Bat, Breeding Bird and Barn Owl Scoping Survey

Twelve, Hackness

June 2018

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Sites:

Twelve,
Broxa Lane
Hackness Village
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Dates:

Scoping survey: 5th June 2018

Client:

Mags Waughman

Planning Authority:

North York Moors National Park Authority

Our ref:

2018-516

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1 Summary

A bat scoping survey has been undertaken on a small extension on a property in Hackness. A small extension to the north is proposed, and the re-roofing of the existing extension. Planning permission is currently being sought for this work.

Following a detailed building inspection, no evidence of roosting bats has been found under lifted tiles. There is no internal void within the extension, therefore the risk of use by void dwelling bat species is negligible.

Very low potential bat roost habitat, limited to crevices under a small number of lifted tiles was identified. All potential crevices were easily and fully inspected and no evidence of bat use was found. We can, therefore, rule out any bat use of these areas without any further survey work.

Survey effort by MAB in 2007 identified large collections of Natterer's or Daubenton's bat droppings within the void of the main house during the scoping assessment, and the subsequent emergence survey identified a soprano pipistrelle maternity roost. To account for any residual risk of transient roosting bats utilising identified crevices, good working practices should be followed during re-roofing of the existing extension. Any works to the main property will require further survey effort.

There will be no loss of breeding bird or barn owl habitat caused by the development.

2 Introduction

MAB Environment and Ecology Ltd was commissioned by Mags Waughman to undertake a bat, breeding bird and barn owl scoping survey on a small extension at Twelve, Hackness to accompany a planning application to increase the size of the existing extension, and re-roof the existing extension. Development plans are in Appendix 1.

A previous scoping survey and emergence survey has been completed by MAB Environment and Ecology in 2007. The 2007 scoping survey identified large collection of droppings in the void of the main house, these were thought to be from Natterer's or Daubenton's bats. The subsequent emergence survey identified a soprano pipistrelle maternity roost. The results of the previous scoping survey are summarised in Section 6.2.

The site is located within the village of Hackness (Central grid reference: SE964900). The location of the site is shown on Figure 1, below and the application site boundary is shown in Figure 2.

The report was written by Sarah Emerson Grad CIEEM of MAB Environment and Ecology Ltd.

The report's primary objective is to provide an impact assessment for the development on bats, define any necessary mitigation proposals, and to assess the requirement for a Protected Species Licence. A secondary objective is to assess potential impact on breeding birds.

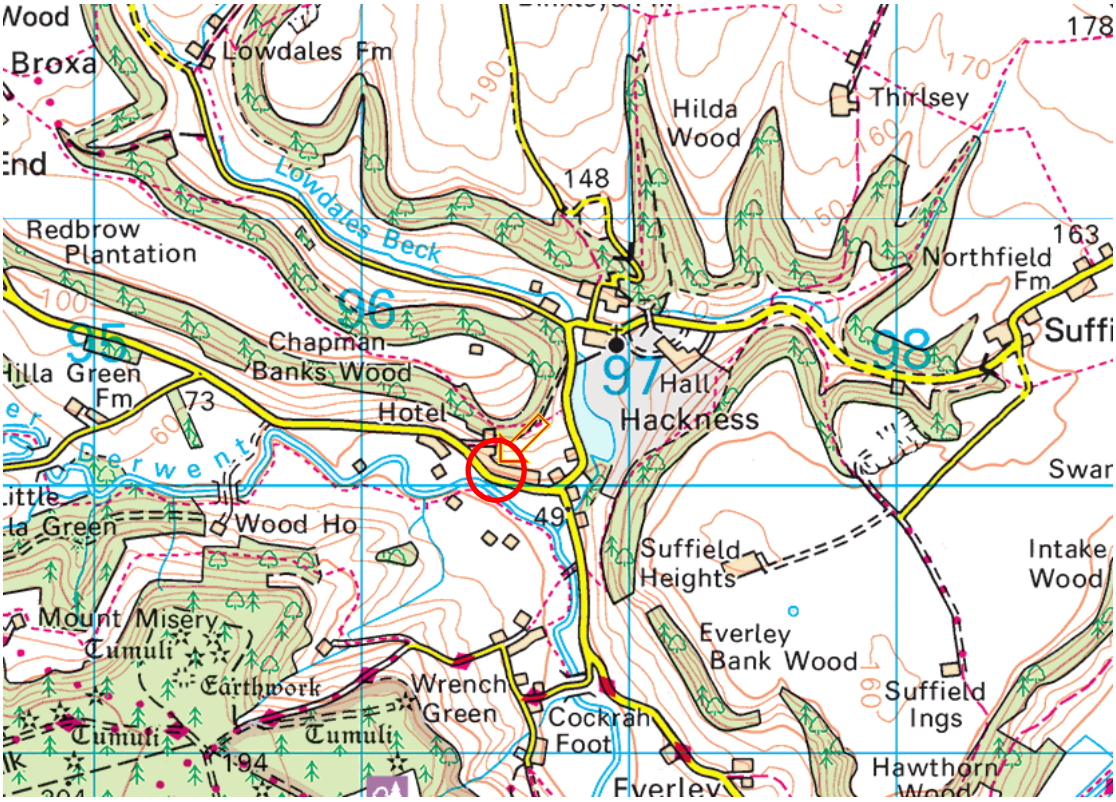


Figure 1: Site location.

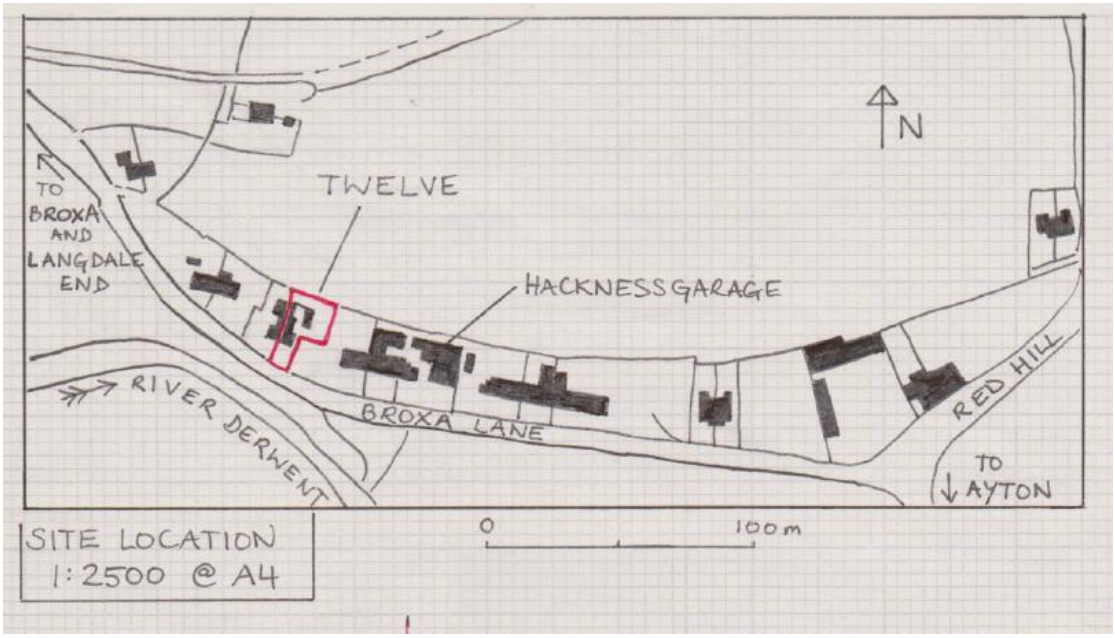


Figure 2: Site location

3 Methodology

3.1 Desktop study

3.1.1 Bat roost records for a 2km radius around the site were commissioned from the North Yorkshire Bat Group.

3.1.2 Aerial imagery from Google Earth and 'MAGIC' government website were used to assess the location of the site and the surrounding habitat for value to bats. This includes proximity of the site to good bat foraging habitat such as woodland and water bodies and if the site is linked to such habitats by linear features like hedgerows, woodland edges or rivers which bats use to commute around the environment.

3.2 Field survey

3.2.1 The site was surveyed by Sarah Emerson GradCIEEM who has worked as an ecologist since 2015 and for MAB since 2017. She holds a Class Survey Licence WML-A34 (Bat Survey Level 2) registration number: 2016-26716-CLS-CLS. She also holds a Class Survey Licence for Great Crested Newts WML-CL09 (level 2) registration number 2016-19358-CLS-CLS. The surveys were carried out in accordance with the Bat Conservation Trust, Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).

3.2.2 The interior and exterior of the building was inspected during the day using halogen torches (500,000 candle power), binoculars, ladders, and a flexible endoscope (a Sea Snake LCD inspection scope). All normal signs of bat use were looked for, including bats, bat droppings, feeding waste, entry and exit holes, grease marks, dead bats, and the sounds / smells of bat roosts.

3.2.3 The buildings were assessed for their degree of potential to support roosting bats. This includes assessing the building design, materials and condition.

Colour code	Bat roost potential.	Roosting habitats	Commuting and foraging habitats
	Confirmed	Signs of roosting bats present (e.g. entry / exit points, accumulated bat droppings, visible bats).	
Red	High risk	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
Amber	Moderate risk	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only-the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as a line of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Yellow	Low risk	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. Unlikely to be suitable for maternity or hibernation)	Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or unvegetated stream, but isolated, i.e. Not very well connected to the surrounding landscape by other habitat. Suitable but isolated habitat that could only be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Green	Very low risk	All potential bat roost habitat *comprehensively* inspected and found to be clear of past or present bat usage.	
Grey	Negligible risk	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

Table 1: Guidelines for assessing the suitability of proposed development sites for bats. Adapted from BCT Bat surveys for Professional Ecologists, Good Practice Guidelines 2016.

3.2.4 Other trees within the site and areas of vegetation were also assessed for value to bats and their importance as foraging and commuting habitat.

3.2.5 All signs of breeding bird activity and barn owl (*Tyto alba*) activity were looked for. Signs looked for included white droppings, often vertical down walls or beams; active nests and nesting materials; (birds flying into and out of barns: generally, summer only); bird feathers, particularly swift (*Apus apus*), swallow (*Hirundo rustica*) and house martin (*Delichon urbica*), bird corpses, feeding waste (including pellets), and the sound/smell of birds.

4 Constraints

The surveys were not constrained.

5 Site Description

Twelve, Hackness is a traditional stone property, with a pitched slate roof. The surveyed area is a small single storey extension on the eastern aspect of the property, which has a lean to clay pantile roof.

Figure 3 Site plan. Surveyed area marked in red.

6 Results

6.1 Desktop study

Figure 4 Aerial view of surrounding land use

The surrounding landscape offers high quality foraging opportunities for bats. The site is located within a small rural village, which is surrounded by wooded valleys, permanent pasture and arable. The site is less than 30m from the river Derwent and associated riparian habitat, and approximately 100m from a lake and 400m from a weir on the river Derwent.

Bat records

MAB Ecology identified a soprano pipistrelle maternity roost of 50 individuals at the property in 2007 (outlined in Table 2 in red), with a very large maternity roost of 468 soprano pipistrelles also within Hackness. Other bat species recorded in the area include; Daubenton's, common pipistrelle, and brown long-eared bats. Full records can be seen in Table 2 below.

Species	Site	Grid ref.	Quantity	Date	Comment
Daubenton's Bat	Lake at Hackness	SE968902	20	2007	
Common Pipistrelle	Everley buildings, Hackness	SE971889	4	05-Jun-14	
Common Pipistrelle	Everley buildings, Hackness	SE971889	3	14-Jun-14	
Brown Long-eared Bat	Hackness	SE968906	1	02-Oct-02	
Brown Long-eared Bat	Milestone Cottage, Wrench Green	SE9689		10-Jun-86	
Brown Long-eared Bat	Hackness	SE968906	1	17-Aug-87	
Soprano Pipistrelle	Low Dale Farm, Hackness, Scarborough	SE955916	468	05-Jul-01	Roost
Soprano Pipistrelle	River Derwent, Wrench Green	SE968892		18-Jun-02	In flight
Soprano Pipistrelle	Wrench bridge	SE968892		18-Jun-02	In flight
Soprano Pipistrelle	12 Hackness Village	SE965900	50	2007	Maternity roost
Unknown	River Derwent, Wrench Green	SE968892		18-Jun-02	In flight

Table 2 NYBG records

6.2 Existing survey information

During a visual inspection survey conducted in July 2007 (MAB Environment and Ecology), significant collections of droppings were noted within the main property void space, and were thought to be Natterer's or Daubenton's. An emergence survey in September identified a maternity roost of approximately 50 soprano pipistrelles using the space between the roof tiles and the liner, and gaining access via the eaves. No *Myotis* species were noted in the area, but as the survey was late in the season, they may have moved to a different roost site.

The buildings appear to be in a similar condition.

6.3 Visual inspection

Figure 5 visual inspection results

Building ref.	Description	Features with potential bat roost habitat (PBRH).
Extension Very low risk of supporting bats	One-storey open stone extension with clay pantiles, which have lifted, providing a gap along the lowest course, above the guttering. Theses gaps were comprehensively inspected with an endoscope and were heavily cobwebbed internally, and no droppings were identified either below any gap or within the space. The roof does not have an internal void, and there is a skylight window in the roof of the extension. The walls of the main property are very well sealed surrounding the extension with no suitable crevices for roosting bats.	All potential bat roost habitat comprehensively inspected and found to be clear of past or present bat usage.

Site photographs

Photo 1: extension

Photo 2: roof of extension

Photo 1: lifted tiles

Photo 2: lifted tiles

7 Discussion and analysis

Potential access for bats under roof tiles were identified at points where they have lifted slightly. A comprehensive inspection of all areas of potential access was possible, due to the low height of crevices and small area of lifted tiles present on the roof. No bat droppings were visible within crevices and no external evidence of use of the roof by bats was found during the survey. In addition, the roof is shaded by the main property on two sides (south, and west), which makes it less suitable for use as a roost space, particularly for maternity roosting, due to the lower temperatures the roof is subjected to.

Previous survey effort by MAB in 2007 identified a significant number of droppings within the void which appeared to be Natterer's or Daubenton's bats. An emergence survey in September 2007 identified a maternity roost of soprano pipistrelles, but did not identify any void dwelling bat species utilising the roof. It is possible that the late season survey missed the void dwelling bat species before moving to a different roost site.

There is a very minor residual risk of use of these identified crevices by transient bats. The surrounding landscape provides high quality potential bat foraging habitat due to its connectivity to suitable foraging habitat. It would not be proportionate to recommend a bat emergence survey for this very low risk. We therefore recommend addressing the risk through the adoption of precautionary measures and sensitive working practices during re-roofing of the extension.

No potential barn owl habitat and no evidence of breeding birds using the site were found.

8 Impact assessment

There is no evidence that the development will impact upon bats or any high-risk bat habitat.

9 Mitigation & Compensation

9.1 Mitigation summary

As no potential bat roost habitat has been identified within the extension, no further survey work or mitigation is considered necessary.

To take account of the minor residual risk of disturbance or harm to or transient bats, it is recommended that is this work is carried out under the terms of a method statement. This shall include the adoption of good working practices and precautionary measures during removal of the roof (set out within Appendix 2). If bats are found to be present, works will cease and advice of a suitably qualified ecologist will be taken concerning any licence requirements and continuation of works.

No mitigation for barn owl or breeding birds is required.

9.2 Method Statement

1. Works to the roof of the extension should follow the good working practices and precautionary working methods set out in Appendix 2. The roof should be dismantled carefully by hand and roof tiles should be lifted upwards and not slid off.
2. If during works, any bats or evidence of bat roosting is found, works will cease and the advice of a suitably qualified ecologist will be sought who will make an assessment concerning the requirement for a European Protected Species licence and continuation of work.

10 Information concerning bat protection and the planning system

10.1 Relevant Legislation.

All bat species are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended), the Countryside and Rights of Way Act 2000 and the Habitat Regulations 2017.

Under the WCA it is an offence for any person to intentionally kill, injure or take any wild bat; to intentionally disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection; to intentionally damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; to be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat; or to sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild bat, or any part of, or anything derived from a wild bat.

Under the Habitat Regulations 2017, it is an offence to (a) deliberately capture, injure or kills any wild animal of a European protected species (EPS), (b) deliberately disturb wild animals of any such species, (c)deliberately take or destroy the eggs of such an animal, or (d)damages or destroys a breeding site or resting place of such an animal. Deliberate disturbance of animals of a European protected species (EPS) includes 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 to affect significantly the local distribution or abundance of the species to which they belong.

*Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used***.** In order to minimise the risk of breaking the law it is essential to work with care to avoid harming bats, to be aware of the procedures to be followed if bats are found during works, and to commission surveys and expert advice as required to minimise the risk of reckless harm to bats.

10.2 Licences.

Where it is proposed to carry out works which will damage / destroy a bat roost or disturb bats to a significant degree, an EPS licence must first be obtained from the Natural England (even if no bats are expected to be present when the work is carried out). The application for a license normally requires a full knowledge of the use of a site by bats, including species, numbers, and timings. Gathering this information usually involves surveying throughout the bat active season. The licence may require ongoing monitoring of the site following completion of the works.

Licences can only be issued if Natural England are satisfied that there is no satisfactory alternative to the development and that the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

10.3 Planning and Wildlife.

The March 2012 National Planning Policy Framework (NPPF) has replaced PPS9 (Planning Policy Statement on Biodiversity and Geological Conservation) as the relevant national planning guidance in relation to ecological issues.

Para 109 of NPPF states that the planning system should “contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”.

Para 117 of NPPF states that the planning system should “promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species, populations, linked to national and local targets”.

Para 118 of NPPF states that "When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

a) if significant harm 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) proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have 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 proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
d) opportunities to incorporate biodiversity in and around developments should be encouraged;
e) planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.

Para 119 of the NPPF makes it clear that "The presumption in favour of sustainable development (paragraph 14) does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined". Therefore, EPS will still be a material consideration when considering sustainable developments.

The accompanying ODPM / Defra Circular 06/2005 remains pertinent; circular 06/2005 is prescriptive in how planning officers should deal with protected species, see paragraphs 98 and 99:

The presence of a protected species is a material consideration when considering a proposal that, if carried out, would be likely to result in harm to the species or its habitat (see ODPM/Defra Circular, para 98)

LPAs should consider attaching planning conditions/entering into planning obligations to enable protection of species. They should also advise developers that they must comply with any statutory species protection issues affecting the site (ODPM/Defra Circular, para 98)

The presence and extent to which protected species will be affected must be established before planning permission is granted. If not, a decision will have been made without all the facts (ODPM/Defra Circular, para 99)

Any measures necessary to protect the species should be conditioned/planning obligations used, before the permission is granted. Conditions can also be placed on a permission in order to prevent development proceeding without a Habitats Regulations Licence (ODPM/Defra Circular, para 99).

The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances.

Further to NPPF and OPDM Circular 06/2005, Section 40 of the Natural Environment and Rural Communities Act (2006) states that 'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'. Section 40(3) also states that 'conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'.

11 References

Altringham, John (2003). *British Bats*. The New Naturalist. Harper Collins.

BS42020. Biodiversity - Code of Practice for planning and development. British Standards Institution 2013.

Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System. http://www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity

Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London.

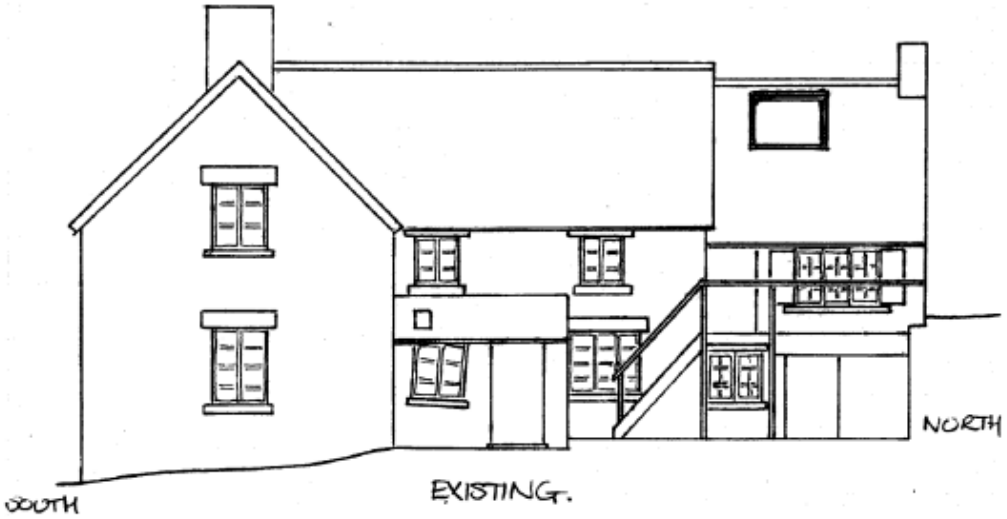
Mitchell-Jones, A.J. (2004). *Bat Mitigation Guidelines*. English Nature.

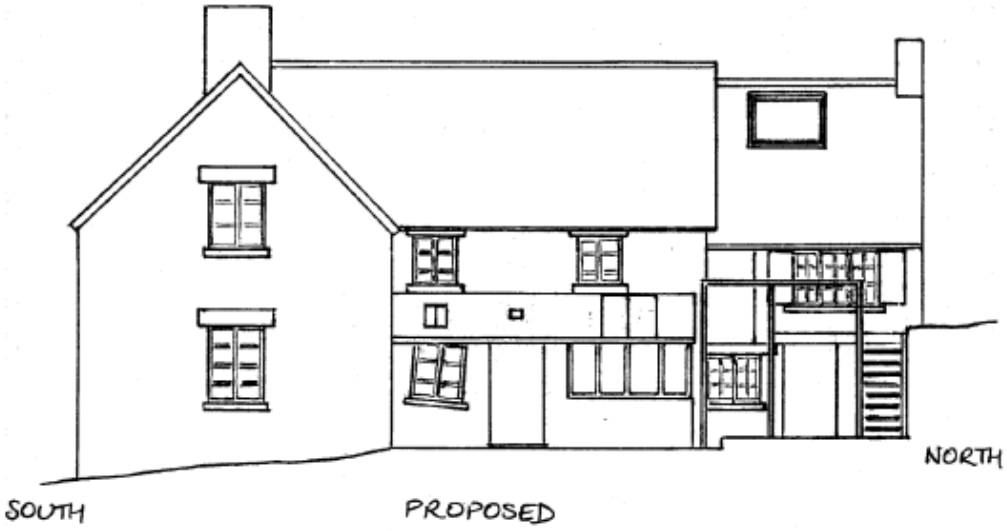
National Planning Policy Framework: http://www.communities.gov.uk/documents/planningandbuilding/pdf/2116950.pdf

The Conservation of Habitats and Species Regulations 2017. https://www.legislation.gov.uk/uksi/2017/1012/contents/made

UKBAP 1995. *UK Biodiversity Action Plan*. http://www.ukbap.org.uk/

Appendix 1: Development Plans





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Appendix 2: Standard good working practices in relation to bats

Bats are small, mobile animals. Individual bats can fit into gaps 14-20mm wide. They can roost in a number of places including crevices between stonework, under roof and ridge tiles, in cavity walls, behind barge boards, in soffits and fascias and around window frames. Builders should always be aware of the potential for bats to be present in almost any small gap accessible from the outside in a building. The following guidelines are provided in order to reduce the risk of harm to individual bats.

- Roofs to be replaced, or which are parts of a building to be demolished, should be dismantled carefully by hand. Ridge tiles, roof tiles and coping stones should always be lifted upwards and not slid off as this may squash/crush bats.
- Re-pointing of crevices should be done between April and October when bats are active. Crevices should be fully inspected for bats using a torch prior to re-pointing.
- Any existing mortar to be raked should be done so by hand (not with a mechanical device).
- Look out for bats during construction works. Bats are opportunistic and may use gaps overnight that have been created during works carried out in the daytime.
- If any bats are found works should stop and the Bat Conservation Trust (0845 1300 228) or a suitably qualified bat ecologist should be contacted.

If it is necessary to pick a bat up always use gloves. It should be carefully caught in a cardboard box and kept in a quiet, dark place. The Bat Conservation Trust or a suitably qualified bat ecologist should be contacted.