



Preliminary Roost Assessment

Lower Starring Farm, Starring Road Littleborough, Lancashire, OL15 8HN

Suzanne Gumbley

Status	Issue	Name	Date
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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Suzanne Gumbley to undertake a Preliminary Roost Assessment (PRA) at Lower Starring Farm, Starring Road Littleborough, Lancashire, OL15 8HN (hereafter referred to as “the site”). The survey was required to inform a planning application for the conversion of the attached barn into living accommodation (hereafter referred to as “the proposed development”).

The following is work you will need to commission to obtain planning permission and to comply with legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 5 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Roosting bats (B1)	B1 has moderate value for roosting bats. Possible suitable roosting sites for crevice dwelling species were noted across the roof of B1 below slightly raised roof tiles. No suitable roosting sites or access point for void dwelling species such as brown long-eared bats were noted during the survey. No evidence of bats was noted during the survey. Three EPSL's were returned within 2km of the site.	The proposed development will result in the conversion of the barn section of B1. No impacts to the residential section are anticipated as part of the proposed development. It is to the consultants understanding that the roof of B1 and the location of potential crevice dwelling bat roosting sites will not be impacted by the proposed development as it is anticipated that only internal works will be undertaken in addition to the creation of windows in the walls are anticipated. Therefore it is considered that there will be no impact to bats as a part of the proposed development.	As stipulated in professional survey guidance, moderate value buildings typically require two bat emergence or re-entry survey to be completed during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely-absence of a bat roost. However, in this case as only internal works are anticipated with no roofing works to be undertaken it is considered that the works could be undertaken under a Bat Mitigation Plan which would include methods such as timings of works to reduced any potential impact to bats to an acceptably low level. Acceptance of this approach would be at the discretion of the Local Planning Authority, given that this would be a deviation from standard survey guidance. If any works are to be undertaken that will impact the roof including the existing roof lining then further surveys will be required as per the aforementioned professional survey guidance,
Foraging and commuting bats	Local woodland areas and watercourses could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. The proposed development may include the use of lighting which could spill on to bat roosting, foraging or	If any additional lighting is proposed a low impact lighting strategy will be adopted for the site during and post-development.

		commuting habitat and deter bats from using these areas.	
Nesting birds (B1)	An old birds nest was noted within B1 and an old barn owl pellet was noted within the building. Both the nest and the pellet were assessed as being old and disused with no fresh evidence present. However the eves of the building provide suable nesting areas of birds such as sparrow or swallows.	As there was no fresh/current evidence of barn owl present within B1. Therefore these is considered to be no impact to barn owl as the site was once previously utilised as an occasional feeding roost and therefore does not warrant protection. No fresh evidence of nesting birds was noted within B1. However the eves of the building provide suable nesting areas of birds such as sparrow or swallow. As such the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.
Other ecological constraints	None identified.	N/A	N/A

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Suzanne Gumbley to undertake a Preliminary Roost Assessment (PRA) at Lower Starring Farm, Starring Road Littleborough, Lancashire, OL15 8HN (hereafter referred to as “the site”). The survey was required to inform a planning application for the conversion of the attached barn into living accommodation (hereafter referred to as “the proposed development”). A plan showing the proposed development will be provided in Appendix 1 when available.

The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging or commuting. This has been undertaken with due consideration to the “Bat Surveys for Professional Ecologists —Good Practice Guidelines” publication (Collins, 2016). No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author’s knowledge, by any other consultancy.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference SD 92421 16557 and has an area of approximately 0.1ha comprising of the existing dwelling and barn with surrounding access and parking areas along with some amenity grassland. It is surrounded by residential dwellings to the east and south and agricultural fields to the north. The wider landscape comprises of a mix of residential and commercial buildings with agricultural fields to the north and scattered reservoirs. A site location plan is provided in Appendix 2.

1.3 Scope of the Report

This report provides a description of all features suitable for roosting, foraging and commuting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation. To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken, including an inspection of built structures, to determine the presence or the suitability of any features which bats could use for roosting and to assess the suitability of the site’s bat foraging and commuting habitat.
- An outline of potential impacts on any confirmed or unidentified roosts has been provided, based on the proposed development.
- Recommendations for further surveys and mitigation have been made, along with advice on the requirements for a European Protected Species Licence (EPSL) application if appropriate.
- Opportunities for the enhancement of the site for roosting, foraging and commuting bats have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a 2km radius review of statutory designated sites with bat qualifying interests and granted EPSL records for bats held on magic.gov.uk database. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

2.2 Field Survey

The survey was undertaken by Elen Griffin BSc (Hons), MRSB, Ecological Consultant (Accredited Agent on Natural England Level 2 Bat Licence Number: 2016-22843-CLS-CLS) on 7th March 2023. The PRA focussed on one built structures which will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging and commuting habitat.

For any surveyed buildings:

A non-intrusive visual appraisal was undertaken from the ground, using binoculars to inspect the external features of the building for features which bats could use for roosting, including access or egress points and for signs of bat use including droppings, scratch marks, insect remains and urine smear marks. An internal inspection of the building was also made, including the living areas and any accessible roof spaces, using a torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space. An endoscope was used to complete a close-up inspection of any accessible features, where appropriate.

2.3 Breeding Birds and Other Incidental Observations

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for barn owls.

2.4 Suitability Assessment

Built structures were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats

Classification	Feature of building and its context
Moderate to high	Buildings or structures with features of particular significance for larger numbers of roosting bats e.g. mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g. river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data). Buildings with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.

Low	A small number of possible roost sites or features, used sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators. Habitat suitable for foraging in close proximity, but isolated in the landscape. Or an isolated site not connected by prominent linear features. Few features suitable for roosting, minor foraging or commuting.
Negligible	Unsuitable for use by bats.

2.5 Limitations

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site. This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study. Bats are highly mobile creatures that switch roosts regularly and therefore the usage of a site by bats can change over a short period of time.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

No proposed development plans were available at the time of writing this report and therefore a detailed impact assessment could not be made. This report should be updated once the plans are available.

These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

3.0 Results and Evaluation

3.1 Designated Sites

No statutory designated sites with bat qualifying interests were identified within 2km of the site.

3.2 Historical Records

A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. EPSL records for bats are summarised in Table 2.

Table 2: Granted EPSLs for bats within 2km of the site

EPSL reference	Bat species affected	Impacts allowed by licence
EPSM2009-525	Common pipistrelle and soprano pipistrelle	Destruction of a resting place
2015-8632-EPS-MIT	Common pipistrelle and soprano pipistrelle	Destruction of a resting place
2016-19740-EPS-MIT-1 2016-19740-EPS-MIT-2	Common pipistrelle	Destruction of a resting place Destruction of a resting place

3.3 Field Survey Results

The weather conditions recorded at the time of the survey are shown in Table 3. The results of the field survey are detailed in Table 4 and illustrated in Appendix 3.

Table 3: Weather conditions during the survey

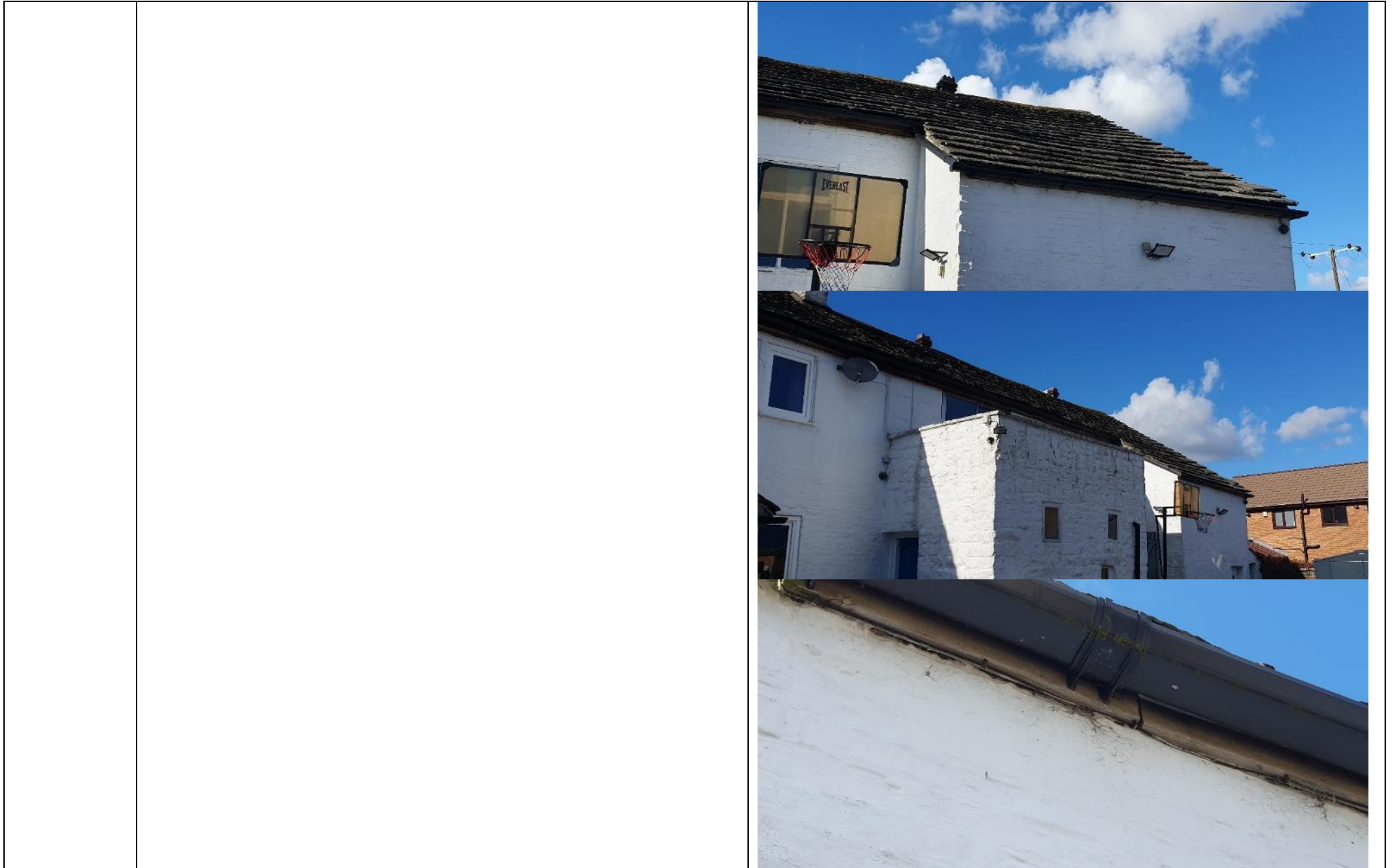
Date:	07/03/2023
Temperature	3°C
Humidity	49%
Cloud Cover	5%
Wind	5mph
Rain	None

Table 4: PRA Results

Feature	Description	Photographs
Bat foraging and commuting habitat	The site is located on the edge of an existing residential area. A number of scattered woodland including Barkers wood to the south of the site are present within the local area which are likely to provide suitable foraging and commuting habitat for bats. Featherstall brook is present to the north of the site is likely to provide suitable foraging habitat for bats due to increased insect activity. A number of reservoirs are also present within the local area which will provide suitable foraging habitat for bats.	

B1 - overview	B1 is a brick built detached barn and farmhouse complex with a pitched and gabled roof clad in stone roof tiles with a flat roof extension along the eastern elevation. The roof tiles are, for the most part in good condition with no areas of damage or missing tiles present. However due to the natural nature of the tiles a number of lifted tiles were noted across both the eastern and western elevation. Such lifts could provide suitable roost sites for crevice dwelling species such as pipistrelle bats. The ridge tiles look, for the most part, to be in good condition and well fitted. Some small areas of missing mortar were noted however upon close inspection with high powered binoculars the surrounding areas of mortar are still in place meaning the identified gaps could not lead to suitable roost sites Two chimneys are present across the roof of B1. The brickwork of both chimneys looks to be in excellent condition with no gaps or cracks in which bats could roost and the surrounding lead flashing looks to be in equally good condition with no lifts or areas of damage which could provide suitable bat roosting features and locations. A number of vets are present across the barn section of B1 which are no longer in use. The gable ends are well sealed with no areas of missing mortar or gaps in which bats could roost. An old ventilation gap is present along the northern gable end. This however has been sealed up and as such no longer provides suitable access for either bats or birds into B1. The brickwork has been white washed and looks to be in good condition with no areas of missing mortar or cracked brick in which bats could roost. The window and door frames are constructed from a mix of wood and UPVC and all look to be in good condition and well fitted with no gaps or cracks in which bats could roost or gain access into B1. The soffits are open with the surrounding guttering having recently been replaced and the wall tops look to be well sealed with no gaps suitable for roosting bats. Some wooden fascia's are present around B1 which look to be in good condition with no areas of damage or gaps which bats could utilise.
B1 – southern elevation	Southern gable end in good condition with no gaps in the brickwork or below the roof tiles along the wall tops. 

		
B1 – eastern elevation	Eastern elevation with brickwork in good condition. A number of slightly lifted roof tiles are present across this elevation which could provide suitable roost sites for crevice dwelling species. The wall tops along this elevation are well sealed with no gaps in which bats could roost or access B1. The flat roof extension along this elevation is in good condition with no suitable bat roosting features.	



B1 – northern elevation	Northern gable end in good condition with no gaps in the mortar below the roof tiles. The ventilation gap present along this elevation has been sealed up and as such it does not provide any suitable access point for protected species such as bats or birds.	
B1 – western elevation	A number of lifted roof tiles are present across the western elevation which could provide suitable roost sites for crevice dwelling bats. The wall tops along this elevation are well sealed with no gaps in which bats could roost or access B1.	

		 
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B1 – interior

There is one loft section present in the barn section of B1, the remainder of this section is open to the roof. The roof structure is built from traditional timber beams including the ridge beam. The roof has been lined with bitumen felt which looks to be in excellent condition with no gaps or areas of sagging.

Light enters the barn section of B1 due to the presence of windows along the northern and eastern elevation. Which can reduce the areas suitability for bats.

Cobwebs are present along all beams and are particularly dense around the beam joints. Such levels of cobwebs can indicate lack of recent use and activity by bats such as brown long-eared bats.

No evidence of bats was noted in the barn section of B1.

A shallow loft space is present within the residential section of B1. Like the barn section the roof structure is built from timber beams and lined with bitumen felt liner which appear to be in excellent condition with no areas of damage or sagging.

The residential loft space is used for storage and as such the area is cluttered which can significantly reduce the areas suitability for bats due to a lack of flying space. Stored items were searched for evidence of bats, none was found. The presence of stored items will also result in higher levels of human disturbance further reducing the lofts suitability for bats.

No light enters the residential loft space indicating that it is well sealed with no bat access points as per the external inspection.





B1 – suitability assessment	B1 is considered to have moderate suitability for roosting bats. Slightly lifted roof tiles were noted across the roof of B1 however it was unclear from the initial inspection of these tile lifts led to any further suitable roosting features. Internally no suitable roosting or access sites were noted. All roof linings are in excellent condition and both internal areas are either subject to light intrusion or human disturbance which can reduce suitability for roosting bats. Some suitable foraging and commuting habitat was noted within the local vicinity of the site. No evidence of bats was noted internally or externally during the time of the inspection.	
B1 - breeding birds and other incidental observations	An extremely old birds nest, likely swallow or similar was noted within the barn section of B1 however no fresh dropping were noted. A single barn owl pellet was noted within the barn section of B1. The pellet was identified as being extremely old as it was dusty and crumbled very easily. No other evidence of barn owl including white wash was identified within the barn indicating that the barn is likely to have only been used in an occasional way and is no longer used by barn owl.	 

4.0 Conclusions, Impacts and Recommendations

Taking the desk study and field survey results into account, Table 5 presents an evaluation of the value of the site for bats and also details any other ecological constraints identified such as nesting birds in relation to the proposed development which will comprise of the conversion of the attached barn into living accommodation.

Table 5: Evaluation of the site for bats and any other ecological constraints

Building	Survey Summary	Results	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Roosting bats (B1)	B1 has moderate value for roosting bats. Possible suitable roosting sites for crevice dwelling species were noted across the roof of B1 below slightly raised roof tiles. No suitable roosting sites or access point for void dwelling species such as brown long-eared bats were noted during the survey. No evidence of bats was noted during the survey. Three EPSL's were returned within 2km of the site.	The proposed development will result in the conversion of the barn section of B1. No impacts to the residential section are anticipated as part of the proposed development. It is to the consultants understanding that the roof of B1 and the location of potential crevice dwelling bat roosting sites will not be impacted by the proposed development as it is anticipated that only internal works will be undertaken in addition to the creation of windows in the walls are anticipated. Therefore it is considered that there will be no impact to bats as a part of the proposed development.	As stipulated in professional survey guidance, moderate value buildings typically require two bat emergence or re-entry survey to be completed during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely-absence of a bat roost. However, in this case as only internal works are anticipated with no roofing works to be undertaken it is considered that the works could be undertaken under a Bat Mitigation Plan which would include methods such as timings of works to reduced any potential impact to bats to an acceptably low level. Acceptance of this approach would be at the discretion of the Local Planning Authority, given that this would be a deviation from standard survey guidance. If any works are to be undertaken that will impact the roof including the existing roof lining then further surveys will be required as per the aforementioned professional survey guidance,	The installation of 2 bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be installed on the new building. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat boxes will be a specification suitable for crevice dwelling bats such as Beaumaris Bat Box (buildings), Vivara Pro Woodstone Bat Box (buildings) or a similar alternative brand. or a similar alternative brand.	

Foraging and commuting bats	Local woodland areas and watercourses could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. The proposed development may include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.	If any additional lighting is proposed a low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimnable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.	None.
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Nesting birds (B1)	An old birds nest was noted within B1 and an old barn owl pellet was noted within the building. Both the nest and the pellet were assessed as being old and disused with no fresh evidence present. However the eaves of the building provide suitable nesting areas of birds such as sparrow or swallows.	As there was no fresh/current evidence of barn owl present within B1. Therefore there is considered to be no impact to barn owl as the site was once previously utilised as an occasional feeding roost and therefore does not warrant protection. No fresh evidence of nesting birds was noted within B1. However the eaves of the building provide suitable nesting areas of birds such as sparrow or swallow. As such the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.	The installation of a minimum of two bird boxes on the retained buildings will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box (buildings) Schwegler 1SP Sparrow Terrace (buildings) Schwegler 1B Nest Boxes (trees) Schwegler 2H Robin Boxes (trees) Woodstone Nest Box (buildings or trees) Or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift and sparrow boxes should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction. In addition it is recommended that an owl box is installed on the retained building e.g. Eco Barn Owl Nest box Or a similar alternative brand. Boxes should be installed close to the eaves of the building and face towards open fields to provide suitable flight paths and foraging sites.
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Other ecological constraints	None identified.	N/A	N/A	N/A
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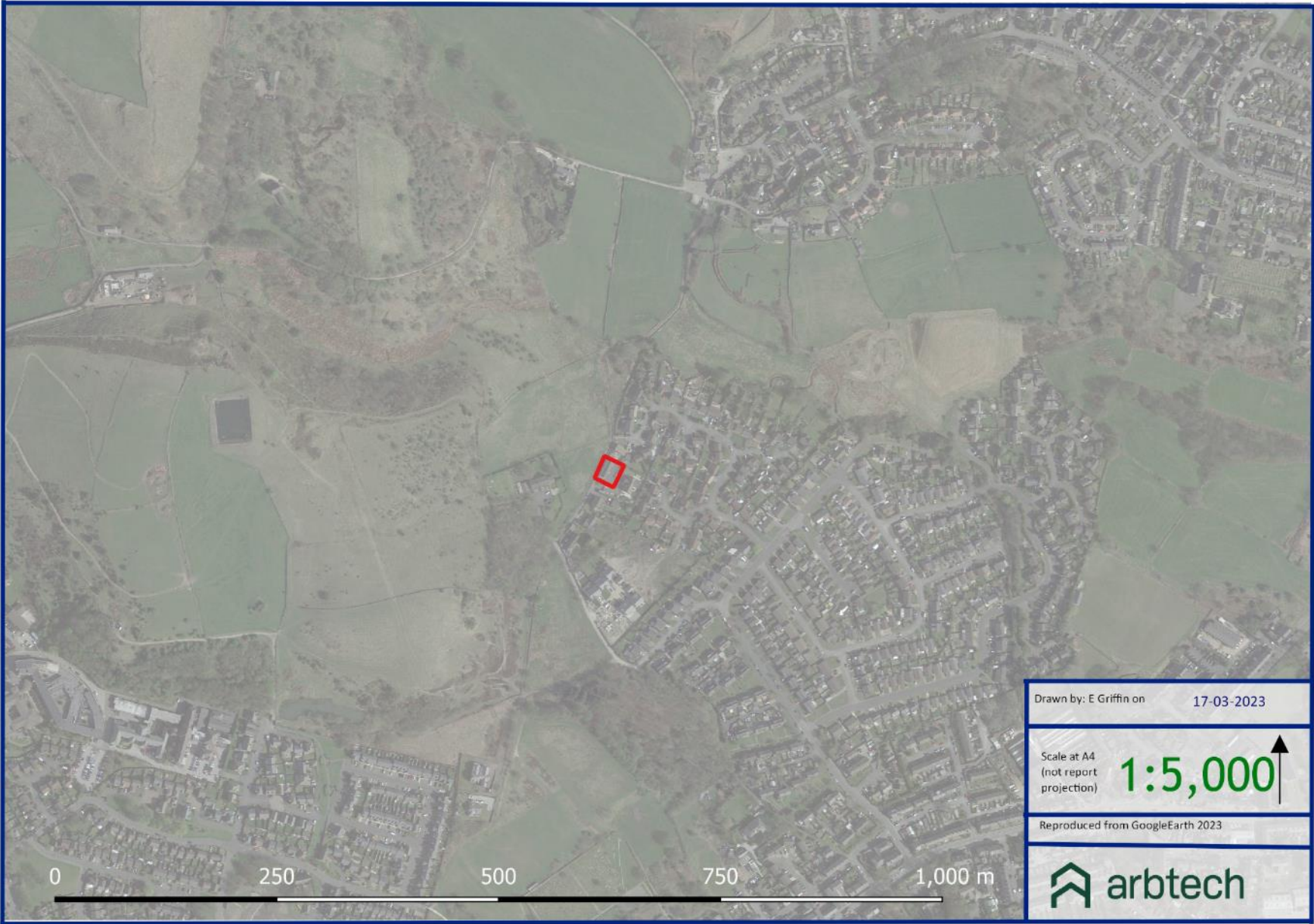
5.0 Bibliography

- Collins, J. (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.
- Garland, L. & Markham, S. (2008) Is Important Bat Foraging and Commuting Habitat Legally Protected? <http://biodiversitybydesign.co.uk/cmsAdmin/uploads/protection-for-bat-habitat-sep-2007.pdf>
- Google Earth. Accessed on 14/03/2023
- Institution of Lighting Professionals (2018). Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the Built Environment Series Publication: http://www.bats.org.uk/news.php/406/new_guidance_on_bats_and_lighting.
- Magic Database. <http://www.magic.gov.uk/MagicMap.aspx> Accessed on 14/03/2023
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
- Natural England Designated Sites View. <https://designatedsites.naturalengland.org.uk/SiteSearch.aspx> Accessed on 14/03/2023
- Wray, S., Wells, D., Long, E., Mitchell-Jones, T (2010) Valuing Bats in Ecological Impact Assessment. IEEM In-Practice. Number 70 (December 2010). Pp. 23-25.

Appendix 1: Proposed Development Plan

Not available at the time of writing this report.

Appendix 2: Site Location Plan



Appendix 3a: PRA Plan



Appendix 4: Legislation and Planning Policy Related to Bats

LEGAL PROTECTION

All species of bat are fully protected under *The Conservation of Habitats and Species Regulations 2017* (as amended) through their inclusion on Schedule 2.

Regulation 43: Protection of certain wild animals - offences

(1) A person is guilty of an offence if they:

- (a) Deliberately captures, injures or kills any wild animal of a European protected species,
- (b) Deliberately disturbs wild animals of any such species,
- (c) Deliberately takes or destroys the eggs of such an animal, or
- (d) Damages or destroys a breeding site or resting place of such an animal,

(2) For the purposes of paragraph (1) (b), disturbance of animals includes in particular any disturbance which is likely—

- (a) 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
- (b) To affect significantly the local distribution or abundance of the species to which they belong.

Bats are also protected under the *Wildlife and Countryside Act 1981* (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

NATIONAL PLANNING POLICY

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by Natural England will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored. The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

There are 17 species of bat breeding in England and Natural England issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

Licences are issued for specific purposes stated in the Regulations, if the following three tests are met:

- The purpose of the work meets one of those listed in the Habitats Regulations (see below);
- That there is no satisfactory alternative;
- That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range

The Habitats Regulations permits licences to be issued for a specific set of purposes including:

1. include preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;
2. scientific and educational purposes;
3. ringing or marking; and,

4. conserving wild animals.

Development works fall under the first purpose and Natural England issues bat mitigation licences for developments.

EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;
- Policy 2; provides greater flexibility in the location of compensatory habitat;
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,
- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.