# BAT SURVEY LOW TOWN STABLE, LONGFRAMLINGTON







DATE: CLIENT: PROJECT NUMBER: AUTHOR: POSITION: CONTACT DETAILS: 13<sup>th</sup> June 2022 George F White 6945 Richard Thompson Graduate Ecologist richard.thompson@e3ecology.co.uk

E3 ECOLOGY LTD, PASTURE HOUSE, WARK, HEXHAM, NORTHUMBERLAND, NE48 3DG 01434 230982 WWW.E3ECOLOGY.CO.UK MAIL@E3ECOLOGY.CO.UK



#### **DOCUMENT & QUALITY CONTROL**

Report Version	Status	Date	Changes	Author	Proof Read	Version Approved by
R01	Draft	08/06/2022	1 <sup>st</sup> draft	RT	GV	MEM
R <b>02</b>	Final	30/06/2022	Client approved	RT		H Wafer

#### **COPYRIGHT, CONFIDENTIALITY & LIABILITY**

This report has been prepared by E3 Ecology Ltd and contains opinions and information produced with all reasonable skill, care and diligence within the terms of the Contract with the client. Any recommendation, opinion or finding stated in this report is based on circumstances and facts as they existed at the time that E3 Ecology Ltd performed the work. No explicit warranty is made in relation to the content of this report. E3 Ecology Ltd assumes no liability for any loss resulting from errors, omissions or misrepresentation made by others.

Copyright to all written or recorded work howsoever held on whatever medium is vested in E3 Ecology Ltd. On settlement of all agreed fees, written work produced specifically for the named clients is thereafter regarded as joint copyright between the named client and E3 Ecology Ltd for the specific purposes for which the report was produced. No attempts should be made to reproduce any element of this report for commercial or other purposes, without explicit written permission from E3 Ecology Ltd.

Further information is provided at Appendix 1 – Copyright, Confidentiality & Liability.



# CONTENTS

Α.	SUMMARY	.5
В.	INTRODUCTION	.7
B.1	AUTHOR, SURVEYORS & QUALIFICATIONS	
B.2 B.3	OBJECTIVES PROPOSED DEVELOPMENT SITE	
в.з В.4	DEVELOPMENT PROPOSALS	
<b>C.</b>	METHODOLOGY	-
-		
C.1 C.2	SCOPE OF STUDY DESK STUDY	
C.2 C.3	Field Survey	-
C.	3.1 PRELIMINARY ASSESSMENTS	
	3.2 BAT PRESENCE/ABSENCE SURVEY	
С. С.4	3.3 DATA ANALYSIS	
C.5	Assessment of Value	
D.	RESULTS	
D.1	DESKTOP STUDY	
	1.2 Consultation	
D.2	PRELIMINARY ROOST ASSESSMENT	
	2.1 HABITATS	
	2.2 Buildings/Structures	
	2.4 Overview of Site Suitability	
D.3		
	<ul> <li>3.1 Dusk /Dawn Survey Surveyors, Timings &amp; Conditions</li></ul>	
	3.3 01.06.22 DUSK SURVEY RESULTS	
D.4	Additional Species Groups	24
E.	SITE ASSESSMENT	25
E.1	ASSESSMENT OF SURVEY FINDINGS	25
F.	IMPACT ASSESSMENT	26
F.1	DIRECT DEVELOPMENT IMPACTS	
F.2	INDIRECT IMPACTS ON LOCAL POPULATIONS	26
G.	RECOMMENDATIONS	27
G.1	FURTHER SURVEY	
G.2	AVOIDANCE, MITIGATION AND COMPENSATION STRATEGY	
-	2.1         Site Design	
G	2.3 Working Methods and Best Practice	27
G.3		
G.4 G.5	MONITORING	
H.	CONCLUSIONS	
	NDIX 1LEGISLATIC	
	30	~14
ΝΑΤΙ	ONAL PLANNING POLICY	30
	EVANT LEGISLATION	
Pric	RITY SPECIES	33



# 

#### I. 35

RELEV	ANT LEGISLATION	35
I.1	POTENTIAL BAT ROOST SITES	35
1.2	BACKGROUND	36
1.3	WORKING METHODS	36

# TABLES

TABLE 1: LEAD SURVEYORS	7
TABLE 2: GUIDELINES FOR ASSESSING THE POTENTIAL SUITABILITY OF PROPOSED DEVELOPMENT SITES FOR BATS, F	
PRESENCE OF HABITAT FEATURES WITHIN THE LANDSCAPE.	10
TABLE 3: ASSESSMENT OF BAT ROOSTING SUITABILITY OF BUILDINGS/STRUCTURES & TREES	11
TABLE 5: PRELIMINARY ASSESSMENT SURVEY CONDITIONS	13
TABLE 6: RECOMMENDED NUMBER AND TIMING OF PRESENCE/ABSENCE SURVEY VISITS REQUIRED TO PROVIDE CONFI	IDENCE IN
NEGATIVE PRELIMINARY ROOST ASSESSMENT RESULTS	13
TABLE 6: ECOLOGICAL RECEPTOR VALUATION	15
TABLE 6: CONSULTATION RECORDS	17
TABLE 7: OVERVIEW OF HABITATS AND SETTING	21
TABLE 8: OVERVIEW OF BUILDING/STRUCTURES <sup>2</sup>	21
TABLE 9: NATIONAL PLANNING POLICY FRAMEWORK: CONSERVING AND ENHANCING THE NATURAL ENVIRONMENT	

# FIGURES

FIGURE 1: SITE BOUNDARY	8
FIGURE 2: SITE AND SETTING	8
FIGURE 3: DEVELOPMENT PROPOSALS	9
FIGURE 6: SUMMARY OF 12.05.22 DUSK SURVEY RESULTS	23
FIGURE 6: SUMMARY OF 01.06.22 DUSK SURVEY RESULTS	24



# A. SUMMARY

E3 Ecology Ltd was commissioned to undertake a bat survey of a stable building at Low Town, Longframlington where it is proposed to convert the building for residential purposes. A desk study was completed, including consultation with DEFRA's MAGIC website and the Environmental Records Information Centre North East (ERIC NE), and a preliminary roost assessment was undertaken on 18<sup>th</sup> March 2022 in order to inform this survey report. This was followed by a dusk emergence survey on the 12<sup>th</sup> of May 2022 and a second dusk emergence survey on the 1<sup>st</sup> of June 2022.

The results of the desk study indicate that there are no internationally and nationally statutorily designated sites for bats within 2km. The site may lie within a Site of Special Scientific Interest (SSSI) Impact Risk Zone (IRZ) for this type of development. There is one record of granted European Protected Species (EPS) mitigation licences for works affecting bats within 2km, located approximately 1.76km to the south-west of the site.

The site is surrounded by amenity garden with properties to the south and east while to the north and west there is pastoral farmland. There are some hedgerows nearby but they do not link directly to the site. Overall, the habitats in the local area are of moderate suitability for use by foraging/commuting bats.

The building was subjected to detailed external and internal inspections:

- Single storey stone and mortar outbuilding with external walls generally well-sealed
- Slate roof, generally in good condition and well-sealed
- Concrete ridge tiles, generally well-sealed but with one gap recorded
- Mixture of wooden door beams or stone behind the guttering, quite poorly sealed with a number of gaps at the roof line and below the wooden beams.
- A low number of old bat droppings (2-4) were found within the building, with no specific accumulation indicating a roosting location. The droppings superficially resemble those of pipistrelle bat species but were too few/damaged to be collected for DNA analysis.

Overall, the building is considered to be of low-moderate suitability to support roosting bats.

Bat presence/absence surveys were undertaken in May and June 2022. No roosts were identified in the stable building. Activity during both surveys was very low with very low numbers (1-3) of pipistrelle species recorded commuting near the site.

The building contains a small number of opportunities for nesting birds and swallows were recorded nesting in the building during the presence/absence surveys. Barn owl pellets were recorded within the building but no signs of a nest, indicating that the building may be a roosting location. During the bat surveys a barn owl was also seen hunting nearby and roosting in a tree.

The following potential impacts have been identified:

- Low residual risk of disturbing bats and loss of roosts in the unlikely event that bats are present within the building at the time of works.
- Risk of harm/disturbance to nesting birds if building demolition is carried out during the bird breeding season (March August inclusive).
- Loss of potential barn owl roost site.
- Increased lighting which could impact on bat and barn owl foraging and commuting habitat within the adjacent area.



A detailed avoidance, mitigation and compensation strategy is provided within this report. Key measures include:

- Sensitive design of external lighting
- A pre-commencement check for nesting birds will be undertaken by a suitably experienced ornithologist if vegetation clearance is undertaken between March and August inclusive.
- Bat roosting opportunities incorporated into the new development.
- All works to the building will be undertaken to a precautionary bat method statement. In the unlikely event that bats are found during works, works will stop in that area and the ecological consultant will be contacted immediately. If it is necessary to move the bats for their safety, this will be undertaken by a licensed bat handler.
- Timber treatments that are toxic to mammals will be avoided. If required, timber treatment will be carried out in the spring or autumn. Both pre-treated timbers and timber treatments will use chemicals classed as safe for use where bats may be present (see <a href="https://data.jncc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf">https://data.jncc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf</a> Chapter 10).

The following additional enhancement measures are recommended in order to further enhance the site for biodiversity:

- Installation of a barn owl nest boxes in a tree elsewhere in the wider landholding.
- Any landscape planting will be designed to enhance structural diversity, and will include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for bats and wildlife generally.

The Local Planning Authority is likely to require the means of delivery of the mitigation to be identified. It is recommended that mitigation and enhancement proposals are incorporated into the planning documents.

If you are assessing this report for a local planning authority and have any difficulties interpreting plans and figures from a scanned version of the report, E3 Ecology Ltd would be happy to email a PDF copy to you. Please contact us on 01434 230982.



# **B.INTRODUCTION**

E3 Ecology Ltd was commissioned by George F. White in March 2022 to undertake a bat survey of a proposed development site at Low Town, Longframlington, Northumberland. The survey comprised a desk study and daytime preliminary roost assessment. Subsequent dusk presence/absence surveys were completed in May and June 2022.

# B.1 AUTHOR, SURVEYORS & QUALIFICATIONS

The author's professional qualifications and survey licences are detailed in the table below, as well as those of additional lead surveyors who completed survey work at the proposed development site:

TABLE 1: LEAD SURVEYORS				
Name Position Professional Qualifications				
Richard Thompson	Ecologist	BSc MSc		

Further details of experience and qualifications are available at www.e3ecology.co.uk.

All surveyors have the knowledge, skills and experience identified within the relevant CIEEM Competencies for Species Survey guidance, or were under the supervision of a surveyor with the required competencies.

# B.2 OBJECTIVES

The objectives of the assessment are to:

- Complete comprehensive building inspections to search for evidence of bat use
- Establish the bat roosting suitability of any buildings, structures or trees which may be present on site and at risk of impact by the development
- Provide recommendations for further survey work, where required
- If sufficient survey assessment has been possible, to set out the mitigation, compensation and enhancement measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects
- Identify how these measures could be secured
- Identify any requirements for post-construction monitoring of the site

# B.3 PROPOSED DEVELOPMENT SITE

The site is located near the village of Longframlington in Northumberland at an approximate central grid reference of NU 13896 00195.

The figures below illustrate firstly the site boundary and secondly the broad habitats present on site and within an approximate 500m buffer zone.



FIGURE 1: SITE BOUNDARY (Reproduced under licence from Google Earth Pro.)



FIGURE 2: SITE AND SETTING (Reproduced under licence from Google Earth Pro.)



# B.4 DEVELOPMENT PROPOSALS

It is proposed to convert the existing building into a residential dwelling. Development proposals are shown in the figure below. It is planned to keep the existing roof structure.

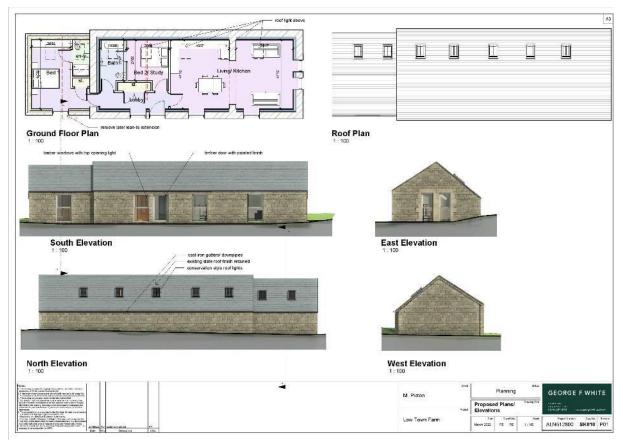


FIGURE 3: DEVELOPMENT PROPOSALS



# C. METHODOLOGY

# C.1 SCOPE OF STUDY

The scope of the study, in terms of the survey area and the desk study area, is based on professional judgement. The scope has been determined based on the site's characteristics, the nature of the surrounding area, the development proposed at the time of reporting and the likely associated zone of influence. Consideration has been given to potential effects both during the construction and operational phases of the development.

For this site the survey area comprised the green line boundary as defined within the figure in Section B. The survey area considered potential roost sites within and adjacent to the survey area, which may be affected by the proposed development.

The desk study included an assessment of land-use in the surrounding area and a data search covering a 2km buffer zone (see below for further detail).

The level of survey effort employed at the site has taken account of the recommendations within the Bat Conservation Trust (BCT) Good Practice Survey Guidelines<sup>1</sup>.

# C.2 DESK STUDY

Initially, the site was assessed from aerial photographs and 1:25,000 Ordnance Survey maps.

Following this, a data search was submitted to the local records centre in May 2022 requesting data relating to bats within 2km of site. In addition, a search was made of the MAGIC website<sup>2</sup> for any granted bat licences within 2km, and Special Protected Areas (SPAs) or Special Areas of Conservation (SACs) within 10km.

# C.3 FIELD SURVEY

# C.3.1 PRELIMINARY ASSESSMENTS

#### C.3.1.1 FORAGING/COMMUTING HABITAT ASSESSMENT

The potential suitability of the habitats within the survey area and surrounding landscape in relation to commuting and foraging bats was classified as negligible, low, moderate or high, based on BCT guidelines and using the surveyor's professional judgement.

TABLE 2: GUID	TABLE 2: GUIDELINES FOR ASSESSING THE POTENTIAL SUITABILITY OF PROPOSED DEVELOPMENT SITES FOR BATS, BASED			
ON PRESENCE O	ON PRESENCE OF HABITAT FEATURES WITHIN THE LANDSCAPE.			
(TO BE APPLIED	USING PROFESSIONAL JUDGEMENT, TABLE 4.1 BAT SURVEY GUIDELINES)			
Suitability	Commuting and foraging habitats			
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.			
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.			
Suitable, but isolated habitat that could be used by small numbers of foraging as a lone tree (not in a parkland situation) or a patch of scrub.				

<sup>&</sup>lt;sup>1</sup> Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> Edition). Bat Conservation Trust

<sup>&</sup>lt;sup>2</sup> Multi Agency Geographic Information for the Countryside (www.magic.gov.uk)



Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.
	Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.
	High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland tree lined watercourses and grazed parkland.
	Site is close to and connected to known roosts.

# C.3.1.2 PRELIMINARY ROOST ASSESSMENT (BUILDINGS/STRUCTURES)

A daytime assessment was made of all structures affected by the proposed development, in order to evaluate their suitability to support bat roosts, and, where present, to record field signs of use by bats.

Buildings/structures were inspected both externally and internally where access was available. Binoculars and extendable ladders were used to assist with the inspection for potential roosting features and bat field signs, such as droppings, feeding remains, grease/urine staining, corpses/skeletons or bats themselves.

Where possible, species identification was either confirmed visually, through DNA analysis of droppings or acoustically through further survey work at dusk or dawn. If endoscope use or handling of bats were required to identify particularly cryptic species or to assess roost type, this was completed by appropriately licensed individuals and minimised where possible to reduce disturbance.

Structures were categorised as having negligible, low, moderate or high suitability to be used by roosting bats, based on guidelines provided by the Bat Conservation Trust<sup>3</sup> and detailed within the table below.

	TABLE 3: ASSESSMENT OF BAT ROOSTING SUITABILITY OF BUILDINGS/STRUCTURES & TREES           (TO BE APPLIED USING PROFESSIONAL JUDGEMENT, TAKEN FROM TABLE 4.1 OF BCT'S BAT SURVEY GUIDELINES)				
Suitability	Roosting Habitats				
Negligible Negligible habitat features on site likely to be used by roosting bats.					
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential.				
Moderate	A building/structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).				

<sup>&</sup>lt;sup>3</sup> Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> Edition). Bat Conservation Trust



High	A building/structure or tree with one or more potential roost sites that are obviously suitable for use	
by larger numbers of bats on a more regular basis and potentially for longer periods of		
	their size, shelter, protection, conditions and surrounding habitat.	

Note that any comments within this report on the state or condition of buildings/structures relate solely to their potential use by bats and must not be taken as a professional assessment of the structural integrity or safety of the structures.

# C.3.1.3 SURVEY EQUIPMENT

- High-powered torch
- Binoculars
- Camera
- Ladders

# C.3.1.4 SURVEY DATES & ENVIRONMENTAL CONDITIONS

The table below details the environmental conditions during the preliminary assessment survey.

TABLE 4: PRELIM	ABLE 4: PRELIMINARY ASSESSMENT SURVEY CONDITIONS					
Date	Temperature ( <sup>o</sup> C)	Cloud Cover (%)	Precipitation	Wind Conditions (Beaufort scale)		
18.03.22	8	30	Dry	F2		

# C.3.2 BAT PRESENCE/ABSENCE SURVEY

#### C.3.2.1 SURVEY EFFORT

The level of survey effort employed has taken account of the guidance provided by the Bat Conservation Trust (BCT)<sup>4</sup> and summarised within the table below.

TABLE 5: RECOMMENDED NUMBER AND TIMING OF PRESENCE/ABSENCE SURVEY VISITS REQUIRED TO PROVIDE CONFIDENCE						
IN NEGATIVE PRELIMINA	IN NEGATIVE PRELIMINARY ROOST ASSESSMENT RESULTS					
(FROM TABLE 7.1 AND TABLE 7.3 BCT GUIDELINES)						
		Moderate Reast				

	Low Roost Suitability*	Moderate Roost Suitability	High Roost Suitability
Recommended minimum number of survey visits for presence/absence survey to give confidence in a negative result	One survey visit. One dusk emergence or dawn re-entry survey (structures). For trees with low roost suitability, no further surveys required.	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn.
Recommended timings for presence/absence surveys	May to August	May to September with at least one of the surveys between May and August	May to September with at least two of the surveys between May and August

\* If a structure is classified as having low suitability for bats an ecologist should make a professional judgement on how to proceed based on all of the evidence available. If sufficient areas of a structure have been inspected and no evidence found (and is unlikely to have been removed by weather or cleaning or be hidden), then further surveys may not be appropriate.

Note: Where a roost is confirmed as being present, further surveys may be required to fully characterise the roost

The recommendations provided above are guidelines and it is recognised by BCT that 'the number of visits could be adjusted (up or down) if necessary by the ecologist, bearing in mind the site-specific circumstances'.

<sup>&</sup>lt;sup>4</sup> Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> Edition). Bat Conservation Trust



Interim guidance released by the BCT in May 2022 stipulates that, when considered appropriate, a second dusk survey for moderate suitability buildings can be completed instead of the dawn survey. In addition, survey effort should be supported by the use of night vision aids.

Details of dates, timings, weather, and surveyor numbers and names are provided in the results section.

# C.3.2.2 SURVEY METHODS

Activity surveys were undertaken in suitably mild conditions when bats are active. Surveyors were positioned to ensure coverage of all high-risk areas of the site, including any potential flight-lines from structures within the site to adjacent cover such as woodland blocks. If bats were recorded within the site before bats were seen in the wider area, or seen flying into the site, it is assumed that roosts are present within the site.

All surveyors used both Batbox Duet bat detectors to listen for bats and Anabat Express detectors, at each surveyor location, to record and better identify bat species.

Timings for observations of key bat activity such as emergence, first records of each species and commuting routes were recorded. All data were recorded using the Anabat Express for future reference and to allow confirmation of species identification through call analysis (using Analook software), and to capture brief echolocation calls that could not be reliably identified in the field<sup>5</sup>. Field survey recorded numbers of bats detected, feeding activity, flight paths, species (as far as is practicable), and social calls.

A total of 4 person-nights work was undertaken and direct observation was reinforced by remote recording of bat activity adding one extra monitoring points. In addition, surveyor coverage of the site was supplemented with the use of an infra-red camera to allow coverage inside the building. Figures provided within the results section of this report illustrate the approximate location of each surveyor, monitoring point and camera.

#### C.3.2.3 SURVEY EQUIPMENT

- Duet bat detectors
- Anabat Expresses
- Light meter
- Canon Infra-Red Camera

# C.3.3 DATA ANALYSIS

All bat calls were analysed using Analook with calls identified to species where possible, referencing call parameters as detailed within Russ (2012)<sup>6</sup> and Middleton et al (2014)<sup>7</sup>.

If identification to species is not practicable, then where possible calls are identified to genus.

<sup>6</sup> Russ, J. (2012) British Bat Calls: A Guide to Species Identification. Pelagic Publishing

<sup>&</sup>lt;sup>5</sup> Reviewing data recorded by surveyors using Duet detectors and the Anabat data indicated that reliable *Myotis* records increased through Anabat use, particularly once conditions were too dark for visual cues to assist in identification, when there was a lot of bat activity, and with bats in clutter. It also reduces errors where pipistrelles in clutter can be mis-identified as *Myotis* bats.

<sup>&</sup>lt;sup>7</sup> Middleton, N., Froud, A. and French, K. (2014) Social Calls of the Bats of Britain and Ireland. Pelagic Publishing



## C.4 SURVEY CONSTRAINTS

The survey completed at the site will provide reasonably typical data for the season in which it was undertaken, and internal field signs are likely to reflect activity over the preceding active season. Assessment of the bat use of the site at other times of year and the potential impacts of the proposed development is based on professional judgement. This is an approach supported by the Bat Conservation Trust Good Practice Guidelines<sup>8</sup>.

#### C.5 ASSESSMENT OF VALUE

The relative value of the ecological receptors (habitats, species and designated sites) was assessed using a geographical frame of reference. For designated sites this is generally a straightforward process with the assigned designation generally being indicative of a particular value, e.g. Sites of Special Scientific Interest are designated under national legislation and are therefore generally considered to be receptors of national value. The assignment of value to non-designated receptors is less straightforward and as recognised by the Guidelines for Ecological Impact Assessment<sup>9</sup>, is a complex and subjective process and requires the application of professional judgement.

When assessing the value of species and habitats, relevant documents and legislation are considered including the lists of species and habitat of principal importance annexed to the NERC Act (2006) and those provided within relevant local Biodiversity Action Plans. Data provided through consultation is also considered. These data sources can provide context at a local, regional and national scale.

TABLE 6: ECOLOG	CAL RECEPTOR VALUATION
Level of Value	Examples
	An internationally designated site or candidate site.
International	A site meeting criteria for international designation.
International	The site is of functional importance* to a species population with internationally important numbers (i.e. >1% of the biogeographic population)
	A nationally designated site.
National	The site is of functional importance* to a species population with nationally important numbers (i.e. >1% of the national population)
Regional	The site is of functional importance* to a species population with regionally important numbers
Regional	(i.e. >1% of the regional population)
	A Local Wildlife Site (LWS) or equivalent, designated at a County level
County	The site is of functional importance* to a species population of county value (i.e. >1% of the county population)
	A Local Wildlife Site (LWS) or equivalent, designated at a District level
District	The site is of functional importance* to a species population of district value (i.e. >1% of the district population)
	A species population considered to appreciably enrich the nature conservation resource within
Parish	the context of the parish.
	Local Nature Reserves
Local	A species population that contributes to local biodiversity but are not exceptional in the context
	of the parish.
Low	Habitats that are unexceptional and common to the local area.

The table below provides examples of receptors of value at different geographical scales.

<sup>&</sup>lt;sup>8</sup> Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> Edition). Bat Conservation Trust

<sup>9</sup> Chartered Institute for Ecology and Environmental Management (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater and Coastal



TABLE 6: ECOLOGI	CAL RECEPTOR VALUATION
Level of Value	Examples
* Functional impo	rtance defined as 'a feature which, based on professional judgement, is of importance to the day
to day functioning	of the population, the loss of which would have a detectable adverse effect on that population',

The site lies within Longframlington Civil Parish which covers approximately 2063ha and is mainly lowland pastoral fields with some areas of upland moorland margins and coniferous plantations. Residential properties are centred around the village of Longframlington with some scattered hamlets and farm steadings.





# D.1 DESKTOP STUDY

#### D.1.1 PRE-EXISTING INFORMATION

#### D.1.1.1 ORDNANCE SURVEY MAPPING AND AERIAL PHOTOGRAPHY

The most recent aerial photograph of the site (2020) indicates that habitats on site are dominated by the stable block building. Historic imagery suggests that the building has been present since at least 2002 and was re-roofed between 2002 and 2006.

Aerial photography shows that the general land use in the surrounding area is predominantly pasture grasslands used for grazing livestock.

#### D.1.1.2 MAGIC WEBSITE<sup>10</sup>

#### **PROTECTED SITES**

There are no internationally and nationally statutorily designated sites for bats within 2km.

The site may fall within a SSSI impact risk zone for this type of development, regarding discharge of waste water. The Local Planning Authority will be required to consult with Natural England on the application if this is the case.

#### SPECIES

There is one record of granted European Protected Species (EPS) mitigation licences for works affecting bats within 2km, located approximately 1.76km to the south-west of the site.

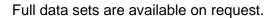
# D.1.2 <u>CONSULTATION</u>

#### D.1.2.1 LOCAL RECORDS CENTRE

The local record centre provided the following notable records within 2km of site:

TABLE 7: CONSULTATION RECO	ORDS		
Species	No. of Records	Closest distance (m – if sufficient record resolution provided)	Most recent date
Brandt's Bat	1	195	12/06/2014
Brown Long-eared Bat	4	1832	01/07/2012
Common Pipistrelle	15	1272	08/08/2017
Daubenton's Bat	1	1762	16/05/2006
Natterer's Bat	4	2016	03/08/2012
Noctule Bat	2	1832	01/07/2012
Pipistrelle Bat species	4	1453	10/08/1986
Soprano Pipistrelle	16	946	27/06/2015
Unidentified Bat	1	651	03/10/1988

<sup>&</sup>lt;sup>10</sup> MAGIC Website: www.magic.gov.uk



#### D.2 PRELIMINARY ROOST ASSESSMENT

# D.2.1 <u>HABITATS</u>

#### FORAGING HABITATS & COMMUTING ROUTES

The site is surrounded by pastoral agricultural fields and scattered hedgerows to the north, east and west. These hedgerows are not directly linked to the site.

#### **SHELTERED FLIGHT AREAS**

Through a damaged stable door, the building is slightly accessible and may itself be used as a sheltered flight area or for light sampling.

#### **ALTERNATIVE ROOST LOCATIONS**

There are numerous alternative roosting opportunities in the nearby residential dwellings, including the main farmhouse which lies approximately 5-10m from the stable.

#### D.2.2 BUILDINGS/STRUCTURES

Descriptions of the building are detailed below.

#### <u>External</u>

- Single storey stone and mortar outbuilding with external walls generally well-sealed
- Slate roof, generally in good condition and well-sealed
- Concrete ridge tiles, generally well-sealed but with one gap recorded
- No water tables present with mortar used to block the slate ends. These are moderately sealed and there are a low number of gaps/cracks in this mortar.
- Mixture of wooden door beams or stone behind the guttering, quite poorly sealed with a number of gaps at the roof line and below the wooden beams.
- Wooden A-frame beams at the gable ends, quite poorly sealed with small gaps leading to the wall tops
- 4 skylights on the northern aspect, generally well-sealed to the roof





- Wooden stable doors, largely in good condition though part of a plank is missing on one of them which would allow access
- No external field signs of bats recorded

#### Internal

- Internally split into two rooms, one larger than the other
- During the risk assessment the building was being used for storage and was hence quite cluttered. By the time of the presence/absence survey it was being used as stabling and is in very regular use.
- Wall tops well-sealed
- Internal brick wall on northern aspect, covered with mortar and well-sealed.
- Stone and mortar walls, either fully covered with mortar or poorly sealed with numerous gaps and areas of missing mortar.
- Wooden rafters and ridge board, well-sealed to roof and with limited gaps at wall tops
- Bitumen felt roof lining, well-sealed.
- Wall between the two rooms has a small open section/mezzanine at the top with wooden panelling on the wall top
- Security light inside, wasn't in use during surveys
- A small number of small tortoiseshell butterfly wings were recorded within the building but these may be from the swallow nests that were present
- A barn owl pellet was found within the building, on a small mezzanine wall top. No evidence of nesting was recorded.
- A low number of old bat droppings (2-4) were found scattered on a small mezzanine wall top within the building, with no specific accumulation indicating a roosting location. The droppings superficially resemble those of pipistrelle bat species but were too few/damaged to be collected for DNA analysis. Indicative of historic foraging/roosting use.

Overall the building is considered to be of low-moderate suitability for roosting bats.









D.2.3 <u>TREES</u> No trees are to be impacted by the proposed development.



# D.2.4 OVERVIEW OF SITE SUITABILITY

TABLE 8: OVERVIE	EW OF HABITATS AND SE	ETTING <sup>11</sup>		
	NEGLIGIBLE	Low	MODERATE	Нідн
HABITATS AND COVER WITHIN 200M	City Centre	Open, exposed arable or pasture with no hedges, amenity grassland, or relatively built up	Hedges and trees linking site to wider countryside, mature linked gardens	Excellent cover with mature trees/ woodland and/or good hedges
Навітатѕ within 1км	City Centre	Little tree cover, few hedges, arable dominated, scattered green spaces	Semi-natural habitats e.g. trees, hedgerows	Good network of woods, wetland and hedges
ALTERNATIVE ROOSTS WITHIN 1 KM	City centre	Numerous alternative roosting opportunities of a similar nature	A number of similar buildings in the local area	Few alternative buildings and site of good quality for roosts
SETTING	Inner city	Urban with little green space	Built development with green-space, wetland, trees	Rural Lowland with woodland and trees.
DISTANCE TO WATER/ MARSH	>1km	500m-1000m	200m-500m	<200m
DISTANCE TO WOODLAND/ SCRUB	>1km	500m-1000m	200m-500m	<200m
Commuting ROUTES	Isolated by development, major roads, large scale agriculture	No direct potential flyways linking site to wider countryside	Some potential commuting routes to and from site	Site is well connected to surrounding area with multiple flyways

TABLE 9: OVERVIE	EW OF BUILDING/STRUC	rures <sup>2</sup>		
	NEGLIGIBLE	Low	MODERATE	Нідн
Age (APPROX.)	Modern	Post 1940's	1900-1940	Pre 20 <sup>th</sup> C
BUILDING/ COMPLEX TYPE	Industrial complex of modern design	Single, small building	Several smaller buildings, larger single structures	Traditional farm buildings large country house, large hospital/school
BUILDING - STOREYS	N/A	Single storey	Multiple storeys	Multiple storeys with large roof voids
Stone/Brick Work	No detectable crevices	Well pointed, limited or superficial gaps	Some cracks and crevices	Poor condition, many deep crevices, thick walls
Framework – Timbers/steel	Modern metal frame with sheet cladding	Timber purlins, modern trusses	Timbers kingpost or similar	Large timbers traditional joints
ROOF VOID	Fully sealed or flat roof	Small, cluttered void	Medium, relatively open	Large, open, interconnected
Roof covering	Modern sheet materials,	Good condition or very open, not weatherproof, modern sheet materials,	Some potential access routes e.g. raised, slipped or missing slates or tiles, low	Numerous gaps, not too open, e.g. uneven stone slates, many gaps in mortar

<sup>&</sup>lt;sup>11</sup> Building and habitat risk assessment technique audited in a research project with York University which compared the risk assessment scoring with the results of detailed field assessment for over 100 sites. Statistically significant associations were found between habitat setting and building features and the presence of absence of different bat species. For example habitat connections and nearby woodland were significant for brown long-eared bats and the presence of species-rich grassland is important for many species.



	tightly sealed, very well sealed roof tiles	generally well sealed roof tiles	number of gaps in bedding/end mortar	
Additional Features	None	Very limited features with potential access	Some features with low number of potential access points	Numerous or good quality gaps in features such as hanging tiles, cladding, barge boards, soffits
External LIGHTING	Extensive security lights covering much of the site	Widespread areas above 2 lux at night	Intermittent lights of low intensity	Minimal
BUILDING USE	Very noisy, dusty	Regular use	Intermittent use	Disused

Overall, the site is situated in an area moderate suitability for bats.

Based on the assessment table, the building is considered of low-moderate suitability for roosting bats.

# D.3 PRESENCE/ABSENCE SURVEY

#### D.3.1 DUSK / DAWN SURVEY SURVEYORS, TIMINGS & CONDITIONS

Date	Start	End	Sunset / Sunrise	Start Temp (°C)	End Temp (°C)	Cloud (%)	Precipitation	Wind (Beaufort)
12.05.22	20:40	22:32	21:02	10	10	100	Dry	F2
01.06.22	21:18	23:04	21:34	11	10	0	Dry	F1

Date	Lead Surveyor	Assistant surveyors
12.05.22	Richard Thompson	P. Grencis
01.06.22	Richard Thompson	A. Gamble

# D.3.2 12.05.22 DUSK SURVEY RESULTS

The survey was undertaken in slightly cool conditions, though it did not drop below 10°c during the survey. There was a light breeze and a very light rain shower at 22:20, around 80 minutes after sunset. No roosts were identified. One bat, a common pipistrelle, was recorded commuting west to east, just north of the site and flying quite low. It was recorded at 21:45, 43 minutes after sunset and at around 2.2 Lux. No other bats were recorded during the survey.

The figure below provides a summary of the results of dusk emergence survey. More detailed data is available on request.



FIGURE 4: SUMMARY OF 12.05.22 DUSK SURVEY RESULTS (Reproduced under licence from Google Earth Pro.)

# D.3.3 01.06.22 DUSK SURVEY RESULTS

The survey was undertaken in slightly cool, still conditions and was dry throughout. No roosts were identified. The first bats, a pair of common pipistrelle, were recorded off-site at 22:45, 1 hour and 11 minutes after sunset (0.6Lux). It is considered likely that the bat commuted east to west, south of the building as surveyor 1. The only other bat recorded, a soprano pipistrelle, was seen commuting along a similar line at 22:56.

An infra-red camera was placed within the building to detect any bats emerging from the potential roosting features within or any bats using the building as sheltered foraging. The camera did not record any bats throughout the survey. Both surveyors had very clear views of the building's rooflines.

A barn owl was seen foraging over the field to the north of the site and later landed in a tree to roost for a short while.

The figure below provides a summary of the results of dusk emergence survey. More detailed data is available on request.



FIGURE 5: SUMMARY OF 01.06.22 DUSK SURVEY RESULTS (Reproduced under licence from Google Earth Pro.)

# D.4 ADDITIONAL SPECIES GROUPS

Swallows were recorded nesting within the stable and a tree sparrow was seen carrying nesting material but a nest site was not identified.



# **E. SITE ASSESSMENT**

# E.1 ASSESSMENT OF SURVEY FINDINGS

No bats roosts were identified during the two presence/absence surveys. Old and degraded droppings found internally in March 2022 are considered likely to be the result of historic roosting or foraging activity by an individual bat.

No evidence of a maternity roost was recorded during the survey in June, with only very low levels of bat activity noted.

Hibernation use of the building is considered unlikely given the lack of roosts identified and very low levels of bat activity.

There is a small number of opportunities for nesting birds to use the building during the breeding season, notably within the stable, accessible for swallows. Barn owls may use the building for roosting in but there is no evidence of barn owl nesting.



# F. IMPACT ASSESSMENT

The likely effects of the proposed development, without appropriate targeted mitigation and/or compensation, are detailed below. Impacts have been considered in both the construction phase and operational phase of the development.

# F.1 DIRECT DEVELOPMENT IMPACTS

- Low residual risk of disturbing bats and loss of roosts in the unlikely event that bats are present within the building at the time of works.
- Risk of harm/disturbance to nesting birds if building demolition is carried out during the bird breeding season (March August inclusive).
- Low risk of disturbance to barn owl if present during the works.

# F.2 INDIRECT IMPACTS ON LOCAL POPULATIONS

• Increased lighting which could impact on bat foraging and commuting habitat within the adjacent area.



# **G.RECOMMENDATIONS**

# G.1 FURTHER SURVEY

If development does not happen within 12 months of the last survey, an updating survey will be required, ideally to be undertaken between May and August.

#### G.2 AVOIDANCE, MITIGATION AND COMPENSATION STRATEGY

The following strategy is proposed:

# G.2.1 SITE DESIGN

- External lighting that may reduce bat use of retained or new potential roost sites will be avoided. High intensity security lights will be avoided as far as practical, and any lighting in areas identified as being important for bats will be low level (2m) and low lumen. Light spillage to areas used by foraging or commuting bats should be less than 2 lux. No lighting will be installed along the flyways between the roosts and adjacent trees, woodland and foraging areas. Where security lights are required, these will be of minimum practicable brightness, be set on a short timer and will be motion sensitive only to larger objects.
- Bat roosting opportunities will be added to the completed development (see section G.3 below).

#### G.2.2 <u>TIMING OF WORKS</u>

- A pre-commencement check for nesting birds will be undertaken by a suitably experienced ornithologist if building works are undertaken between March and August inclusive.
- No timing restrictions are considered necessary with regards to bats.

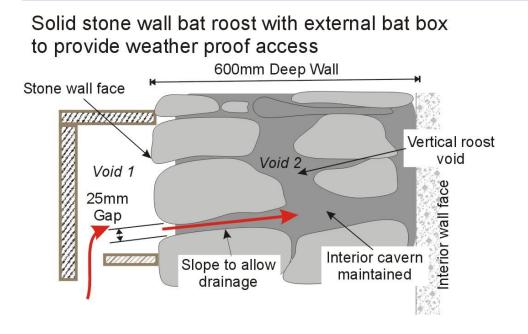
#### G.2.3 WORKING METHODS AND BEST PRACTICE

- All works to the building will be undertaken to a precautionary bat method statement.
- In the unlikely event that bats are found during works, works will stop in that area and the ecological consultant will be contacted immediately. If it is necessary to move the bats for their safety, this will be undertaken by a licensed bat handler.
- Timber treatments that are toxic to mammals will be avoided. If required, timber treatment will be carried out in the spring or autumn. Both pre-treated timbers and timber treatments will use chemicals classed as safe for use where bats may be present (see <a href="https://data.incc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf">https://data.incc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf</a> Chapter 10).

# G.3 COMPENSATION STRATEGY

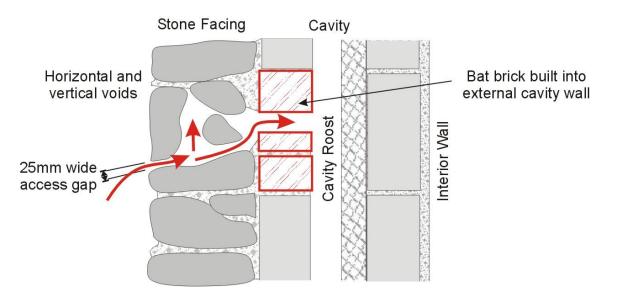
Roosting opportunities will be provided in the completed development. These will be built-in to the structure in the form of:

- Two crevices retained/re-created into the stone walls.
- 2 swallow nesting bowls on the building or in the near vicinity, beneath and overhanging section of roof



Bat roosts such as these should be positioned throughout the walls of a barn conversion, ideally near to eave height and away from windows and doors

# Stone faced cavity wall bat roost



# G.4 MONITORING

Given the results of the survey, no monitoring is proposed.

# G.5 ADDITIONAL ENHANCEMENT RECOMMENDATIONS

The following additional enhancement measures are recommended in order to further enhance the site for biodiversity:

• Installation of a barn owl nest box in a tree in the wider landholding.



• Any landscape planting will be designed to enhance structural diversity, and will include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for bats and wildlife generally.

# **H.** CONCLUSIONS

Provided that the recommendations in this report are implemented, it is anticipated that proposals may proceed with no significant impacts with regard to bats. The proposals provide an opportunity for ecological benefit through the addition of bat and bird nest boxes including a barn owl nest box, contributing to local and national conservation targets.



# **APPENDIX 1. LEGISLATION**

# **NATIONAL PLANNING POLICY**

The table below details the key paragraphs from the National Planning Policy Framework (NPPF)<sup>12</sup> relating to the natural environment:

TABLE 10: NATIONAL PLANNING POLICY FRAMEWORK: CONSERVING AND ENHANCING THE NATURAL ENVIRO	ONMENT
Statement	Paragraph
<ul> <li>Planning policies and decisions should contribute to and enhance the natural and local environment by: <ul> <li>a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);</li> <li>b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;</li> <li>c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;</li> <li>d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;</li> <li>e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information events.</li> </ul> </li> </ul>	174
<ul> <li>information such as river basin management plans; and</li> <li>remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate</li> <li>Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework<sup>13</sup>; take a strategic approach to maintaining and enhancing networks of</li> </ul>	175
habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads <sup>14</sup> . The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.	176
<ul> <li>When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development<sup>15</sup> other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of: <ul> <li>a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;</li> <li>b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and</li> <li>c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated</li> </ul> </li> </ul>	177
Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 176), planning policies and decisions should be consistent with the	178

<sup>&</sup>lt;sup>12</sup> National Planning Policy Framework (July 2021), Department for Communities and Local Government,

<sup>&</sup>lt;sup>13</sup> Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. <sup>14</sup> English National Parks and the Broads: UK Government Vision and Circular 2010 provides further guidance and

information about their statutory purposes, management and other matters.

<sup>&</sup>lt;sup>15</sup> For the purposes of paragraphs 177 and 178, whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined.



TABLE 1	0: NATIONAL PLANNING POLICY FRAMEWORK: CONSERVING AND ENHANCING THE NATURAL ENVIR	
	Statement	Paragraph
	character of the area and the importance of its conservation. Major development within a	
	Coast is unlikely to be appropriate, unless it is compatible with its special character.	
I o prote	ect and enhance biodiversity and geodiversity, plans should:	
a) b)	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 <sup>16</sup> ; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation <sup>17</sup> ; and promote the conservation, restoration and enhancement 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.	179
	etermining planning applications, local planning authorities should apply the following	
principle	9S:	
a)	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;	
b) c) d)	development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest; development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons63 and a suitable compensation strategy exists; and development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.	180
	owing should be given the same protection as habitats sites:	
a)	potential Special Protection Areas and possible Special Areas of Conservation;	
b) c)	listed or proposed Ramsar sites <sup>18</sup> ; and sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.	181
The pre	sumption in favour of sustainable development does not apply where the plan or project	
is likely plans or	to have a significant effect on a habitats site (either alone or in combination with other projects), unless an appropriate assessment has concluded that the plan or project will ersely affect the integrity of the habitats site.	182

Section 40 of the Natural Environment and Rural Communities Act 2006, places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity.

Planning Practice Guidance<sup>19</sup> states:

<sup>&</sup>lt;sup>16</sup> Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

<sup>&</sup>lt;sup>17</sup> Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them.

<sup>&</sup>lt;sup>16</sup> Potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a Special Protection Area, candidate Special Area of Conservation or Ramsar site.

<sup>&</sup>lt;sup>19</sup> Planning Practice Guidance: Natural Environment (<u>www.planningguidance.communities.gov</u>) Updated July 2019 2021



- Planning authorities need to consider the potential impacts of development on protected and priority species, and the scope to avoid or mitigate any impacts when considering site allocations or planning applications. (para. 016)
- Information on biodiversity and geodiversity impacts and opportunities needs to inform all stages of development (including site selection and design, pre-application consultation and the application itself). An ecological survey will be necessary in advance of a planning application if the type and location of development could have a significant impact on biodiversity and existing information is lacking or inadequate. (para. 018)
- Even where an Environmental Impact Assessment is not needed, it might still be appropriate to undertake an ecological survey, for example, where protected species may be present or where biodiverse habitats may be lost. (para. 018)
- As with other supporting information, local planning authorities should require ecological surveys only where clearly justified. Assessments should be proportionate to the nature and scale of development proposed and the likely impact on biodiversity. (para. 018)
- The National Planning Policy Framework encourages net gains for biodiversity to be sought through planning policies and decisions. Biodiversity net gain delivers measurable improvements for biodiversity by creating or enhancing habitats in association with development. Biodiversity net gain can be achieved on-site, off-site or through a combination of on-site and off-site measures. (para. 022)

# **RELEVANT LEGISLATION**

Within England all bat species are specially protected under the Conservation of Habitats and Species Regulations 2017 (as amended).

As a result there is a requirement to consult with Natural England before undertaking any works that may disturb bats or their roost, and under the Conservation of Habitats and Species Regulations it is illegal to.

- Deliberately kill, injure or capture bats.
- Deliberately obstruct access to a bat roost.
- Damage or destroy a bat roost.
- Deliberately disturb bats; in particular any disturbance which is likely to impair their ability:

(i) to survive, to breed or reproduce, or to rear or nurture their young; or

(ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or

(iii) to affect significantly the local distribution or abundance of the species to which they belong.

Under the Wildlife and Countryside Act (1981) the above offence of disturbing bats includes low level disturbance and as such under this act it is also an offence to:

- Intentionally or recklessly disturb at bat while it is occupying a roost.
- Intentionally or recklessly obstruct access to a roost.

Under the above legal protection, only the offences under the Conservation of Habitats and Species Regulations 2017 (as amended) are strict liability offences; the remaining offences, under the Wildlife and Countryside Act (1981), are offences only where they are carried out "intentionally or recklessly".



Under the Countryside and Rights of Way Act 2000 (CROW Act) the offence in section 9(4) of the Wildlife and Countryside Act 1981 of disturbing bats is extended to cover reckless damage or disturbance.

The Hedgerow Regulations 1997 provide for the conservation of important hedgerows and their constituent trees. The presence of a protected species such as bats is a relevant consideration when assessing whether a hedgerow is important and may influence a local planning authority's decision on whether to approve removal of such hedges.

#### **PRIORITY SPECIES**

Although not afforded any legal protection, national priority species (species of principal importance, as listed in Section 41 of the NERC Act (2006)), and local and regional priority species, as detailed within the relevant biodiversity action plans, are material considerations in the planning process and as such have been assessed accordingly within this report.

The following bat species are listed as national priority species: Barbastelle bat, Bechstein's bat, noctule, soprano pipistrelle, brown long-eared bat, greater horseshoe bat and lesser horseshoe bat. 'Bats' as a species group is also listed on the relevant local biodiversity action plan for this site.

# Ecology Ltd

# APPENDIX 2. BAT METHOD STATEMENT FOR THE DEVELOPMENT OF LOW TOWN STABLE, LONGFRAMLINGTON

DATE: CLIENT: PROJECT NUMBER: AUTHOR: POSITION: CONTACT DETAILS:

THIS STATEMENT MUST BE COPIED TO THE SITE OWNER, DESIGNER, CLERK OF WORKS, AND TO THOSE CONTRACTORS WHOSE WORK MAY AFFECT BATS, INCLUDING THOSE INVOLVED IN ALL ELEMENTS OF THE WORK DETAILED ABOVE. A SIGNED

	Print Name	Signature	Date
Supervisor:			
Operative:			

COPY SHOULD BE KEPT AT THE SITE OFFICES.

This method statement contains information regarding:

- bat legal status
- and site working methods

We have read and fully understood this method statement and all key aspects have been explained to the site operatives.

#### I.

#### **RELEVANT LEGISLATION**

All bat species are specially protected. The Wildlife and Countryside Act (1981) and the *Conservation of Habitats and Species Regulations 2017 (as amended)* make it an offence to:

- intentionally kill, injure, or take any species of bat
- intentionally or recklessly disturb bats
- intentionally or recklessly damage destroy or obstruct access to bat roosts

Fines (formerly of up to £5000 for each individual bat affected, fine limit now removed) and confiscation of vehicles/equipment used can be imposed for deliberate or reckless disturbance of bats or damage to a roost site.

Under these regulations Natural England licenses are required for works that may adversely affect bats.

#### I.1 Potential Bat Roost Sites

Bat roost sites in buildings and stone structures can be difficult to locate. British bats vary in size, the smallest being the crevice roosting Pipistrelle with a body the size of a matchbox. The small size of these animals means that they can roost within the smallest cracks or crevices.

Common locations for crevice roosting bats within buildings include beneath slates or tiles, within mortise joints, rubble fill and cavity walls and between loose stones (see photos). It is possible that small colonies may be present within the fabric of a building yet no external signs are visible. Therefore care is needed when works affect such features.









# I.2 BACKGROUND

During the preliminary assessment of this site, bat droppings were found on a small mezzanine structure between the two stable rooms. These may have been from a bat roosting along the central wooden roof beam.

# **I.3** WORKING METHODS

Survey work has been carried out at this site with no evidence that bat roosts are present. There is a residual risk that bats may use the building at times, so works are to follow this method statement to minimise the risk of harming wildlife.

The following working methods to minimise the risk to bats and avoid causing reckless damage or disturbance must be followed:

- Old slates, coping stones, ridge tiles and roof coverings will be removed by hand, being aware that bats may be present beneath slates or tiles, within mortise joints, cavity walls, between loose stones, between lintels and in gaps around window frames and in sash windows.
- Ridge tiles should be lifted vertically, and then carefully checked beneath for bats prior to being removed from the roof. Removing ridge tiles also makes the roof draughty which, if the roof is not to be fully stripped on the same time, will help encourage bats to move away from the site.
- Slates/pantiles should be lifted carefully and checked prior to being removed.
- Prior to levering off fascias/soffits, they should be checked behind to ensure no bats are present that may be harmed by equipment used. Fascias/soffits should be checked for bats prior to lowering to the ground.
- If full demolition is proposed and there is a risk of bats being present within the walls, the roof should be removed and wall tops exposed and the building left overnight prior to general demolition proceeding, to allow any bats present but not visible during the strip to escape.
- If bats are found during works, works should cease on that structure immediately and the ecological consultant contacted.
- Remedial timber treatments that are toxic to mammals will be avoided. If required, timber treatment will be carried out in the spring or autumn. Both pre-treated timbers and timber treatments will use chemicals classed as safe for use where bats may be present (see <u>http://www.jncc.gov.uk/pdf/batwork\_manualpt4.pdf</u>).
- The following mitigation/compensation/enhancements are to be provided:
  - 2 Built-in or mounted bat boxes/bricks/tubes
  - 4 swallow nesting bowls on the building or in the near vicinity, beneath and overhanging section of roof
  - Installation of a barn owl nest boxes in a tree elsewhere in the wider landholding.
  - Any landscape planting will be designed to enhance structural diversity, and will include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for bats and wildlife generally.

If bats are found at any time during the development work, E3 Ecology Ltd (01434 230982) must be contacted immediately.



If works risk recklessly harming bats then the police can order all construction/renovation work to cease until the issue is properly addressed. If police are called they will actively seek prosecution so full adherence to good working practises is essential