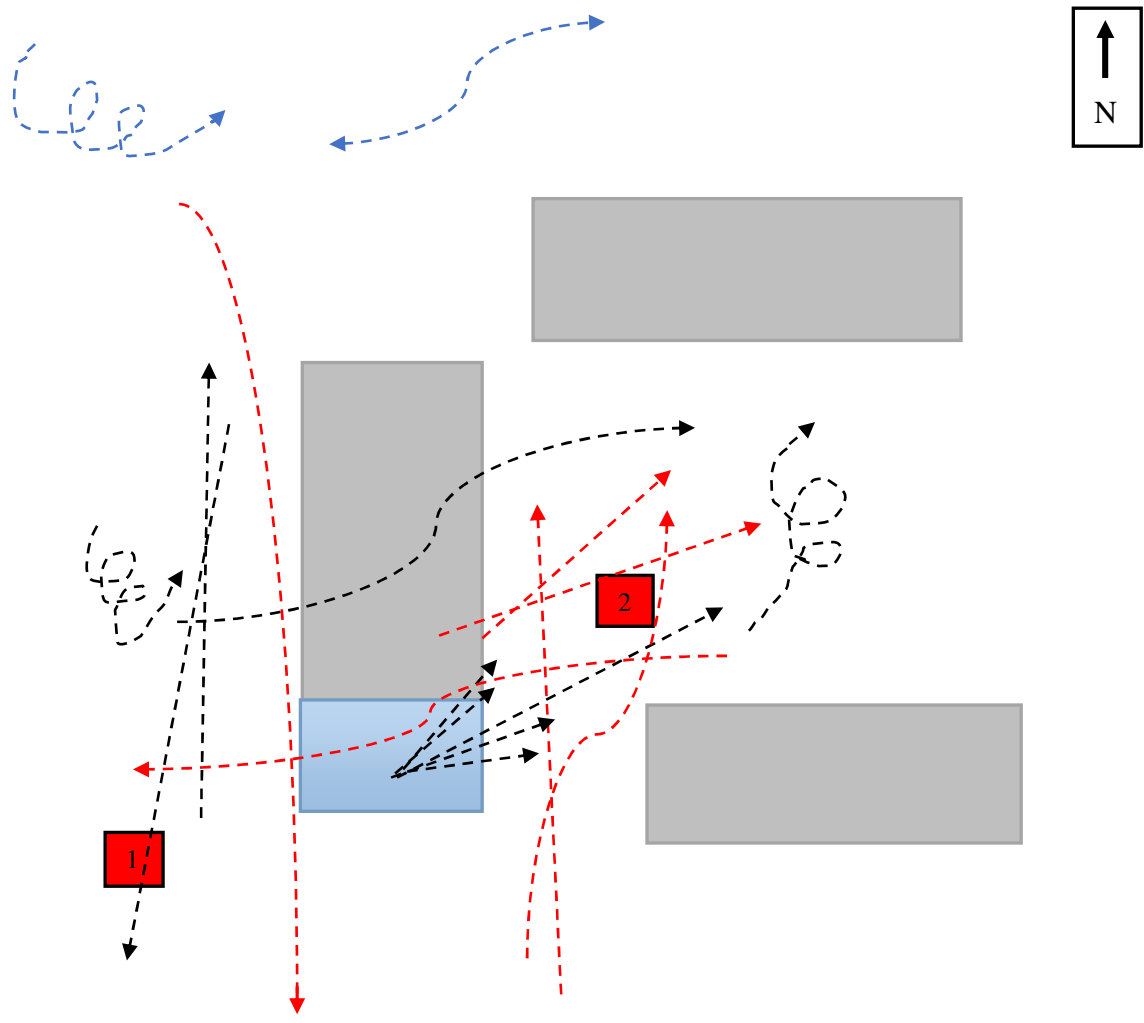
	Surveyor Location		Study Building		Other Buildings on Site
	Common Pipistrelle		Noctule		Soprano Pipistrelle







*Dawn Activity Survey for 23<sup>rd</sup> July 2020*

Table 7. Results of the dawn re-entry bat survey

<b>Location</b>	<b>Time</b>	<b>Observations made</b>
	20.55	Survey Start
2	21.18	1 Common pipistrelle heard briefly; direction not ascertained
2	21.10	1 Common pipistrelle commuting south to north
1	21.21 – 22.28	1 Noctule foraging over trees to the north west
2	21.22	1 Common pipistrelle emerged from a day roost under tile on the east elevation of barn
2	21.23	1 Soprano pipistrelle emerged from day roost under ridge tile on study building
2	21.30	1 Common pipistrelle foraging south to north
1 & 2	21.31 – 21.35	1 Noctule seen foraging above trees to north west of study site.
2	21.33	1 Common pipistrelle emerged from under tile on east elevation of barn
2	21.34 – 21.36	4 Soprano pipistrelle emerged from under ridge tile on study building
1 & 2	21.45	1 Common pipistrelle heard commuting; direction not ascertained.
1	21.52	1 Soprano pipistrelle commuting south to north along west elevation of study building.
1 & 2	21.53	1 or 2 Soprano pipistrelle foraging west to east
1	22.56-21.59	1 or 2 Soprano pipistrelle foraging to west of study site
1 & 2	22.03	1 Common pipistrelle foraging east to west over study building
2	22.20 – 22.32	1 or 2 Soprano pipistrelle foraging around yard to east of study building
1	22.22	1 Common pipistrelle foraging from north west to garden to south of study building
1	22.31	1 Soprano pipistrelle commuting north to south
1 & 2	22.35	1 Common pipistrelle heard commuting; direction not ascertained
	23.00	Survey End

Dawn bat activity plan 23<sup>rd</sup> July 2020



	Surveyor Location		Study Building		Other Buildings on Site
	Common Pipistrelle		Noctule		
	Soprano Pipistrelle				



## **4.0 ASSESSMENT OF SURVEY RESULTS**

### **4.1 Constraints on Survey Information**

- There were no constraints on the equipment used during the daytime buildings assessment or nocturnal surveys
- There were no constraints on the third-party data searches.

### **4.2 Constraints on Equipment Used**

- There were no constraints on the equipment used during the building assessment or nocturnal surveys.

### **4.3 Potential Impacts of Development.**

#### 4.3.1 Designated sites

There are no International or National sites found within the 2km search area.

There are no Local Nature Reserves found within the 2 km search area.

There are four Non-Statutory sites within the search area the nearest of which is Campbell's Wood a Deleted Local Wildlife Site, which is located approximately 0.85km to the south of the study site.

Therefore due to the distances between the application site and the nearest Non -Statutory site, together with the size of development and its location, it is reasonable to consider that any short or long term impacts are unlikely to occur upon any of the site designations by the proposed development if it were to proceed.

#### 4.3.2 Roosts.

There were 10 historical bat records returned from the third party repositories. The nearest historical roost record is for a maternity roost of 468 Soprano Pipistrelle *Pipistrellus pygmaeus* in 2001 at Low Dale Farm, which either relates to the study site or the neighbouring Lowdale Cottage, which is approximately 40 metres south east of the study building.

During the daytime buildings assessment undertaken on the 31<sup>st</sup> October 2019, there were several features identified within the structure of the study building to varying degrees, which have the potential to provide roosting opportunities, especially for crevice dwelling bat species, bearing in mind that a Pipistrelle bat species can squeeze into a 15 – 20mm gap quite easily. There was also evidence of bat habitation found in the form of multiple bat droppings pertaining to Pipistrelle bat species, in the first floor room of the southern section of the study building. Therefore, as a result of the observations made during the daytime buildings assessment, the study building had been assessed as having High potential bat habitation.

Just prior to the commencement of the dusk survey undertaken on the 13<sup>th</sup> June 2020, 6 Brown long-eared *Plecotus auritus* were seen roosting on the ridge board adjacent to the south gable internal wall. A single Soprano pipistrelle *Pipistrellus pygmaeus* was also seen between the southern gable wall and adjacent rafter. However the interior of the building was also inspected at the times of the following dawn survey periods, with the result that no Brown Long-eared *Plecotus auritus* were present within the southern section room of the barn, although at the time of the dawn survey undertaken on the 23<sup>rd</sup> July 2020 a single Soprano pipistrelle *Pipistrellus pygmaeus* was again seen roosting in the same location as previously noted.

During the dusk survey undertaken on the 13<sup>th</sup> June 2020, one Common Pipistrelle *pipistrellus pipistrellus* was seen to emerge from a day roost under a pantile on the east elevation of the main barn @ 21.22hrs (Roost 1) (Plate 8). One Soprano pipistrelle *Pipistrellus pygmaeus* was seen to emerge from the south gable of the study building @ 22.10hrs (Roost 2) (Plate 9), and 2 Brown Long Eared *Plecotus auritus* were seen to emerge from the ridge line above the southern section room @ 22.40 & 22.43 (Roost 3) (Plate 9).

During the dawn survey undertaken on 3<sup>rd</sup> July 2020 one Common pipistrelle *Pipistrellus pipistrellus* was seen to re-enter a day roost under the tiles on the east elevation of the main barn @ 04.10 (Roost 1) (Plate 8). Four Soprano pipistrelle *Pipistrellus pygmaeus* were seen to enter a day roost under a ridge tile above the southern section room between 04.11 & 04.20 (Roost 4) Plate 10).

During the dusk survey on 23<sup>rd</sup> July 2020 one Common pipistrelle *pipistrellus pipistrellus* was seen to emerge from under a tile on the east elevation of the main barn @ 21.22 hrs (Roost 1) (Plate 8). Five Soprano Pipistrelle *Pipistrellus pygmaeus* were seen to emerge from under a ridge tile above the southern section room between 21.23 & 21.36 (Roost 4) (Plate 10). One Common pipistrelle *pipistrellus pipistrellus* was seen to emerge from under a tile on east elevation above the southern section room @ 21.33hrs (Roost 5) (Plate 10)

It should be remembered however, that bats are highly mobile and secretive species, their absence during surveys of this type does not preclude them from being present at other times of the year.

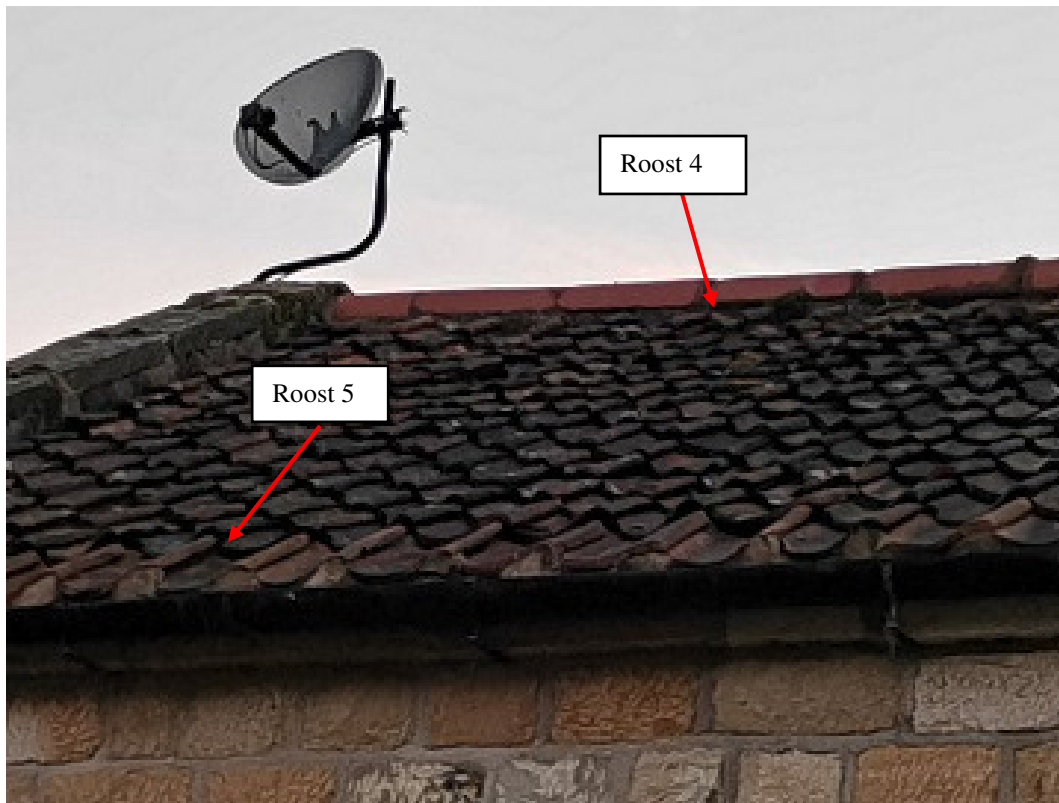
Plate 8. Shows position of Day Roost 1



Plate 9. Shows position of day Roosts 2 & 3



Plate 10 Show position of Day Roosts 4 and 5.



#### 4.3.3 Habitats

The habitats within the immediate surrounding area being predominately extensive areas of woodland and Lowdale Beck, are considered to offer moderate/high foraging capacity for several bat species.

#### 4.3.4 Foraging and commuting

Foraging activity was primarily associated with the garden area and woodland to the north of the study site. The majority of foraging recording during all the survey periods were for single Common pipistrelle *pipistrellus pipistrellus*, Soprano pipistrelle *Pipistrellus pygmaeus* and Noctule bats, although on several occasions up to two bats of the same species were recorded foraging together. It is considered that the primary foraging habitat for a larger number of bats will be associated with the large blocks of woodland to the immediate north, west and east of the study site.

Commuting activity was generally randomly spread over the site, there was no indication of a man commuting route within the study site for a large number of bats.

From the observation made during the nocturnal survey period it is apparent that the study site and the immediate surrounding habitat only supports a small number of individual bats of a common species.

Therefore from the nocturnal survey findings as discussed above it can be anticipated that it would be highly unlikely for any adverse short or long term impacts, upon either the foraging or commuting activity of the local bat population, if the proposed development were to proceed.

#### 4.3.5 Nesting birds

A single House Martin *Delichon urbicum* nest found on the first floor hatched opening on the west elevation adjacent to the study section of the barn. The nesting site will be lost/disturbed as part of the proposed conversion, therefore to mitigate any negative short or long term impacts, recommendations have been made in Section 7.3 of this report.

## 5.0 LEGISLATION

### 5.1 Bats

All species of UK bats are statutorily protected under the Conservation of Habitats and Species Regulations 2017 (formerly The Conservation (Natural Habitats, Etc.) Regulations 1994 (as amended), which implements the requirements of the EC Habitats Directive, plus under UK legislation through Schedule 5 (Section 9) of the Wildlife and Countryside Act 1981. This combined legislation makes it an offence to:

- Deliberately kill, injure or capture bats
- Deliberately disturb bats in such a way as to significantly effect:
  - a) the ability of that species to survive, breed, rear or nurture their young
  - b) the local distribution on the species
- Intentionally or recklessly disturb or obstruct access to the resting place of bats
- Damage or destroy breeding sites and resting places of bats even if bats are not occupying the roost at the time.
- Possess, transport, sell, barter or exchange any part of, or derived from a bat whether dead or alive.

### 5.2 Nesting birds

All wild birds are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended), it is an offence to:-

- Deliberately kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird whilst in use or being built
- Take or destroy an egg or eggs of any such wild bird.

The breeding bird season runs from 1<sup>st</sup> March to 31<sup>st</sup> August.

## 6.0 PLANNING POLICY

6.1 The National Planning Policy Framework (2019) states:

174 .To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and
- Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity

175. When determining planning applications, local authorities should aim to conserve and enhance biodiversity by applying the following principles:

- If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or as a last resort, compensated for, then planning permission should be refused.
- Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments, should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of specific scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.
- Development resulting in the loss or deterioration of irreplaceable habitats ( such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can be secured measurable net gains for biodiversity.

176. The following should be given the same protection as habitat sites:

- Potential Special Protection Areas and possible Special Sites of Conservation;
- listed or proposed Ramsar sites; and

- Sites identified, or required, as compensatory measures for adverse effects on habitat sites, potential Special Protected Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

177. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plan or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site

## 6.2 ODMP Circular 06/2005 Biodiversity and Geological Conservation

- The presence of a protected species is a ‘material consideration’ when a local planning authority is considering a development proposal. (*Paragraph 98 Circular 06/2005*), when a planning authority is considering a development proposal and as such where impacts upon a protected species are likely to occur from a proposed development, surveys must be undertaken and provided to support a planning application.
- Paragraph 99 Circular 06/2005 states;  
*‘It is essential that the presence or otherwise of protected species and the extent that they may be affected by the proposed development, is established before making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted’.*
- Where there is a reasonable likelihood of protected species being present and affected by a development the surveys should be completed and any necessary measure put in place, through conditions and / or planning obligations, before the permission is granted.

## 6.3 The Natural Environment and Rural Communities Act 2006 (NERC)

The Natural Environment and Rural Communities Act 2006 (NERC) also lists the Bat as a species of principal importance under Section 41 and Section 40 requires every public body in the exercising of its functions (in relation to Section 41 species) to ‘have regard, so far as is consistent with the proper exercise of those functions, to the propose of conserving biodiversity’; therefore making the Bat a material consideration in the planning process and requiring a detailed survey before planning permission can be granted.

## 7.0 RECOMMENDATIONS

The small Brown Long-eared maternity roost along with day roosts for 2 Common pipistrelle *pipistrellus pipistrellus* and 5 Soprano pipistrelle *Pipistrellus pygmaeus* located within the roof structure of the study building will be disturbed /destroyed as part of the proposed conversion works. Therefore a European Protected Species Mitigation Licence will have to be obtained and approved by Natural England before the conversion work on the study building can be undertaken. This licence can only be applied for once approval for the proposed development has been granted by the local planning authority in this case the North York Moors Planning Authority.

It is recommended that the Mitigation Strategy in Section 7.1 of this report with reference to bat species should be implemented as a precautionary approach to the proposed development and to meet obligations under the National Planning Policy Framework 2019.

### 7.1 Mitigation Strategy for Bats

Mitigation is required to avoid or limit the impact of the proposed conversion of study building on both roosting and foraging bats. Any mitigation is designed to meet the needs of the bat species present within the day roosts, in this case 6 Brown Long-eared *Plecotus auritus*, 2 Common pipistrelle *pipistrellus pipistrellus* and 5 Soprano pipistrelle *Pipistrellus pygmaeus* bats.

Mitigation will include the slight modification and enhancement of the existing roost area and disturbance will be kept to a minimum by the timings of the proposed works and pre work surveys.

Natural England states: - *For maternity roosts of common bat species timing constraints apply and that the roost provision should be more or less on a like for like basis.*

Mitigation is designed to ensure that the Favourable Conservation Status and Continued Ecological Functionality of the identified bat populations within the study building are maintained and not adversely affected by the development proposals.

The Natural England Mitigation Licence application is comprised of the following sections;

1. Application Form
2. Method Statement
3. Reasoned Statement

#### ***Method Statement***

The production of a Method Statement is required and will include the following elements unless otherwise varied by a European Protected Species Licence subsequently issued by Natural England.

- 7.1.1. All contractors associated with the conversion of the study building will be given a toolbox talk by a suitably qualified bat worker, prior to any conversion work commencing. A copy of this report containing the Method Statement will be on site at all times for the contractors to use as a reference.



- 7.1.2. Natural England advice requires maternity roost that are likely to be occupied between April to September, work should be undertaken between 1<sup>st</sup> October and the 1<sup>st</sup> May.
- 7.1.3. Prior to any works commencing on the study building, a total of 3 bat boxes will be erected around the application site on mature trees or suitable buildings found in close proximity to the existing roost. The following bat boxes are advised a will be located either a south east or south elevation and be at least 4 m above ground level.
- 2 x Chilton Woodstone Bat boxes or woodcrete equivalents
  - 1 Schweglar 1 FD bat box or woodcrete equivalent
- 7.1.4. A Pre-works survey will be undertaken by a Suitably Qualified Ecologist (SQE) to ensure that the roof space and interior of the proposed holiday let section of the building is free from bats. A methodical search will be undertaken, checking all potential roost locations within the proposed holiday let unit..
- 7.1.5. If any bats are found within the proposed holiday let unit section or any other locations during the pre-works survey, then the bat or bats, if considered appropriate by the SQE can be removed to the pre erected bat boxes, but only by the SQE.
- 7.1.6. Only once the SQE is satisfied that no bats remain in the roof structure or any other location within the proposed holiday let unit can work begin.
- 7.1.7. Removal of any roof materials and wall coverings will only take place by hand in a careful and methodical manner, starting at the ridge line and working down to the eaves and will be supervised by a SQE at all times.
- 7.1.8. The section of the roof over the proposed holiday let unit which forms the existing roost locations will be modified during part of the conversion works, to form an independent bat loft. The floor area will be boarded out and sealed at the edges and any insulation will be fitted to the underside of the new floor, as not to adversely affect the internal thermal properties of the existing roost. The insulation will also minimise humane disturbance to the roost as well as to minimise any effect upon from the bats on the people occupying the holiday let unit.
- 7.1.9. If the roof covering over the roost area is to be renewed, then only bitumastic or hessian roofing felt will be used, as it has been proven that Breathable Roof Membrane can entangle bats and ultimately cause death therefore this type of membrane will not be used within the roof area of the holiday let unit.
- 7.1.10. If the timber roof structure covering the bat loft is to be renewed then only bat friendly timber treatment products will be used on all new timberwork during the renewal process. A list of these products can be found in the Natural England TIN 092 publication at the following address <http://publications.naturalengland.org.uk/publication/31005> any new tanalised timber should be fully dry before use.

- 7.1.11. The central ridge board and timber rafters will be left exposed within the bat loft to provide roosting locations for the Brown Long-eared bats.
- 7.1.12. Four timber squeeze boxes will be located within the bat loft to facilitate suitable roost locations for Common and Soprano pipistrelle.
- 7.1.13. Four bat access tiles will be located in the roof over the bat loft to facilitate entry into the bat loft, two on the east elevation and two on the west elevation.
- 7.1.14. All work relating to the bat loft and bat box installations will be undertaken to the satisfaction of the SQE.
- 7.1.15. External lighting can have an adverse effect on bat foraging and commuting activity. Therefore any new external lighting should be fitted with a downward facing hood at an angle of less than 70 degrees to reduce light spillage. Light sources should also be fitted with a ultra-violet filter or the use of low pressure sodium lamps or similar product should be considered. All lamps should be fitted with a time adjustable motion sensor to reduce the period any lighting is on for.
- 7.1.16. Any new external lighting should not be shone directly towards any of the immediate surrounding woodland areas, around the walled garden or existing study buildings.
- 7.1.17. During work to be carried out, in the unlikely event that bats are encountered by an unlicensed person then they **MUST** withdraw immediately and work must stop and a licensed bat ecologist/worker called in to enable further investigation and before any work recommences.

## **7.2 Consideration of the ‘Three Tests’ (The Conservation of Habitats and Species Regulations 2017)**

In the light of the judgement in recent high court cases, namely *Woolley v Cheshire East Borough Council* and *Millennium Estates* 5 June 2009 consideration should be given to the application of the ‘Three Tests’ of the Conservation of Habitats and Species Regulations 2017 to the proposed development at the proposed site in order to ensure that the development proposals comply with the Conservation of Habitats and Species Regulations 2017 and should help to clarify the role and responsibilities of the Local Planning Authorities (LPA) in respect of European Protected Species (EPS) when they are considered development consent applications.

With respect to European Protected Species, recent guidance from Natural England clearly states ‘where it is likely that one of the prohibitions (under The Conservation of Habitat and Species Regulations 2017 – ‘The Regulations’ will be offered the LPA will be required to consider the likelihood of an EPS licence being granted by Natural England and in doing so, the ‘Three Tests’

*“Imperative Reasons of Overriding Public Interest including those of a Social or Economic nature”*

The application proposal is for conversion of southern section of the barn into a single holiday let unit. The conversion of the southern section of the barn will help with the much needed requirements for quality holiday accommodation within the local area. The additional tourist income generated from the expected holiday visitors will also generate additional economic benefits to the local area through the use of local amenities.

Further benefits to the local economy would be gained through the use of local builders and tradesmen.

*“No Satisfactory Alternative”*

Without the proposed conversions, the study building would fall into a greater state of disrepair and obsolescence. The age and layout of the current building does not lend itself to modern day requirements. Therefore there is no satisfactory alternative to the proposed conversion works.

*“The Authorised Action will not be Detrimental to the Maintenance of the Population of the Species Concerned at a Favourable Conservation Status in their Natural Range”*

The proposals set out within Section 7.0 of this report has outlined that an offence under The Regulations with regard to bats in the development footprint would be reasonably unlikely and the loss of the existing roost would not be considered detrimental to the Favourable Conservation Status of the local bat population.

### **7.3 Nesting Birds.**

A single historical House Martin *Delichon urbicum* nest is found on the west elevation of the study building. Without appropriate mitigation the conversion of the study building would result in the possible loss//disturbance of the existing nest site. Therefore to address these findings and to enable both the Continued Ecological Functionality and to maintain the Favourable Conservation Status of these bird species the following recommendations have been proposed.

Recommendations.

- If the initial conversion work on the study building is to be undertaken during the nesting bird season 1<sup>st</sup> March - 31<sup>st</sup> August then the area of the building to be converted will require checking for nesting birds by a suitably qualified ecologist prior to any work commencing. If any active nest sites are found then the work must stop within the immediate nest location until the young have fledged or the nest is naturally abandoned.
- The following nest box is to be installed prior to any conversion work been undertaken on the study building and remain in -situs thereafter.

- 2 x Vivara Pro Woodstone House Martin Nest Bowls are to be mounted in the most northerly first floor timber boarded window on the western elevation of the study building. The distance from the development footprint is considered to be sufficient to negate any potential disturbance. This location also mirrors the existing nesting position.
- The Vivara nest bowls can be obtained from NHBS at [www.nhbs.com](http://www.nhbs.com) or any other reputable habitat supplier.

## 8.0 REFERENCES AND BIBLIOGRAPHY

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Michell-Jones, A.J. and McLeish A.P. (Eds). (2004). *Bat Worker's Manual* (3<sup>rd</sup> Edition). Joint Nature Conservation Committee, Peterborough, UK

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Natural England Standing Advice Sheet: *Bats* (April 2012)

Natural England Standing Advice – Planning and Development

North Yorkshire Bat Group

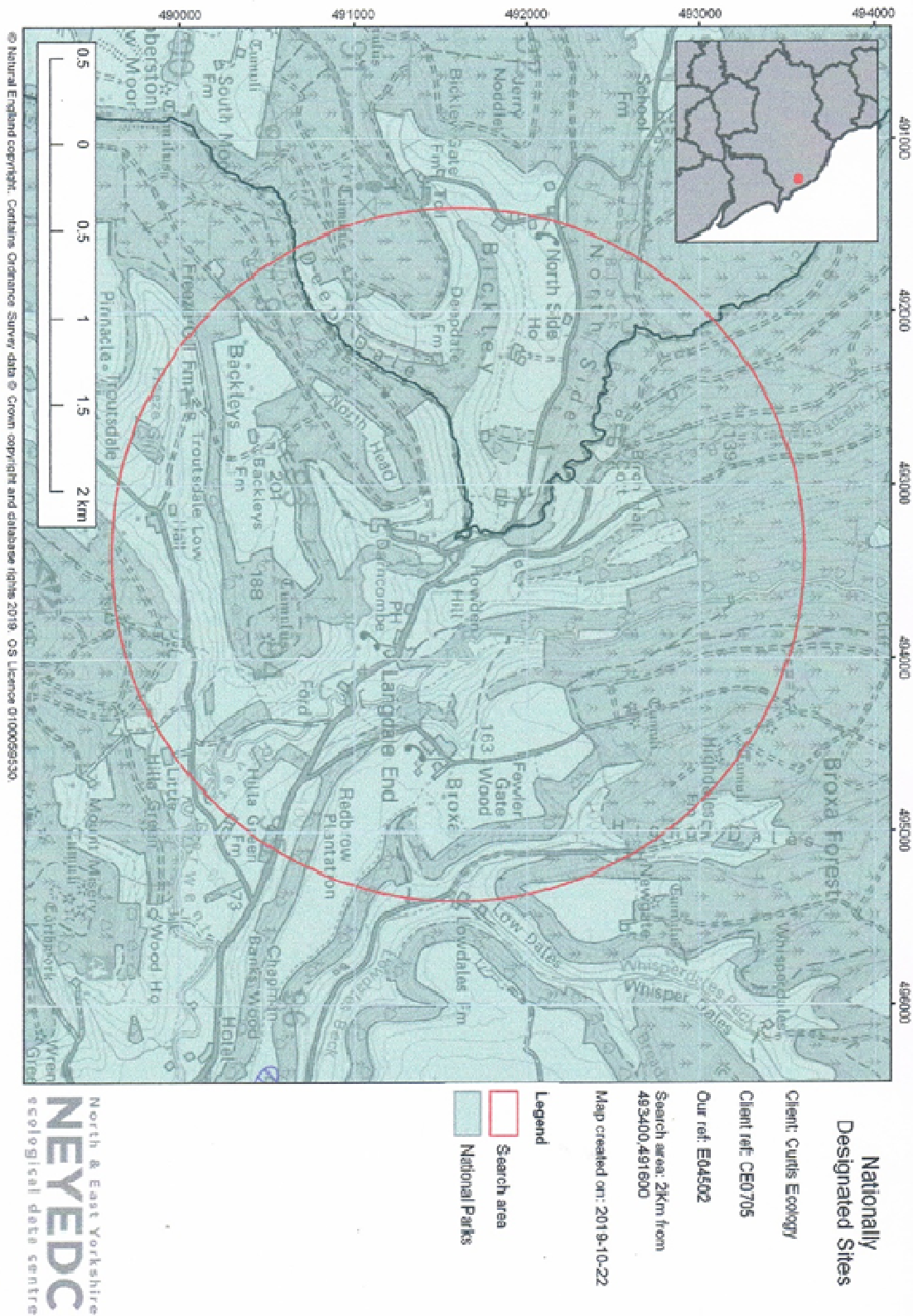
North & East Yorkshire Ecological Data Centre

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Wildlife and Countryside Act 1981 -HMSO

## 9.0 APPENDICES

### Appendix 1. Nationally Designated Sites Map 2km



Appendix 2. Priority Habitats Map 2km

