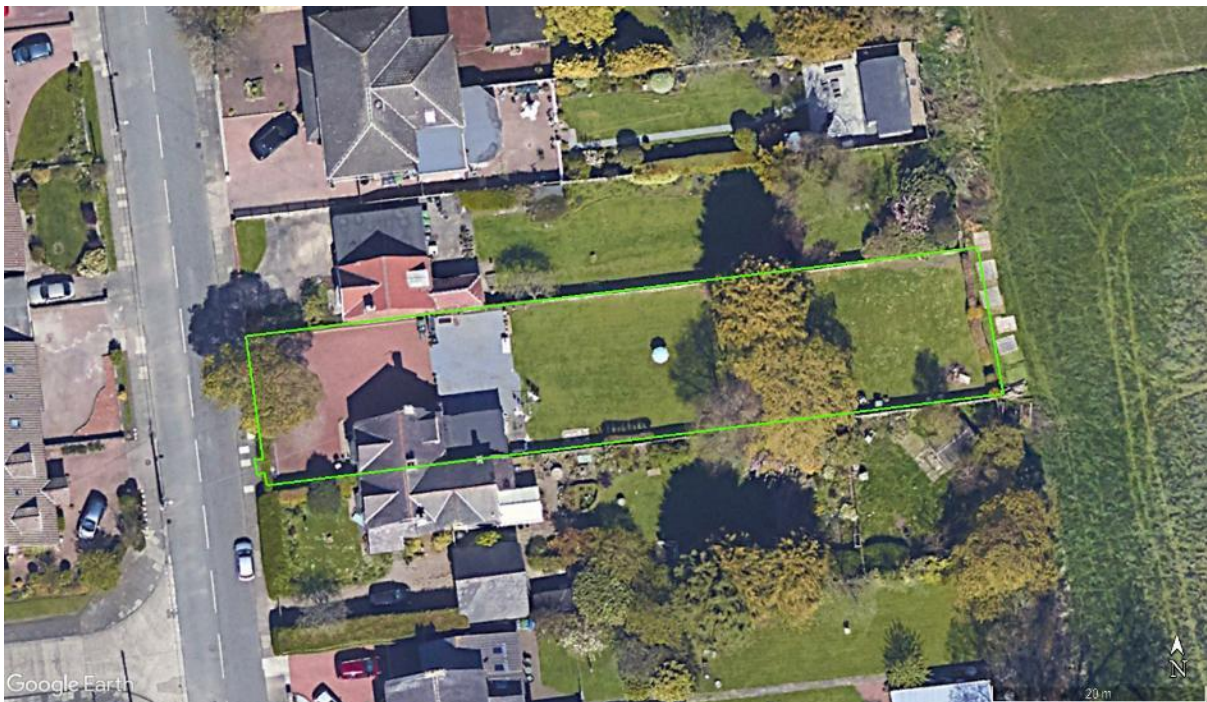




Experts in Ecology,
Pragmatic in Solutions

BAT SURVEY

35 West Meadows, Cleadon



DATE:	22nd July 2026
CLIENT:	Mr. & Mrs. J. Graham
PROJECT NUMBER:	8248
AUTHOR:	Abbie Tunnicliffe
POSITION:	Graduate Ecologist
CONTACT DETAILS:	abbie.tunnicliffe@e3ecology.co.uk

9 Anvil Court, Whittonstall
Consett, Northumberland
DH8 9JU

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	11/06/2026	1 st draft	AT	JM	SG
R02	Final	22/06/26	Bat survey Results added	AT	JM	MEM

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

A.	SUMMARY.....	5
B.	INTRODUCTION.....	7
B.1	AUTHOR, SURVEYORS & QUALIFICATIONS.....	7
B.2	OBJECTIVES.....	7
B.3	PROPOSED DEVELOPMENT SITE.....	7
B.4	DEVELOPMENT PROPOSALS.....	8
C.	METHODOLOGY	10
C.1	SCOPE OF STUDY	10
C.2	DESK STUDY	10
C.3	PRELIMINARY ASSESSMENTS	10
C.3.1	FORAGING/COMMUTING HABITAT ASSESSMENT	10
C.3.2	PRELIMINARY ROOST ASSESSMENT (BUILDINGS/STRUCTURES).....	10
C.3.3	SURVEY DATES & ENVIRONMENTAL CONDITIONS	11
C.3.4	BAT PRESENCE/ABSENCE SURVEY.....	11
C.4	SURVEY CONSTRAINTS.....	13
C.5	ASSESSMENT OF VALUE.....	13
D.	RESULTS	15
D.1	DESKTOP STUDY	15
D.1.1	PRE-EXISTING INFORMATION	15
D.1.2	CONSULTATION	15
D.2	PRELIMINARY ROOST ASSESSMENT.....	16
D.2.1	HABITATS.....	16
D.2.2	BUILDINGS/STRUCTURES.....	16
D.3	OVERVIEW OF SITE SUITABILITY	19
D.4	PRESENCE/ABSENCE SURVEY.....	20
D.4.1	SURVEYORS, TIMINGS & CONDITIONS	20
D.4.2	24.06.26 DUSK SURVEY RESULTS	20
D.4.3	14.07.26 SURVEY RESULTS	21
D.5	NESTING BIRDS	22
E.	SITE ASSESSMENT	23
E.1	ASSESSMENT OF SURVEY FINDINGS	23
E.2	POPULATION SIZE CLASS ASSESSMENT	23
F.	IMPACT ASSESSMENT	23
F.1	DIRECT DEVELOPMENT IMPACTS	23
F.2	INDIRECT IMPACTS ON LOCAL POPULATIONS.....	23
G.	RECOMMENDATIONS	24
G.1	FURTHER SURVEY	24
G.2	AVOIDANCE, MITIGATION AND COMPENSATION STRATEGY	24
G.2.1	SITE DESIGN	24
G.2.2	TIMING OF WORKS	24
G.2.3	WORKING METHODS AND BEST PRACTICE.....	24
G.3	COMPENSATION STRATEGY.....	24
G.4	MONITORING	24
G.5	ADDITIONAL ENHANCEMENT RECOMMENDATIONS	24
H.	CONCLUSIONS	25
APPENDIX 1.	LEGISLATION	26
	NATIONAL PLANNING POLICY	26
	RELEVANT LEGISLATION	28
	PRIORITY SPECIES	29

TABLES

TABLE 1: LEAD SURVEYORS	7
TABLE 2: ASSESSMENT OF BAT ROOSTING SUITABILITY OF BUILDINGS/STRUCTURES	11
TABLE 3: PRELIMINARY ASSESSMENT SURVEY CONDITIONS	11
TABLE 4: RECOMMENDED NUMBER AND TIMING OF PRESENCE/ABSENCE SURVEY VISITS REQUIRED TO PROVIDE CONFIDENCE IN NEGATIVE PRELIMINARY ROOST ASSESSMENT RESULTS	12
TABLE 5: ECOLOGICAL RECEPTOR VALUATION	14
TABLE 5: CONSULTATION RECORDS	15
TABLE 6: OVERVIEW OF HABITATS AND SETTING	19
TABLE 7: OVERVIEW OF BUILDING/STRUCTURES ²	19
TABLE 9: NATIONAL PLANNING POLICY FRAMEWORK: CONSERVING AND ENHANCING THE NATURAL ENVIRONMENT	26

FIGURES

FIGURE 1: SITE BOUNDARY	8
FIGURE 2: SITE AND SETTING	8
FIGURE 3: EXISTING PLANS	9
FIGURE 4: DEVELOPMENT PROPOSALS	9
FIGURE 5: SUMMARY OF SURVEY RESULTS	21
FIGURE 6: NIGHT VISION AID STILL SHOTS	21
FIGURE 7: SUMMARY OF SURVEY RESULTS	22
FIGURE 8: NIGHT VISION AID STILL SHOTS	22

A. SUMMARY

E3 Ecology Ltd was commissioned to undertake a bat survey of 35 West Meadows Road, Cleadon where it is proposed to construct a first-floor extension over an existing flat roof rear extension, with a pitched roof joining into the existing roof. 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 1st June 2026. Subsequent dusk presence/absence surveys were undertaken on 24th June and 14th July 2026 in order to inform this survey report.

The results of the desk study indicate that there are no internationally and nationally statutorily designated sites for bats within 2km. The site does not lie within a Site of Special Scientific Interest (SSSI) Impact Risk Zone (IRZ) for this type of development. There are two records of granted European Protected Species (EPS) mitigation licences affecting bats within 2km, both over 700m to the north and north west of site. The Durham Coast SAC lies 2.2km to the east of the site. No direct development impacts are envisaged on these or any other nearby protected sites due to the small scale of the proposals.

The site itself consists of the residential property and surrounding hardstanding with a vegetated garden and amenity grassland lawn to the rear. Habitats in the surrounding area are predominantly urban, comprising built development and scattered greenspaces and street trees.

Overall, the habitats in the local area are of moderate suitability for use by foraging/commuting bats.

The building on site was subjected to detailed external and internal inspection. It is a semi-detached, of brick construction with pitched slate roof and dormer windows. A single-storey flat roof extension extends to the east. A number of potential roosting features were noted on the building including multiple broken/slipped/raised slate tiles and a gap behind a timber fascia board.

As such, the building is of moderate suitability to support roosting bats.

In accordance with Bat Conservation Trust (BCT) guidelines, two dusk presence/absence surveys have been undertaken. No roosts were identified and activity was limited to low levels of common pipistrelle foraging activity.

No opportunities for nesting birds were identified on or within the property.

The following potential impacts have been identified:

- Low residual risk of disturbing bats and damage/destruction of roosts in the unlikely event that they are present within the building.
- Damage/destruction of potential roosting features.
- Potential increased lighting which could impact on bat foraging and commuting habitat within the adjacent area.

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

- Works will be completed in accordance with a precautionary working method statement as good working practice.

- In the unlikely event that bats are found during works, works will stop in that area and the ecologist will be contacted immediately. If it is necessary to move the bats for their safety, this will be undertaken by a licensed bat handler.
- Sensitive design of any additional external lighting.
- 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 <https://data.jncc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf> - Chapter 10).

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

- Provision of bird nesting and bat roosting features on site. To include one bird box and one bat box. Boxes are to be sited with the aid of the project ecologist.

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 master-planning documents.

Provided that the recommendations in this report are implemented, it is anticipated that proposals may proceed while minimising the risk of significant impacts to bats. The proposals provide an opportunity for ecological benefit through bat and bird nest box provision, contributing to local and national conservation targets.

B. INTRODUCTION

E3 Ecology Ltd was commissioned by Artisan Architecture on behalf of Mr. & Mrs. J. Graham to undertake a bat survey of a proposed development site at 35 West Meadows Road in Cleadon. The survey comprised a desk study and daytime preliminary roost assessment.

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	Natural England Survey Licence Numbers
Abbie Tunnicliffe	Graduate Ecologist	BSc ACIEEM	2025-85750-CL18-BAT (accredited)

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 in Cleadon, South Tyneside at an approximate central grid reference of NZ 38568 61568.

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

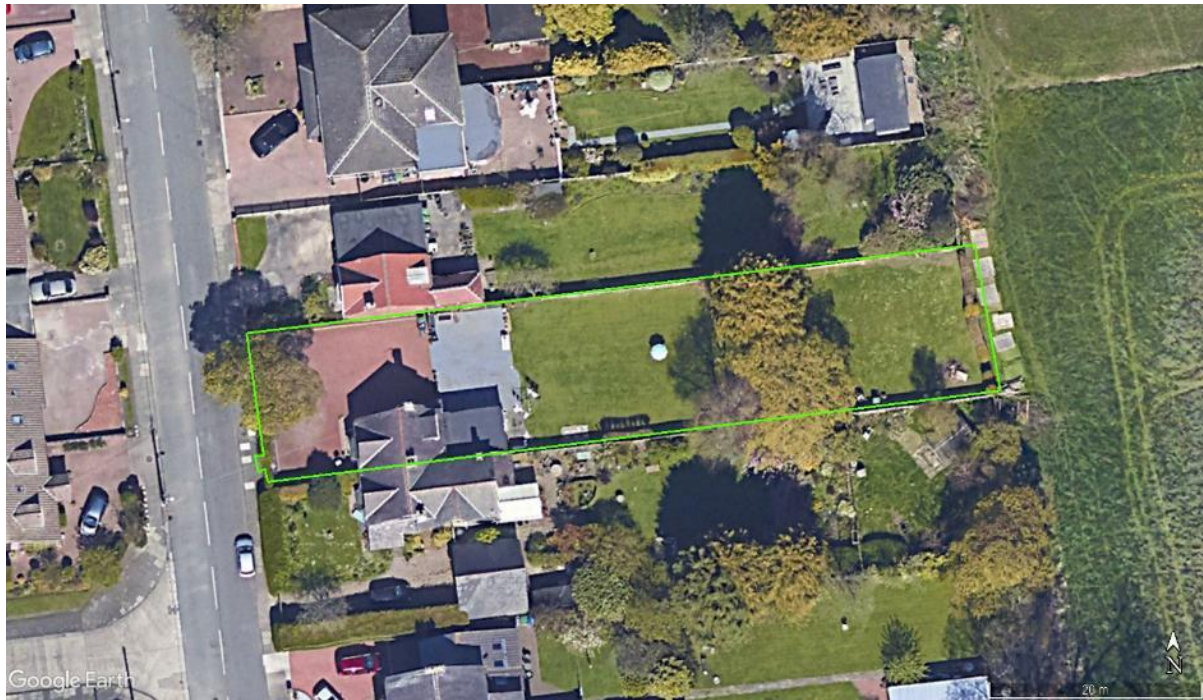


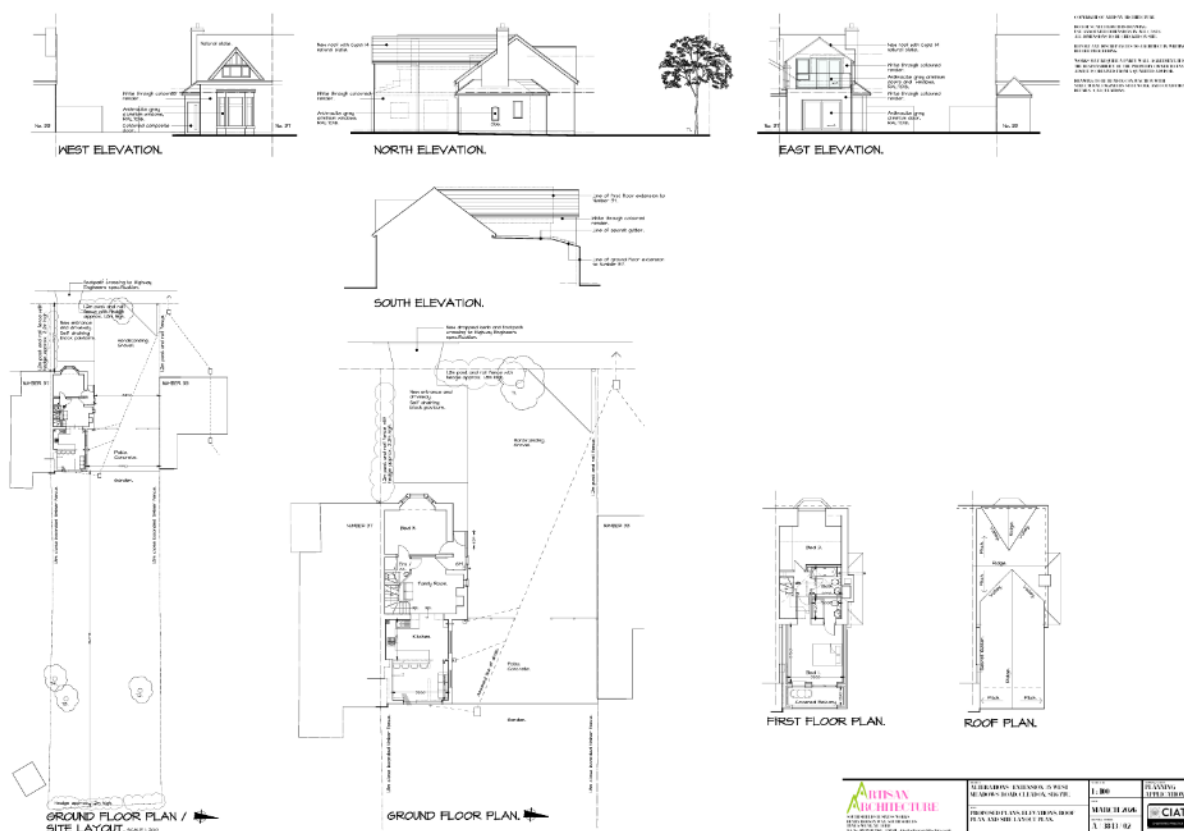
FIGURE 1: SITE BOUNDARY
(Reproduced under licence from Google Earth Pro.)



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

B.4 DEVELOPMENT PROPOSALS

It is proposed to construct a first-floor extension over an existing flat roof rear extension, with a pitched roof joining into the existing roof. Development proposals are shown in the figures below.



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 BCT Good Practice Survey Guidelines¹.

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 June 2026, requesting data relating to bats within 2km of site. In addition, a search was made of the MAGIC website² for any granted bat licences within 2km, and Special Protected Areas (SPAs) or Special Areas of Conservation (SACs) within 10km.

C.3 PRELIMINARY ASSESSMENTS

C.3.1 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.

C.3.2 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,

¹ Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). Bat Conservation Trust

² Multi Agency Geographic Information for the Countryside (www.magic.gov.uk)

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 BCT³ and detailed within the table below.

TABLE 2: ASSESSMENT OF BAT ROOSTING SUITABILITY OF BUILDINGS/STRUCTURES (TO BE APPLIED USING PROFESSIONAL JUDGEMENT, TAKEN FROM TABLE 4.1 OF BCT'S BAT SURVEY GUIDELINES)	
Suitability	Roosting Habitats
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. 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 and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation - the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure 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 time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.

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.

An assessment of the suitability of the buildings/structures to support nesting birds was also completed.

C.3.3 SURVEY DATES & ENVIRONMENTAL CONDITIONS

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

TABLE 3: PRELIMINARY ASSESSMENT SURVEY CONDITIONS				
Date	Temperature (°C)	Cloud Cover (%)	Precipitation	Wind Conditions (Beaufort scale)
01.06.26	15	100	Heavy rain	F1

C.3.4 BAT PRESENCE/ABSENCE SURVEY

C.3.4.1 SURVEY EFFORT

The level of survey effort employed has taken account of the guidance provided by the BCT⁴ and summarised within the table below.

³ Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). Bat Conservation Trust

⁴ Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). Bat Conservation Trust

TABLE 4: RECOMMENDED NUMBER AND TIMING OF PRESENCE/ABSENCE SURVEY VISITS REQUIRED TO PROVIDE CONFIDENCE IN NEGATIVE PRELIMINARY ROOST ASSESSMENT RESULTS (FROM TABLE 7.1 AND TABLE 7.2 BCT GUIDELINES)

	Low Roost Suitability* or PRF-I	Moderate Roost Suitability	High Roost Suitability or PRF-M
Recommended minimum number of survey visits for presence/absence survey to give confidence in a negative result	One survey visit. One dusk emergence survey (structures). For trees with PRF-I suitability, no further surveys required.	Two separate dusk emergence survey visits.	Three separate dusk emergence survey visits.
Recommended timings for presence/absence surveys	May to August (structures).	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.
<i>* 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.</i> 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*’.

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

C.3.4.2 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 were equipped with bat detectors to listen for and record bats such that the resulting sonograms could then be viewed and analysed.

Timings for observations of key bat activity such as emergence, first records of each species and commuting routes were recorded. All data were recorded either using an Anabat Express or Scout for future reference and to allow confirmation of species identification through call analysis (using Anabat Insight software), and to capture brief echolocation calls that could not be reliably identified in the field⁵. Field survey recorded numbers of bats detected, feeding activity, flight paths, species (as far as is practicable), and social calls.

A total of four person-nights work was undertaken. In addition, surveyor coverage of the site was supplemented with the use of night vision aids (which can comprise infra-red or thermal video cameras) to assist with observation of bat activity in lower light levels, which is particularly useful for later emerging species. Where infra-red cameras were used, these were supplemented with additional infra-red lighting. Night vision aids were not used in place of surveyors, but were used to supplement the survey coverage, including targeting areas of

⁵ 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.

higher risk within the survey area. Recorded footage was then reviewed at varied speeds and analysed to inform the survey results.

Figures provided within the results section of this report illustrate the approximate location of each surveyor and camera.

C.3.4.3 SURVEY EQUIPMENT

- Duet bat detectors
- Anabat Express bat detectors
- Anabat Scout bat detectors
- Light meter
- Infrared Video Camera
 - Nightfox Whisker Night Vision Binoculars
- Infra-red torches and floodlights

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 BCT Good Practice Guidelines⁶.

The entire length of the loft space could not be inspected in detail due to the lack of weight bearing loft boards. Every effort was made to inspect the loft space from the loft hatch and further surveys have been undertaken with no roosts recorded. As such, this is not thought to be a significant constraint to the assessment.

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 Assessment⁷, 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.

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

⁶ Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). Bat Conservation Trust

⁷ Chartered Institute for Ecology and Environmental Management (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater and Coastal

TABLE 5: ECOLOGICAL RECEPTOR VALUATION	
Level of Value	Examples
International	An internationally designated site or candidate site.
	A site meeting criteria for international designation.
	The site is of functional importance* to a species population with internationally important numbers (i.e. >1% of the biogeographic population)
National	A nationally designated site.
	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 (i.e. >1% of the regional population)
County	A Local Wildlife Site (LWS) or equivalent, designated at a County level
	The site is of functional importance* to a species population of county value (i.e. >1% of the county population)
District	A Local Wildlife Site (LWS) or equivalent, designated at a District level
	The site is of functional importance* to a species population of district value (i.e. >1% of the district population)
Parish	A species population considered to appreciably enrich the nature conservation resource within 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.

** Functional importance 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 South Tyneside which covers approximately 6,690ha and is mainly comprised of urban and agricultural land. The north of the site is comprised of commercial and residential land, including the towns of South Shields, Tyne Dock and Jarrow with scattered greenspaces throughout. Agricultural land becomes more prevalent to the south of the site, and the River Tyne demarcates the northern boundary of the site.

D. RESULTS

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 (2025) indicates that habitats on site are dominated by a residential property which is surrounding hardstanding and vegetated garden. Historic imagery suggests that the site has remained relatively unchanged since at least 2001.

Aerial photography shows that the general land use in the surrounding area is predominantly residential to the west and north with arable farmland to the east and south.

D.1.1.2 MAGIC WEBSITE⁸

PROTECTED SITES

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

The site does not fall within a SSSI IRZ for this type of development.

The site lies within 2.2km of an SAC. No direct development impacts are envisaged on this or any other nearby protected sites due to the small scale of the proposals.

SPECIES

There are two records of granted EPS mitigation licences for works affecting bats within 2km, located approximately 750m to the north and 1.8km to the southwest of site respectively. Both were for the destruction of a common pipistrelle day roost.

D.1.2 CONSULTATION

D.1.2.1 LOCAL RECORDS CENTRE

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

TABLE 6: CONSULTATION RECORDS			
Species	No. of Records	Closest distance (m – if sufficient record resolution provided)	Most recent date
Unknown Bat Species	20	640	01/08/2020
Common Pipistrelle	34	361	29/08/2024
Myotis Bat species	1	640	23/08/2019
Nathusius's Pipistrelle	2	510	18/06/2019
Noctule Bat	1	1726	22/08/2006
Pipistrelle Bat species	7	1600	29/04/2023
Soprano Pipistrelle	1	1347	18/06/2019

The closest record of common pipistrelle just 361m away was from 2006 and it is not clear whether this was for a roost or general activity.

⁸ MAGIC Website: www.magic.gov.uk

Full data sets are available on request.

D.2 PRELIMINARY ROOST ASSESSMENT

D.2.1 HABITATS

FORAGING HABITATS & COMMUTING ROUTES

The site is well connected to foraging habitat including mature gardens and hedgerows, though these are somewhat isolated within an agricultural and residential setting with no higher value habitat such as woodland or wetland.



SHELTERED FLIGHT AREAS

There are no sheltered flight areas for foul weather foraging or light sampling on site.

ALTERNATIVE ROOST LOCATIONS

There are numerous alternative roosting opportunities in the nearby residential dwellings.



D.2.2 BUILDINGS/STRUCTURES

A description of the building is detailed below.

Where recorded, field signs that confirm bat use are in bold.

EXTERNAL

- Semi-detached property of brick construction, brickwork well-sealed.
- Pitched slate roof - multiple broken, slipped, raised and missing tiles creating suitability for bats.
- Missing tiles close to the northern gable end leaving an open/exposed hole through the eaves therefore not a suitable feature in itself.
- Flat roof single storey extension to the rear (east elevation), bitumen felting, well-sealed.
- Timber fascia board at wall top on eastern elevation, slightly raised off the wall at the north east corner of the property, a suitable shelter for bats.
- Timber fascia board along rear single storey extension wall top, flat against wall, no gap behind.
- Two chimneys, north elevation and east elevation, both brick construction, well-sealed, lead flashing at base well-sealed.
- Dormer window on west elevation (front), timber bargeboard and slate pitched roof – no features noted.
- Dormer window (rear) east elevation, flat roof, bitumen felting well-sealed, no features noted.
- PVC fascia board above rear dormer window (east elevation), slight gap behind though less suitable as directly above window.
- Concrete ridge tiles, well-sealed.

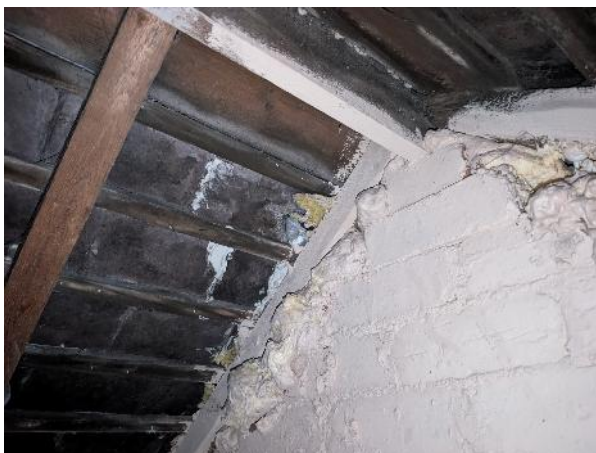
- Timber bargeboard along overhanging eaves – no features.
- No external field signs of bats recorded.





Internal

- Most of the space under the roof is first floor rooms, and only a small loft void remains at the top of the roof.
- Cobwebbed timber trusses.
- Unlined slate tiles, light ingress from slipped and broken slate tiles, providing potential access into the loft space.
- No internal field signs of bats were recorded although the southern portion of the loft space could not be inspected in detail.



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

D.3 OVERVIEW OF SITE SUITABILITY

TABLE 7: OVERVIEW OF HABITATS AND SETTING⁹

	NEGLECTIBLE	LOW	MODERATE	HIGH
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
HABITATS WITHIN 1KM	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 1KM	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 8: OVERVIEW OF BUILDING/STRUCTURES²

	NEGLECTIBLE	LOW	MODERATE	HIGH
AGE (APPROX.)	Modern	Post 1940's	1900-1940	Pre 20 th 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, sheet asbestos, 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, tightly sealed, very well sealed roof tiles	Good condition or very open, not weatherproof, modern sheet materials, generally well-sealed roof tiles	Some potential access routes e.g. raised, slipped or missing slates or tiles, low number of gaps in bedding/end mortar	Numerous gaps, not too open, e.g. uneven stone slates, many gaps in mortar

⁹ 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.

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 of moderate suitability for bats.

The building is considered of moderate suitability for roosting bats.#

D.4 PRESENCE/ABSENCE SURVEY

D.4.1 SURVEYORS, TIMINGS & CONDITIONS

Date	Start	End	Sunset / Sunrise	Start Temp (°C)	End Temp (°C)	Cloud (%)	Precipitation	Wind (Beaufort)
24.06.26	21:36	23:21	21:51	19	17	5	Dry	F0
14.07.26	21:21	23:06	21:36	15	13	100	Dry	F1

Date	Lead Surveyor	Assistant surveyors
24.06.26	A Tunnicliffe	K Moore
14.07.26	Abbie Tunnicliffe	J Cole

D.4.2 24.06.26 DUSK SURVEY RESULTS

The survey was undertaken in warm, dry weather; with no wind. No roosts were identified on site. Bat activity was low throughout with only intermittent common pipistrelle commuting and foraging recorded. The first bats recorded were common pipistrelle at 22:20, 44 minutes after sunset at 17.9lux; two could be seen foraging in the east of the site towards the back of the back garden. This continued intermittently until 22:48. Aside this, the occasional common pipistrelle was also recorded elsewhere on site including commuting south to north across the front of the property. No other species were recorded.

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



FIGURE 5: SUMMARY OF SURVEY RESULTS



FIGURE 6: NIGHT VISION AID STILL SHOTS

D.4.3 14.07.26 SURVEY RESULTS

The survey was undertaken in warm, dry weather; with little wind. No roosts were identified on site. Bat activity was low throughout with only very occasional common pipistrelle commuting and foraging recorded. The first bats recorded were common pipistrelle at 22:15, 39 minutes after sunset at 2.9lux. Similar to the first survey, two bats could be seen foraging in the east of the site towards the back of the back garden. This continued intermittently throughout the survey. Aside from this, the occasional common pipistrelle was also recorded elsewhere on site including commuting east to west before cutting to the south across the back of the property. No other species were recorded.

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



FIGURE 7: SUMMARY OF SURVEY RESULTS



FIGURE 8: NIGHT VISION Aid STILL SHOTS

D.5 NESTING BIRDS

No evidence of nesting birds was recorded at the time of the survey, and no suitable nesting opportunities are available in the buildings on site.

E. SITE ASSESSMENT

E.1 ASSESSMENT OF SURVEY FINDINGS

The building is considered to be of moderate suitability for roosting bats but no roosts were identified during the 2026 surveys.

Hibernation use of the building is considered unlikely.

No opportunities for nesting birds to use the building were noted during the assessment.

E.2 POPULATION SIZE CLASS ASSESSMENT

No roosts were identified on site.

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 damage/destruction of roosts in the unlikely event that they are present within the building.
- Damage/destruction of potential roosting features.

F.2 INDIRECT IMPACTS ON LOCAL POPULATIONS

- Potential 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.

G.2.2 TIMING OF WORKS

- Given the results of the dusk presence/absence surveys, no timing restrictions are considered necessary.

G.2.3 WORKING METHODS AND BEST PRACTICE

- As good working practice, works will be undertaken in accordance with a precautionary working method statement which is included in the appendix of this report.
- 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 <https://data.jncc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf> - Chapter 10).
- .

G.3 COMPENSATION STRATEGY

With the implementation of the above mitigation strategy, it is not anticipated that there will be any significant adverse residual effects from the proposed development. As such, a compensation strategy is not required.

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:

- Provision of bird nesting and bat roosting features on site. To include one bird box and one bat box. Boxes are to be sited with the aid of the project ecologist.

H. CONCLUSIONS

Provided that the recommendations in this report are implemented, it is anticipated that proposals may proceed while minimising the risk of significant impacts to bats. The proposals provide an opportunity for ecological benefit through bat and bird nest box provision, 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)¹⁰ relating to the natural environment:

TABLE 9: NATIONAL PLANNING POLICY FRAMEWORK: CONSERVING AND ENHANCING THE NATURAL ENVIRONMENT	
Statement	Paragraph
Planning policies and decisions should contribute to and enhance the natural and local environment by: 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); 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; c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; 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 and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs; 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 such as river basin management plans; and a) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.	187
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 ¹¹ ; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries	188
Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of National Landscapes 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 ¹² . 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	189
When considering applications for development within National Parks, the Broads and National Landscapes, permission should be refused for major development¹³ 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: 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; b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and a) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.	190

¹⁰ National Planning Policy Framework (December 2024), Department for Communities and Local Government,

¹¹ 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.

¹² English National Parks and the Broads: UK Government Vision and Circular 2010 provides further guidance and information about their statutory purposes, management and other matter

¹³ For the purposes of paragraphs 182 and 183, 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 9: NATIONAL PLANNING POLICY FRAMEWORK: CONSERVING AND ENHANCING THE NATURAL ENVIRONMENT	
Statement	Paragraph
Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 189), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.	191
To protect and enhance biodiversity and geodiversity, plans should: a) 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 biodiversity¹⁴ ; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation¹⁵ ; and a) 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.	192
When determining planning applications, local planning authorities should apply the following principles: 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) 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; c) 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 reasons¹⁶ and a suitable compensation strategy exists; and a) 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.	193
The following should be given the same protection as habitats sites: a) potential Special Protection Areas and possible Special Areas of Conservation; b) listed or proposed Ramsar sites¹⁷ ; and a) 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.	194
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 plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.	195

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.

¹⁴ Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

¹⁵ 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.

¹⁶ For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.

¹⁷ See Explanatory Note to the [Noise Policy Statement for England](#) (Department for Environment, Food & Rural Affairs, 2010).

Planning Practice Guidance¹⁸ states:

- 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 a 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".

¹⁸ Planning Practice Guidance: Natural Environment (www.planningguidance.communities.gov) Updated July 2021

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.

PROTECTED SPECIES METHOD STATEMENT FOR THE DEVELOPMENT OF 35 WEST MEADOWS, CLEADON

This method statement must be copied to the site owner, site manager/lead contractor and to those contractors whose work may affect protected species, including those involved in all elements of the work at the site. A signed copy should be kept at the site office.

This method statement contains information regarding:

- Protected species' legal status
- Protected species' ecology
- Site working methods

	Print Name	Signature	Date
Site Manager/ Supervisor:			
Operative:			
Operative:			
Operative:			
Operative:			
Operative:			
Operative:			

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

Site details

Ecological survey work was undertaken of the site in June-July 2026.

Habitats on site are limited to the building itself.

The survey work identified the following ecological constraint that needs to be considered during the development, and which is the subject of this method statement:

- Bats

Specific details of these species in relation to the site is provided in the below table, as well as precautionary methods in relation to those species and general good working practices.

Additional requirements for other protected species and habitats may be included within the other ecological reports, though are not considered within this method statement. The site owner and site manager/lead contractor should familiarise themselves with those reports so that they are aware of any other such requirements.

General working methods (Please see specific species sections below for more targeted working methods)

- The site/project manager will maintain close contact with the project ecologist to review the nature and timings of works and the potential to affect wildlife and biodiversity.
- No work will be completed between dusk and dawn to minimise disturbance to nocturnal wildlife and no external lighting will be installed unless approved by the council and project ecologist.
- Any excavations left open overnight will have a means of escape for wildlife that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°. If left overnight, excavations will be checked for amphibians (and any other wildlife) prior to infilling, with any amphibian/wildlife found to be carefully translocated to the boundaries as previously detailed.
- Any chemical storage or hazardous materials (e.g. barbed wire) will be stored in such a way that they cannot be accessed by wildlife (e.g. hedgehog or badger).
- Any pipes to be stored on site over 100mm diameter should be capped or stored in such a way that wildlife cannot shelter within.
- Materials should be stored on pallets where possible rather than directly on the ground, to reduce the risk of wildlife sheltering directly beneath materials and possibly being harmed when they are moved.
- If there is any doubt as to the appropriate action, the ecologist should be contacted for advice.

If works risk recklessly harming wildlife then the police can order all work on site to cease until the issue is properly addressed and may prosecute accordingly.

In case of any queries, please contact the project ecologist E3 Ecology Ltd on 01434 230982.

Bats - Buildings	
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.
Ecology	Bat roost 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. 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.
Working Methods	- Where removal is necessary, old slates, coping stones and ridge tiles 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. - If removal is necessary, slate tiles should be lifted carefully and checked prior to being removed. - Where necessary 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 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 http://www.jncc.gov.uk/pdf/batwork_manualpt4.pdf). 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
Provisions	The following mitigation/compensation/enhancements are to be provided: Provision of bird nesting and bat roosting features on site. To include one bird box and one bat box. Boxes are to be sited with the aid of the project ecologist.



Missing stone mortar



Internal gaps near loft beam



Bat droppings under ridge tile