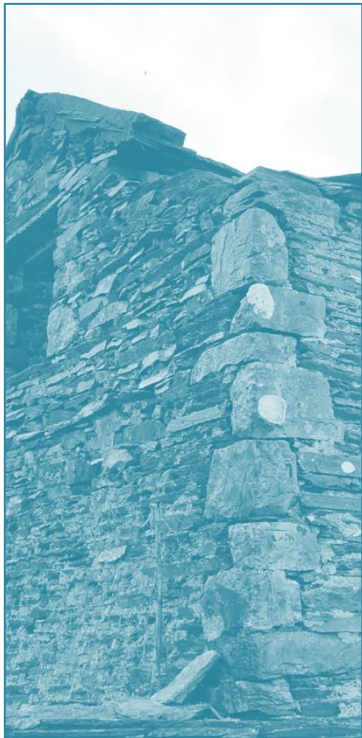


Listers Farm, Clitheroe

Bat Activity Survey



Document Information

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Quality Control

Version	Status	Originated/Revised	Checked	Approved	Date
1.0	Final	A. Gould	N. Wilkinson	N. Wilkinson	11/06/2021

Declaration of Compliance

This Bat Scoping Assessment has been undertaken in accordance with the Bat Conservation Trust *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (3rd Edition, 2016). The information has been prepared and provided in compliance with the CIEEM's Code of Professional Conduct (2013), British Standard 42020:2013: *Biodiversity: Code of practice for planning and development*, and CIEEM *Guidelines for Ecological Report Writing* (2017).

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1. INTRODUCTION

1.1. TERMS OF REFERENCE

PBA Applied Ecology Ltd. was commissioned by Mrs. S. Wright to undertake bat activity surveys at Listers Farm, Newsholme, Clitheroe to determine the likely use by, and importance to, bat species. These bat activity surveys follow on from a bat scoping survey conducted by PBA Applied Ecology in October 2020 (Report Ref: PC20043/Bat/v1) and are a planning condition for the proposed house extension.

The approach adopted follows current Bat Conservation Trust Guidelines (BCT, 2016) for bat activity surveys. PBA conducted two dusk emergence activity surveys. The surveys were required to provide information on the presence or likely presence of bats in association with a planning application to extend the rear of the main farmhouse, and remodel internally. This will involve the demolition of some outbuildings.

Of the UK's 17 resident bat species, the majority will utilise the built environment at some point during their lifecycle and some species are particularly linked to buildings. Appendix D provides a diagram showing possible roost sites within buildings. Some species roost in building crevices, such as common and soprano pipistrelle (*Pipistrellus pipistrellus* and *P. pygmaeus*); others prefer large cavities, such as brown long-eared (*Plecotus auritus*) and Natterer's bats (*Myotis nattereri*). Bats are most likely to be present and seen for the duration of the summer months, but may be present within buildings throughout the year.

All bat species are protected under Section 39 of Conservation of Habitats and Species Regulations 2010, the 1981 Wildlife and Countryside Act (as amended) and the 2000 Countryside and Rights of Way Act. Consequently, it is a criminal offence to: capture or kill a bat; disturb a bat whilst in a place of shelter or rest; or damage or destroy a bat's breeding site or resting place. The breeding sites and resting places of bats are usually known as 'roosts' and resting places also include, for example, feeding perches where a bat consumes its prey. Bat roosts are protected even when bats are not present. Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used.

Unless stated otherwise, the information provided within this report is valid for a maximum period of 24 months from the date of survey. If works at the site have not progressed by this time an updated site visit may be required in order to determine any changes in use of the site by bats.



Figure 1: Site location (Bing Maps, 2021)

1.2. SITE DESCRIPTION AND CONTEXT

The survey site is located at Listers Farm, Newsholme, Clitheroe (SD 84010 51536, Figure 1). The site comprises a stone-built farmhouse and associated outbuildings.

The wider landscape is dominated by improved and semi-improved grazed grasslands with scattered trees and areas of woodland. The River Ribble, and its associated riparian woodland, flows immediately west of the site (Figure 2). A tree lined railway line is also located immediately west of the site.

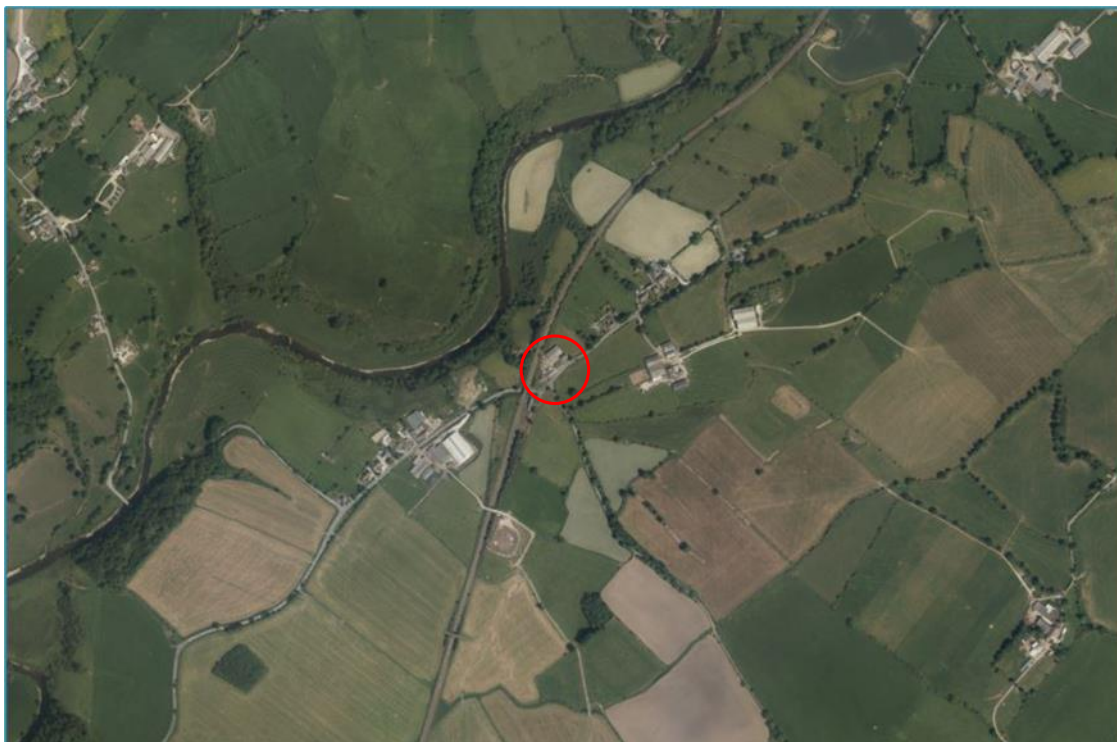


Figure 2: Site context (Google Maps, 2021)

1.3. DESCRIPTION OF WORKS

The proposed works are expected to include the construction of an extension on the rear of the farmhouse, with internal remodelling. This will involve the demolition of the rear part of the outbuilding. Plans for the proposed works can be found in Appendix B.

2. APPROACH

2.1. BUILDING INSPECTION

The approach adopted follows current Bat Conservation Trust Guidelines: Chapter 4 – Preliminary Ecological Appraisal for Bats (BCT, 2016). The site survey consisted of an internal and external inspection of the building to locate potential bat roosts; including voids, gaps and cracks in the roof, walls, and ridge tiles, which may provide access to the building. In addition, an internal and external search was conducted to look for evidence of bats such as droppings, insect remains, grease or scratch marks on sills, doors or around eaves, roof verges etc. The surveyor present for the scoping survey was Alex Gould MA Cantab ACIEEM (Natural England Class Licence 2019-43598-CLS-CLS).

2.2. ACTIVITY SURVEY

2 surveyors were in attendance on each occasion, and located where signs of bats were present, or where there was potential for bats to be present. Each surveyor was equipped with a heterodyne bat detector (either a Batbox Duet or Magenta Bat5). The time of emergence or activity, the species of bat (based on kHz) and the location of emergence were recorded. An Echo Meter Touch and/or Anabat

Swift was/were also used during the activity surveys in a static position. The dusk surveys began 30 minutes before sunset and ended when bat activity from the building had subsided or roughly 1 hour 30 minutes after sunset as conditions were too dark to observe emergence.

2.3. PERSONNEL AND SCHEDULE

Table 1: *Scoping assessment and activity survey details*

Date	Start	Finish	Type of Survey	Personnel	Conditions	Equipment
22/10/2020	10:30	12:00	Building inspection	Neil Wilkinson (2016-22700-CLS-CLS) Alex Gould (2019-43598-CLS-CLS)	Dry, and overcast	Maglite torch, digital camera, ladder
10/05/2021	20:30	22:20	Dusk emergence survey	Alex Gould (2019-43598-CLS-CLS), Sam Laycock	Wind 3-4, occasional drizzle & rain, 10°C	Maglite torch, Heterodyne detectors x2, static Echo Meter Touch
02/06/2021	21:00	22:55	Dusk emergence survey	Alex Gould (2019-43598-CLS-CLS), George Renwick	No rain. Wind 2, 15°C	Maglite torch, Heterodyne detectors x2, static Echo Meter Touch

2.4. QUALITY STANDARDS

The survey and reporting process is consistent with: The Bat Conservation Trust Good Practice Guidelines for Bat Surveys, Third Edition (BCT, 2016); Natural England Standing Advice: Bats (NE, 2013); English Nature (now Natural England) Bat Mitigation Guidelines (Mitchell-Jones, 2004); and, The Chartered Institute of Ecology and Environmental Management (CIEEM) Professional Competency Framework: Competencies for Species Surveys: Bats (CIEEM, 2013).

3. SURVEY RESULTS

3.1. BUILDING INSPECTION

Haybarn

The haybarn is a single-storey stone-built building with a high slate roof. The northeast aspect of the building is the only section of the barn which will be affected by the works. A section of the stone wall will be demolished, and a large sliding door will be inserted in its place. This will go below an existing sealed window. No evidence of bats was found near this wall, or within the barn, and no gaps or cracks were recorded within the stonework where the door will be inserted.

Outbuilding

The section of the outbuilding which will be impacted by the works is built from a combination of stone, bricks, and concrete breeze blocks with a corrugate metal roof. The majority of the outbuilding is currently used as a covered area for parking cars and is open on the northwest aspect. There are fascia boards on the southwest and northeast aspects of the building. There are wide, shallow gaps behind these boards which offer no potential for roosting parts. Internally there are no features which offer roosting potential, and no evidence of bats was recorded.

Farmhouse

The farmhouse is a two-storey rendered building with a slate roof. There is a two-storey extension with a gable end from the northwest aspect of the farmhouse with additional single storey extensions either side of this.

Three roof voids were inspected from internal roof hatches (Figure 3). Roof void 1 was above the single storey extension. Internally the roof slates are lined by roof felts and Kingspan insulation panels. Mouse droppings were found within this roof void, however there was no evidence of current or recently roosting bats. Roof void 2 was above the western portion of the main farmhouse. Internally the roof is lined by a breathable membrane. A small number of aged bat droppings were found below a section of membrane which had come away from the roof tiles. There was no other evidence of currently or recently roosting bats within the roof void. Roof void three was above the western portion of the main farmhouse. The roof tiles were again lined by a breathable membrane. No evidence of roosting bats was found within this roof void.

Externally the roof is generally in good condition with no missing or significantly raised tiles. The main features with the potential to be used by roosting bats are associated with the two-storey extension off the northwest aspect (Figure 3). There are multiple gaps between and under the tiles over hanging the edge of the gable and along the sides of the extension. These have the potential to provide roosting opportunities for crevice roosting bat species. There are also lead lined roof valleys where the extension abuts to the main farmhouse. Small sections of the lead flashing are raised and there are gaps under the overhanging tiles. This also offers potential for crevice dwelling bat species and is likely to be linked to the bat droppings found within roof void 2.

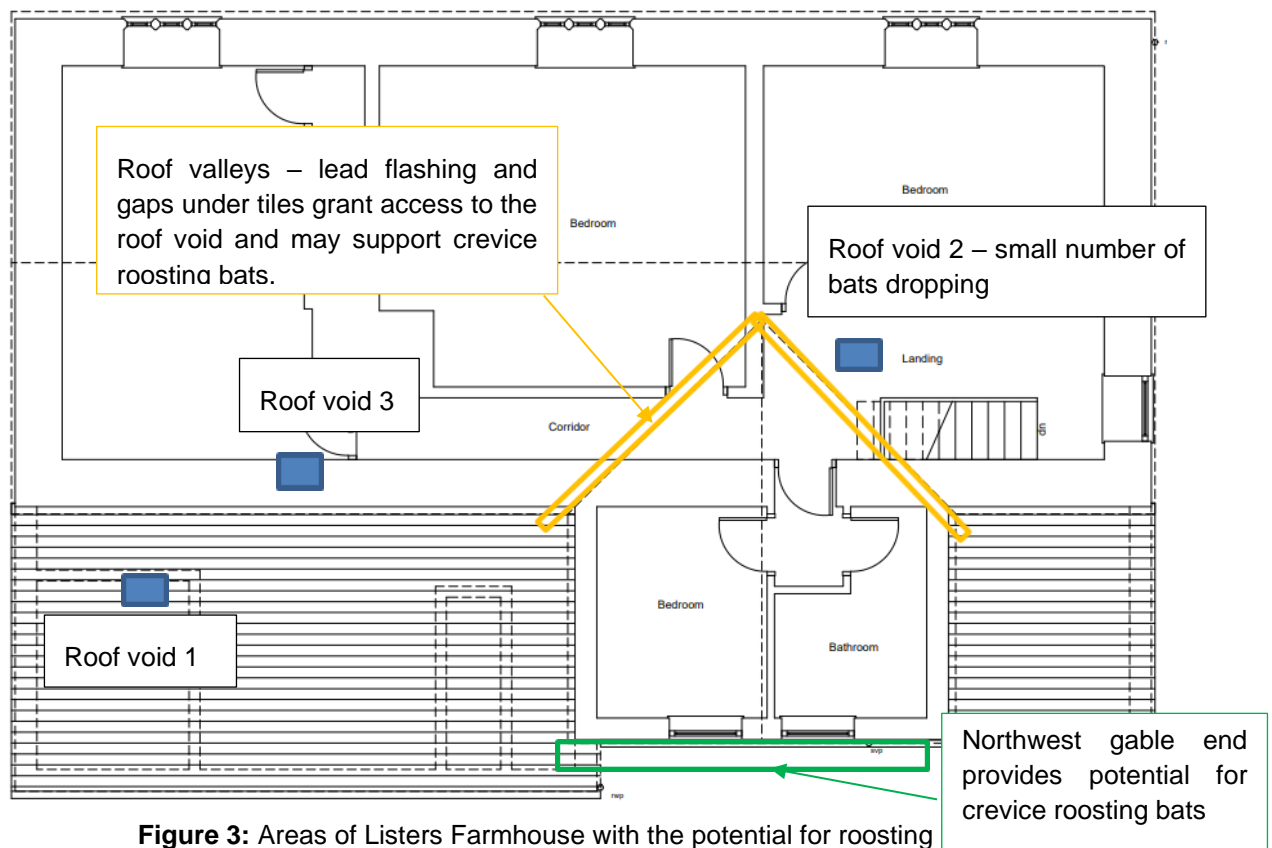


Figure 3: Areas of Lister's Farmhouse with the potential for roosting

3.2. DUSK EMERGENCE SURVEY 1**Table 2.** *Dusk emergence survey 1 conditions*

Date	10/05/21
Temperature	10°C
Rain	Occasional drizzle & showers before survey
Sunset	20:54

Table 3. *Dusk emergence survey 1 records*

Record	Time	Surveyor	Species	No. of Bats	Activity	Place of Activity (See Appendix 2)
1	21:13	AG, SL	Common pipistrelle	1	Commuting	Along treeline & railway
2	21:16	AG	Soprano pipistrelle	1	Commuting	Along treeline & railway
3	21:20	AG, SL	Soprano Pipistrelle	1	Foraging	Stables & farm buildings
4	21:28	AG, SL	Common pipistrelle	1	Commuting	Along treeline & railway
5	21:30	AG, SL	Common Pipistrelle	1	Foraging	House & garden
6	21:39	AG	Soprano Pipistrelle	1	Commuting	House, garden, & railway.
7	21:40	AG	Soprano Pipistrelle	1	Foraging	Stables & farm buildings

3.3. DUSK EMERGENCE SURVEY 2/DAWN RETURN SURVEY**Table 4.** *Dusk emergence survey 2 conditions*

Date	02/06/2021
Temperature	15°C
Rain	None
Sunset	21:31

Table 5. *Dusk emergence survey 2 records*

Record	Time	Surveyor	Species	No. of Bats	Activity	Place of Activity (See Appendix 2)
1	22:01	GR	Soprano pipistrelle	1	Foraging	Along railway trees
2	22:02	GR	Soprano pipistrelle	1	Foraging	Along railway trees
3	22:05	AG & GR	Soprano pipistrelle	1	Commuting	Along railway trees
4	22:09	GR	Soprano pipistrelle	1	Foraging	Along railway trees

5	22:11	AG & GR	Soprano pipistrelle	2	Foraging	Along railway trees and around the stables
6	22:13	GR	Common pipistrelle	1	Foraging	Along railway trees
7	22:16	GR	Soprano pipistrelle	1	Foraging	Along railway trees

3.4. HABITAT AND CONNECTIVITY

The surrounding habitat is determined to be of moderate suitability for a range of bat species. Additional roosting opportunities are associated with other nearby agricultural and residential properties, and mature trees. Foraging opportunities are associated with areas of woodland, the nearby River Ribble and its associated riparian woodland. This linear feature also provides connectivity to the wider landscape, and other suitable areas of habitat.

4. INTERPRETATION OF RESULTS

4.1. BUILDING INSPECTION

The works to the haybarn have a negligible potential to impact roosting bats. It is therefore recommended that no further surveys or Bat Mitigation Licences are required before works associated with this building proceed.

The outbuilding has a negligible potential to support roosting bats. It is therefore recommended that no further surveys or Bat Mitigation Licences are required before works affecting this outbuilding are required.

The main farmhouse has a moderate potential to support roosting bats. The main areas with potential for bats are associated with the two-storey extension off the northwest aspect. Aged bat droppings found within roof void 2 indicate that a small number of bats have previously roosted in the building. It is considered possible that this has previously been used as an occasional/transitional bat roost used by a single/small number of crevice roosting bats (likely pipistrelles) most likely gaining access under roof tiles around the roof valleys of the extension.

4.2. ACTIVITY SURVEY

Two species of bats were recorded across the two dusk emergence activity surveys, common pipistrelles *Pipistrellus pipistrellus* and soprano pipistrelles *Pipistrellus pygmaeus*. Activity was predominately focused around the tree/scrub lined railway site located immediately west of the surveyed building. Both common and soprano pipistrelles were recorded commuting along this linear feature, generally in a northwards direction towards the foraging grounds associated with the River Ribble and its riparian woodland (Appendix B).

A small number of common and soprano pipistrelles were also recorded foraging around the garden immediately north of the farmhouse and around the stables and other farm buildings (Appendix B).

No bats were recorded emerging from roosts during wither survey. It is therefore considered likely that the small number of well-aged bat droppings found within the roof void during the initial scoping survey were from a single bat roosting within the building on a single, or very small number of occasions. There is no evidence that this occasional/transitional roost site is currently in use.

5. ADVICE AND RECOMMENDATIONS

The works to the haybarn have a negligible potential to impact roosting bats. It is therefore recommended that no further surveys or Bat Mitigation Licences are required before works associated with this building proceed.

The outbuilding has a negligible potential to support roosting bats. It is therefore recommended that no further surveys or Bat Mitigation Licences are required before works affecting this outbuilding are required.

No bats were recorded emerging from the farmhouse during either dusk emergence activity survey, and there is no evidence of current, or recently used bat roosts. It is therefore recommended that the proposed works can proceed without the need for an EPS Bat Mitigation Licence.

A moderate amount of commuting and foraging activity was recorded along the tree lined railway immediately north of the farmhouse. In order to ensure that these foraging and commuting bats are not disturbed artificial lighting must not directly illuminate this area.

As a moderate level of bat activity was recorded in proximity of the farmhouse, and there is evidence of historic occasional/transitional bat roosts it is recommended that a bat box is installed on the north or west aspect of the farmhouse. The bat box should be installed at the apex of the building, and must not be illuminated by artificial light. A 1FF Schwegler Bat Box (or similar) is recommended.

As a precaution all works must comply fully with the points below:

- All contractors must be made aware of the potential presence of bats prior to any works. Bats are highly mobile and opportunistic; therefore, may move into buildings following surveys or during construction works.
- **Any external lighting must be down lighting should be motion sensor activated low level lighting at a maximum of 2000 lumens (150W), which ideally should be fitted with a timer to control the amount of 'lit time' (Institute of Lighting Engineers, 2007). Lighting must avoid illuminating the treeline to the north.**
- Contractors must be provided with contact details of the appointed PBA ecologist, who can provide advice in relation to bats at any time during work. In the event that bats are found during unsupervised work, all work must cease and the appointed ecologist must be contacted for further advice.
- If it is necessary to remove a bat to avoid it being harmed, gloves should be worn. It should be carefully caught in a cardboard box and kept in the dark in a quiet place. In this eventuality the appointed ecologist would need to be contacted for further advice.

6. REFERENCES

- Bat Conservation Trust (BCT). 2016. Bat Surveys for Professional Ecologists: Good Practice Guidelines. Bat Conservation Trust, London.
- BSI. 2013. Biodiversity - Code of practice for planning and development (BS 42020:2013). British Standards Institution.
- CIEEM. 2013a. Code of Professional Conduct. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM. 2013b. Technical Guidance Series. Competencies for Species Survey: Bats. Winchester.
- CIEEM. 2017. Guidelines on Ecological Report Writing. Chartered Institute of Ecological and Environmental Management, Winchester.
- Mitchell-Jones, A. J. 2004. Bat Mitigation Guidelines. English Nature, Peterborough.
- Natural England. 2013. Standing Advice Species Sheet: Bats.
- PBA Applied Ecology.PC20043/Bat/v1 Listers Farm, Cliteroe - Bat Scoping Assessment

APPENDICES

Appendix A – Policy and Legislation

Statutory measures are in place to protect habitats and wildlife; these measures range from the global to the local, and variously give protection to whole ecosystems or single species. Included is a brief summary of legislation and planning policy relating to bat species. The original texts of the relevant legislation should be consulted for further details.

All bat species are protected under Section 39 of Conservation of Habitats and Species Regulations 2010, the 1981 Wildlife and Countryside Act (as amended) and the 2000 Countryside and Rights of Way Act.

Annex IV of the *Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora* (EC Habitats Directive) lists animal and plant species of Community interest in need of strict protection; this includes all bat species.

In the UK, the EC Habitats Directive has been transposed into national laws by means of Conservation of Habitats and Species Regulations 2010. These are commonly and collectively known as the 'Habitats Regulations' and they give bats, their breeding sites and resting places a high level of protection.

In summary, it is a **criminal offence** to:

- ⇒ capture or kill a bat;
- ⇒ disturb a bat whilst in a place of shelter or rest; or
- ⇒ damage or destroy a bat's breeding site or resting place.

The breeding sites and resting places of bats are usually known as 'roosts' and resting places also include, for example, feeding perches where a bat consumes its prey. **Bat roosts are protected even when bats are not present.**

Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used.

Article 12 of the Habitats Directive prohibits certain activities in relation to European Protected Species (EPS). Article 16 of the Habitats Directive contains derogations from Article 12. Article 16 is transposed into English law by regulation 53 of the Habitats Regulations which allows licences to be issued under certain circumstances. The effect of these licences is to make an activity that would otherwise be an offence, lawful if carried out in accordance with the provisions of the licence.

An EPS licence may be required for any activity which: (i) is likely to result in the deliberate capture, injury or killing of a bat; (ii) will result in the deliberate disturbance of bats; or (iii) will damage or destroy a breeding site or resting place used by bats. Disturbance of bats includes any disturbance that is likely to: (i) impair their ability to survive, breed, reproduce, nurture their young, or to hibernate; or, (ii) affect significantly the local distribution or abundance of the species to which they belong.

A licence can only be granted if the following tests can be met:

- 1) the consented operation must be for 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- 2) there must be 'no satisfactory alternative'; and,
- 3) the action authorised 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their range'.

Local authorities, when exercising their functions must have regard to the requirements of the Habitats Directive. Planning Authorities are competent authorities and are exercising a function in deciding whether or not to grant planning permission.

The judgement in the case of *Morge (FC) (Appellant) v Hampshire County Council* [2011] UKSC 2 considered the application of this duty. In that case the Supreme Court came to the conclusion that, if the Planning Authority concludes that the carrying out of the development for which permission has been applied for even if it were to be conditioned, would be likely to offend Article 12(1), by say causing the disturbance of a species with which that Article is concerned, then it must consider the likelihood of a licence being granted.

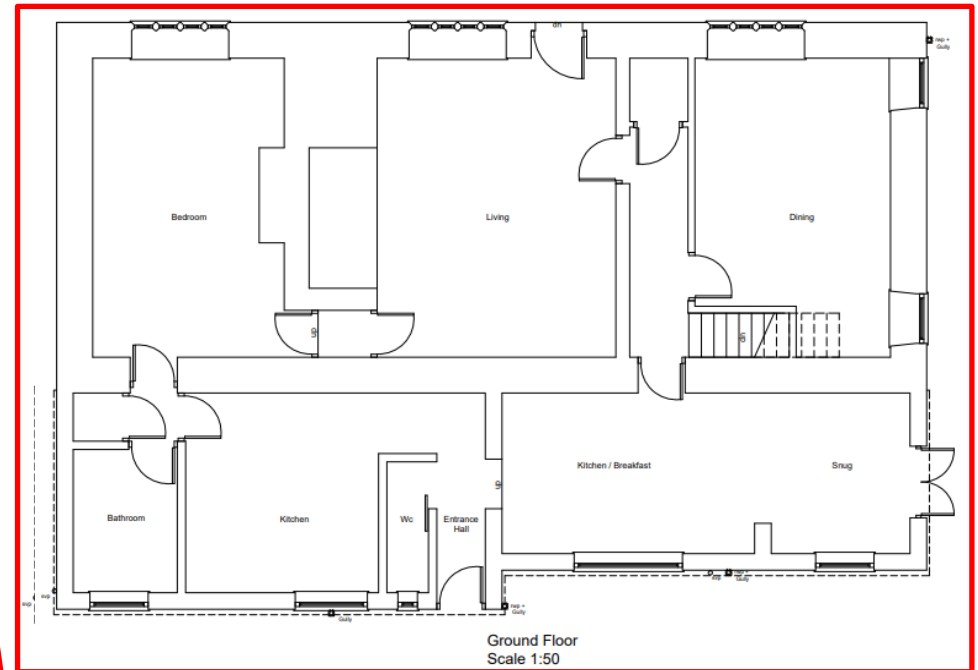
The licensing authority is Natural England. When considering the likelihood of a licence being granted it may be helpful to view guidance on how Natural England applies the tests listed above when considering planning applications which affect European Protected Species <http://publications.naturalengland.org.uk/publication/113030?category=12002> .

Appendix B – Site Plan and Locations of Bat Activity



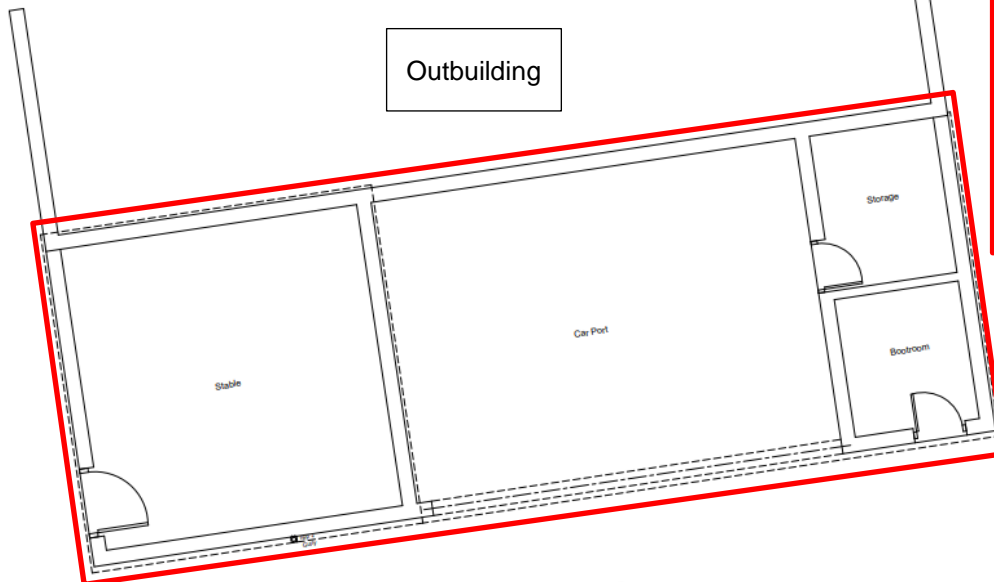
Site Plan as existing

Farmhouse



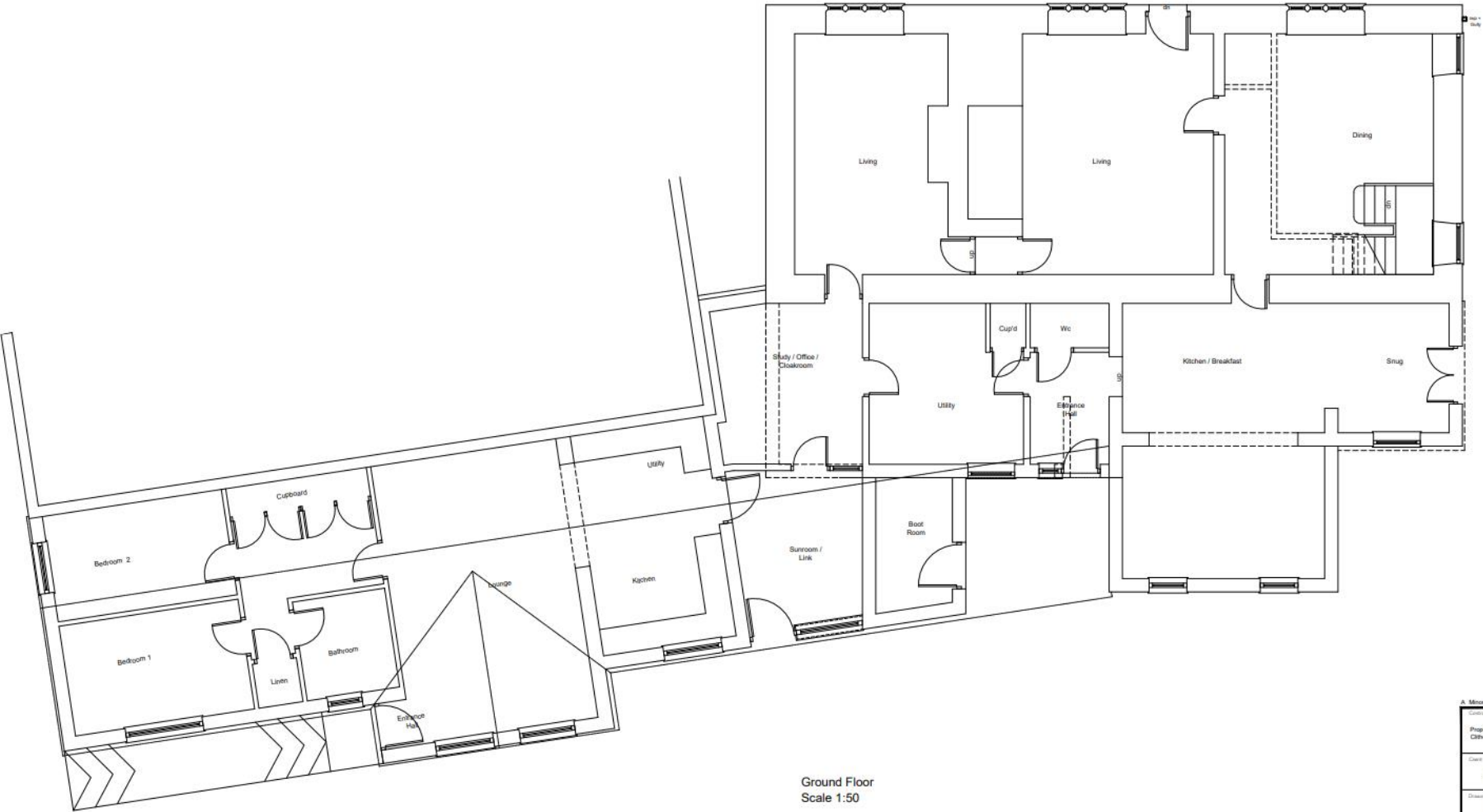
Ground Floor
Scale 1:50

Outbuilding



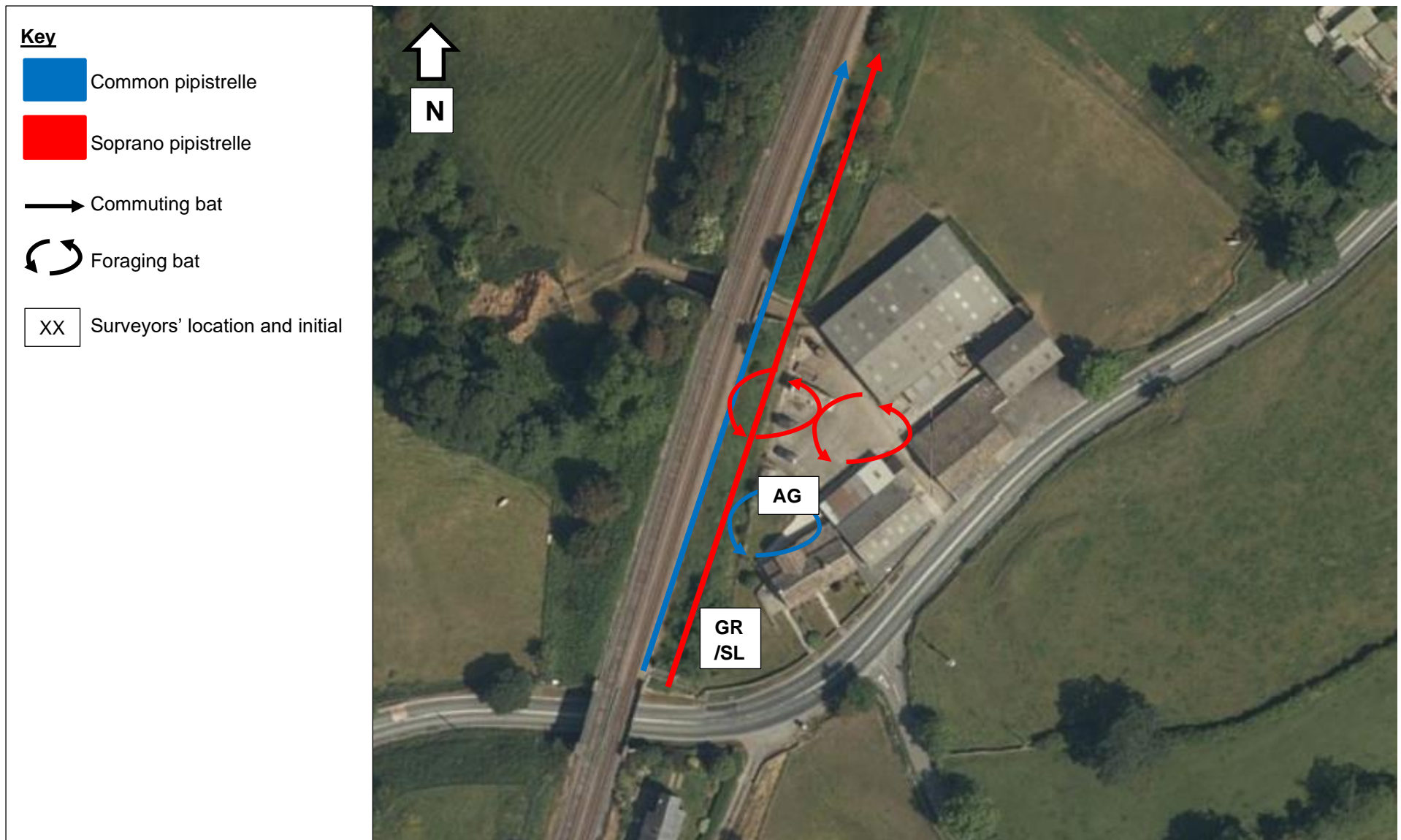
Ground Floor
Scale 1:50

Site plan as proposed.





A: Minor Amendment		16-10-2020	
Proposed: Alterations At Listers Farm Newsholme Cheshire, S80 4JF		mpas	
Client Mrs S Wright		Marten Peacock Architectural Services Limited	
Drawing Ground Floor Plans As Proposed		100 Reading Room 100 Reading Room North Yorkshire YO24 0PE 019 4381 6082 Tel: 01943 224 201	
Drawn MGP	Scale 1:50 / 1:100 @A1	Date 08-10-2020	2020-41
205		A	

Location of bat activity



Appendix C – Photographs & Target Notes

#	Photograph	Notes
1		View from surveyor 1's location
2		View from surveyor 2's location

Appendix D - Possible roosting sites and access points for bats in buildings

