# Bat, Breeding Bird and Barn Owl Scoping Survey

# Troutsdale Mill Farm

# June 2016

MAB Environment & Ecology Ltd

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| Revisions | | |

**Sites:**

Troutsdale Mill Farm
Snainton
Scarborough
YO13 9PS

**Dates:**

Scoping survey: 8th June 2016

Scoping report: 17th June 2016

**Client:**

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**Planning Authority:**

North Yorkshire Moors National Park Authority

**Our ref:**

2016-119

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## 1. Summary

**A bat, barn owl and breeding bird scoping survey has been undertaken on a single-storey stone outbuilding at Troutsdale Mill Farm, near Snainton. Planning permission and listed building consent is being sought for conversion into a residential dwelling.**

**Following a detailed visual assessment and scoping survey in June 2016, evidence of bat use was found within units a, c and d: a low density of bat droppings was found on floors and stored items. The building overall offers moderate potential bat roosting habitat due to masonry crevices; crevices around roofing timbers; raised roofing tiles and as the roof is lined.**

**Activity surveys are now required in order to establish the status of roosting on site and to complete the impact assessment. Information from these further surveys will then inform the level of mitigation required and the need for a European Protected Species Licence (EPSL).**

**The open-sided end unit (e) has been used by a barn owl as an occasional roost site. There is no evidence of nesting. The buildings have also been used over the summer by breeding birds, most notably barn swallows. Work will need to be scheduled to avoid disturbance to breeding birds.**

## 2. Introduction

MAB Environment and Ecology Ltd was commissioned to carry out a bat, breeding bird and barn owl scoping survey on a range of single-storey outbuildings at Troutsdale Mill Farm, near Snainton, North Yorkshire. Planning permission and listed building consent is being sought for the conversion of buildings to provide new ancillary accommodation. The location plan as exiting is shown below in Figure 1.

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.

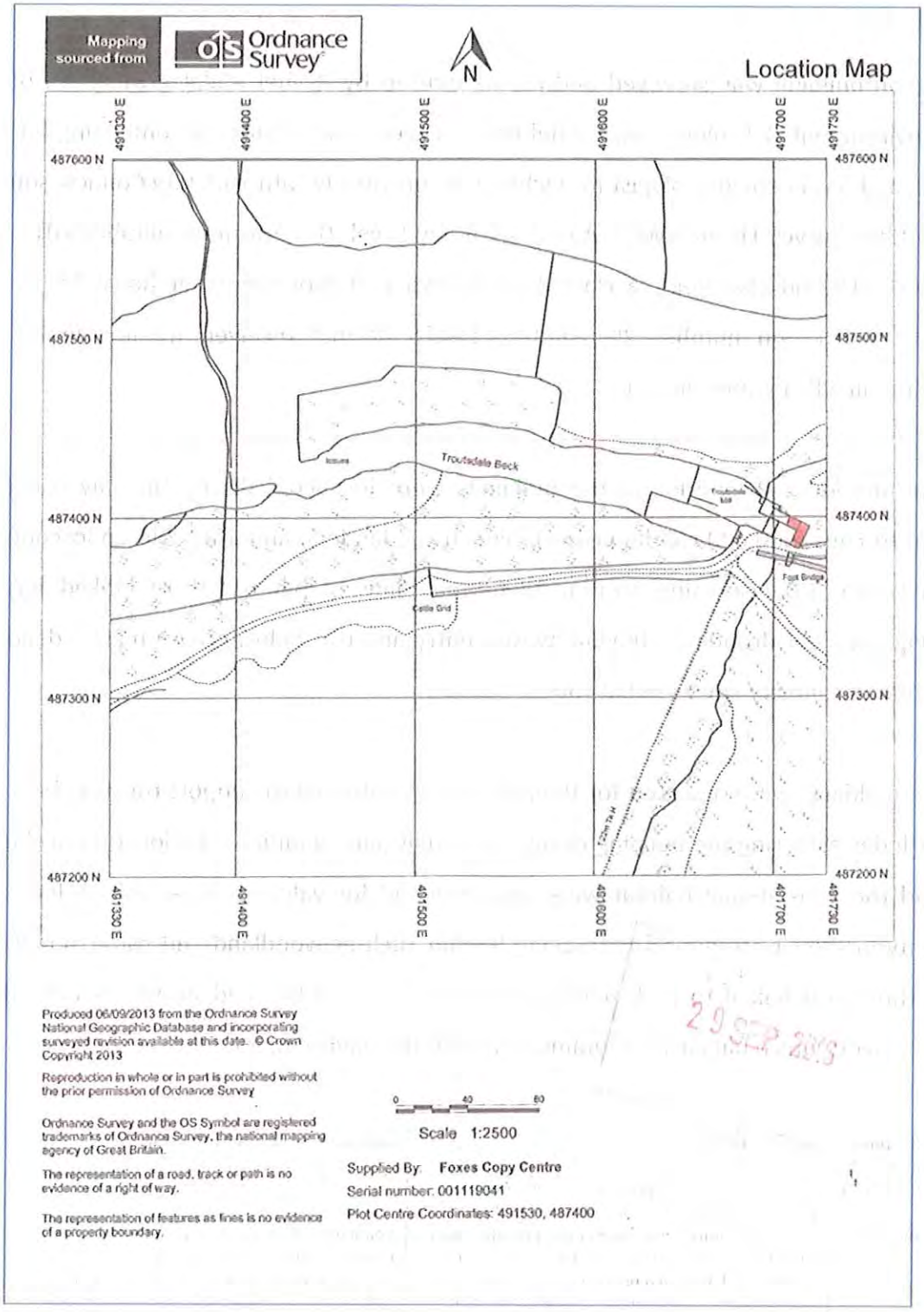


**Figure 1 - Site location plan showing survey building highlighted red.**

## 3. Methodology

3.1 The outbuilding was surveyed and report written by Rachel Midgley MCIEEM, of MAB Environment & Ecology Ltd. Rachel has four years experience of conducting bat surveys, and has been an ecologist for eight years, previously with York City Council; she holds a Class Survey Licence WML-A34 (Bat Survey Level 2) registration number 2015-11726-CLS-CLS and also holds a class licence WML-A34 (Volunteer Bat Roost Visitor Level 1) registration number 2015-17135-CLS-CLS. Rachel received training in bat mitigation on a BCT course in 2013.

3.2 The interior and exterior of the buildings were 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.

3.3 The buildings were assessed for their degree of potential to support roosting bats. This includes assessing the building design, materials and condition. The location of the site and the surrounding habitat were also assessed 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.

| 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.<br><br>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.<br><br>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 regular4 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.<br><br>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.**

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

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

3.6 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 scoping survey was not significantly constrained.

## 5. Site Description

Troutsdale Mill Farm is located to the north of Snainton village, in Trouts Dale and within the boundary of the North Yorkshire Moors National Park (central grid reference: SE 917 873). The site is very well connected to the wider landscape and high quality bat foraging and commuting habitat is available due to large areas of mixed woodland, fields of permanent pasture and wildflower meadow. The Troutsdale Beck also runs immediately adjacent to the site.

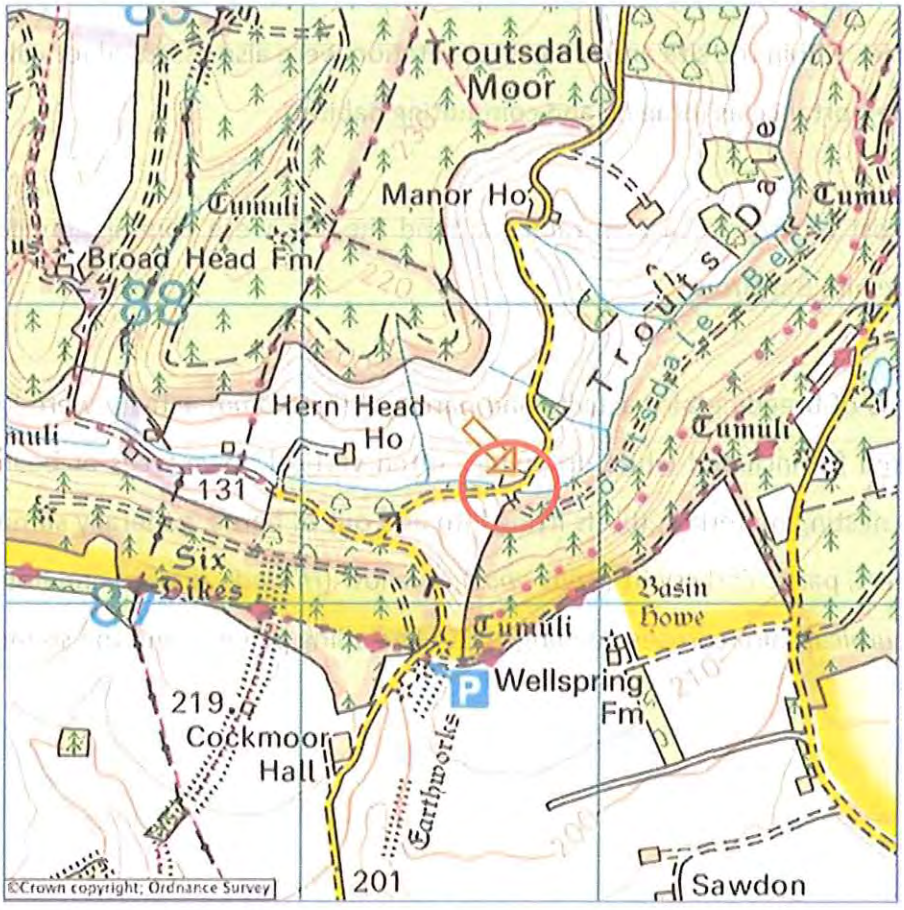


**Figure 2 - Site location map (1:50,000).**


**Figure 3 - Aerial image of the site and surrounding landscape.**

## 6. Results

### 6.1 Desktop study

**North Yorkshire Bat Group (NYBG)**

The local bat group currently hold only one record for this area, shown below. This is a historical record for pipistrelle but no further details are provided regarding numbers or if this is a roost record or 'in-flight' only record. The record does not relate to this survey site and is located 900m away.



**Table 2 - NYBG roost records:**

| Species | Site | Grid ref. | Date |
|---|---|---|---|
| Pipistrelle species | Troutsdale | SE918883 | 24 Jun 1978 |

## 6.2 Visual inspection

The surveyed building is a single-storey former pigsty, now used as outside stores and utility areas. The building is constructed out of sandstone with a pantiled roof, and can be subdivided into 5 main units (see plan – Figure 4 below).

**Unit a:** Garage unit with large gap above timber doors. Bitumastic felt lining under tiles. There are internal crevices within walls and around roofing timbers. A small-medium density of small and finely textured bat droppings were present on stored items, below a gap between roofing timbers – this gap was free of cobwebs (see photo 5). A very small number of droppings were also found caught in cobwebs on the internal wall. The ridge beam is cobwebby but with some slightly clearer sections. A total of 27 swallow nests were present. All nests were old and not in use this current season. 3 other old and unidentified bird nests were also seen.

**Unit b:** store room. The bitumastic felt lining to the tiles is in poor condition in places, particularly close to the ridge. The ridge line and roofing timbers are all cobwebby. No bat droppings or bird nests seen.

**Unit c:** Open and connected internally to unit b. The underside of the roof has a complicated structure with cluttered roofing timbers. There are holes in the bitumastic roofing felt. There are internal masonry crevices and numerous gaps around timbers and door/window lintels. The ridge beam is again cobwebby but with some clearer sections. A very low density of small and scattered bat droppings were present on the floor. A total of 4x old swallow nests present.

**Unit d:** Store. The roofing tiles have a timber lath lining; the majority of which is in fairly good condition but with some small damp patches nearer to the ridge. There are lots of masonry crevices and cracks in the internal walls. A large crack in the western corner

leads all the way through to unit e. A low density of scattered and small bat droppings on surfaces but these were not fresh.

**Unit e:** Open-sided wood store with lath-lined roof. There are crevices around timbers, masonry crevices and around the large timber lintel above the doorway. No bat droppings found but poor conditions due to earth floor and wood chippings. 8x swallow nests (old) and 4x other nests. A small pile (<25) of barn owl pellets below a timber beam and close to the end gable which has a small window access. The pellets were not fresh (>4 months approx.)

Externally, there are raised and slipped pantiles. The ridge line has a small number of gaps in the mortar but is otherwise in good condition. Masonry crevices present, as well as gaps along the eaves, and around stone door lintels. Some missing mortar along the verge. A crevice low down on the end gable has been used in the past by nesting birds (not active).

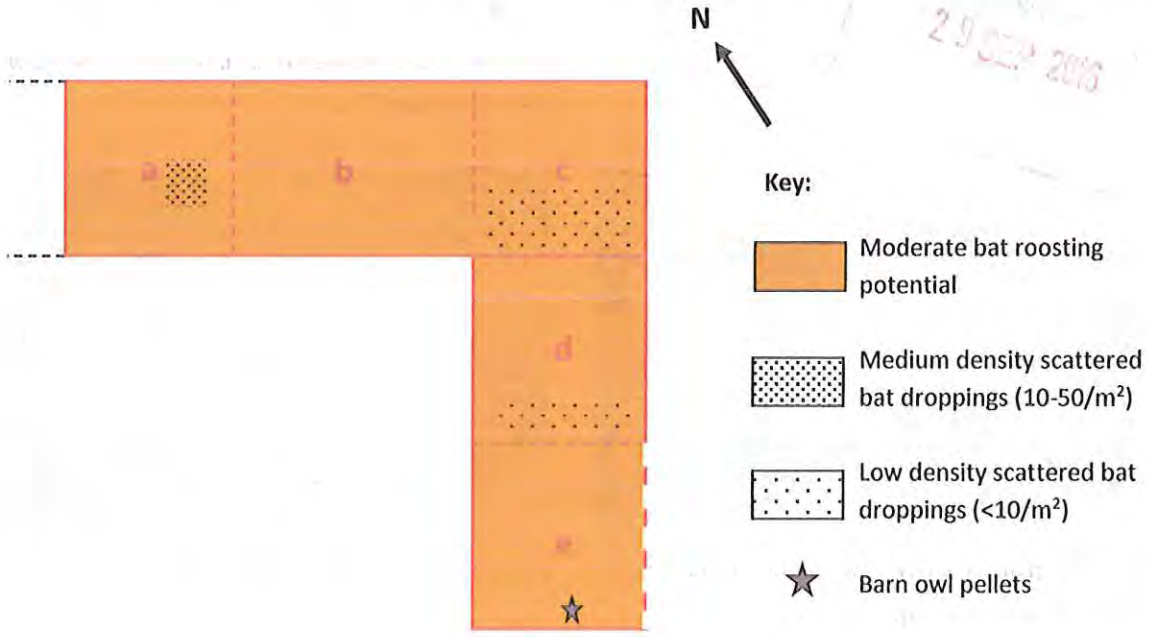


**Figure 4 – Building layout plan as existing showing scoping survey results (see key below).**

## Site photographs:

Photo 1 - View of the building from the courtyard (west).

Photo 2 - Eastern elevation.

Photo 3 - Rear roof pitch (north).

Photo 4 - Roof structure to unit a, showing old swallow nests on timbers.

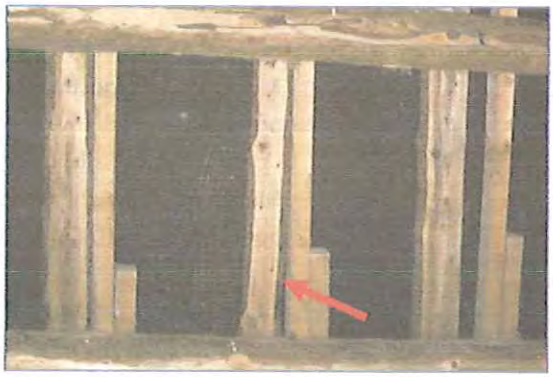

Photo 5 - Gap between roofing timbers to unit a (bat droppings found below).

Photo 6 - Cluttered roof structure to unit c.

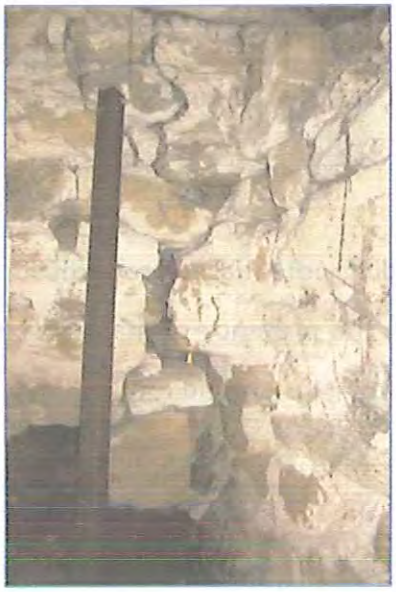

Photo 7 - Large crack in internal wall separating unit d from e.

Photo 8 - Roof structure to unit e with timber beam and small gable window used in past by barn owl.

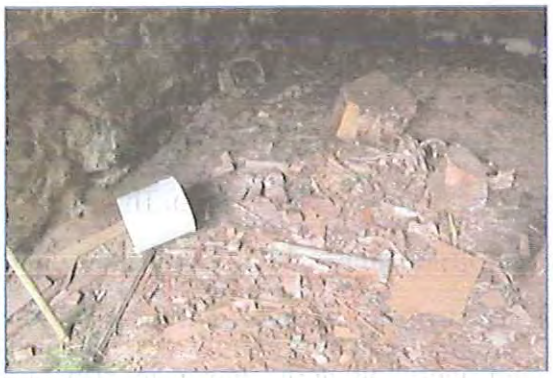

Photo 9 - Barn owl pellets found within unit e.

Photo 10 - Crevices around stone door lintel on courtyard elevation.



Photo 11 - Masonry crevices within external stone walls (corner of unit e).

Photo 12 - Crevices around large timber lintel to unit e.

## 7. Discussion and analysis

The results of the daytime visual assessment and scoping survey revealed low level usage of the outbuilding by bats.

The building offers suitable roosting habitat, including potential for cool roosting, day roosting, maternity and hibernation roosts, due to the presence of masonry crevices, missing mortar along the ridge and raised roofing tiles, gaps around roofing timbers and sections of lined roof.

Only a small number of bat droppings were found inside the building, despite conditions generally being good: the separate rooms/units were dry and undisturbed and so any evidence such as bat droppings or feeding remains were well preserved. The small accumulation of droppings within unit a suggests that there has been some roosting around roofing timbers: the droppings were found directly below a gap between two roofing timbers, which were also free of cobwebs. Within other areas (unit c and d), droppings were at a much lower density and more scattered in distribution. This is more likely to be as a result of foraging, or bats flying inside the building during the night rather than a sign of roosting. The low density suggests a single bat or very low numbers. The bat droppings found throughout were all very similar in size and consistency, characteristic of pipistrelle sp.

For this reason, and as the roof is also lined which may conceal further signs of use, activity surveys are now required in order to complete the impact assessment and to establish the full use of the site by bats.

A barn owl has roosted within the open-sided end unit (e). Pellets found ranged in age and were not fresh. The most recent was 3 or 4 months old. This would suggest that the building is used only on an occasional basis and as a feeding roost: there were no signs of nesting and no suitable nesting habitat. The open-sided areas have also been used in

the past by nesting barn swallows and a very high number of old nests were found. None of these were active at the time of the survey which was carried out during the optimal time.

## 8. Impact assessment

Conversion of the outbuildings will result in the loss of bat roosting habitat. As the full use of the site by roosting bats cannot at this stage be determined based on the results of the scoping survey alone, a full impact assessment will be completed following further activity surveys in the summer (see section 9).

Work will result in the loss of an occasionally used barn owl roost site. There is also a risk that work may cause disturbance to barn owls if the owl is using the site whilst work is being carried out.

There will be a loss of bird nesting habitat and a reduction in available swallow nesting sites. There is also a risk of disturbance to breeding birds if work is carried out during the bird breeding season and if active nests are present at the time.

## 9. Mitigation & Compensation

### 9.1 Mitigation summary

A full mitigation scheme and method statement will be provided following the results of the summer emergence survey.

Emergence surveys should be carried out during the period May - August in order to gain a full understanding of the use of the site by bats and to assess the extent to which they may be affected by the proposed development.

The results of the summer surveys will inform the need for a European Protected Species Licence (EPSL) and the level of mitigation required. Mitigation may include timing of works, ecological supervision, and the retention or re-creation of bat roosting habitat.

To help safeguard the long term use of the site and surrounding area by barn owls, a barn owl box can be provided on site which will ensure that alternative habitat, including opportunities for nesting are made available. The box should be installed in a suitable location within 200m of the development and put up prior to work (at least 30 days).

If work takes place during the bird breeding season, then a check should be made prior to work for any active bird nests within buildings to be worked on. If nests are found, then no work to these immediate areas will take place until any chicks have fledged.

## 9.2 Method Statement

1. Emergence (or dawn re-entry) surveys shall be carried out at the appropriate time of year (May - August) and in suitable weather conditions using sufficient surveyors to ensure that all elevations of the building and potential roosting habitat are covered.

2. The results of the emergence surveys shall inform the need for an EPSL. If an EPSL is required then no work to roost areas will take place until a licence has been obtained. Results of the emergence survey shall be forwarded to the LPA.

3. A purpose built, wooden barn owl nesting box should be installed on site to ensure the long-term, continued use of the site by barn owls. The nest box will be a deep, indoor nest box, suitable for installation inside a barn or other building, of the design supplied by The Barn Owl Trust (http://www.barnowltrust.org.uk/product_dets.html?Id=85) or similar. Its location will be approved by the ecologist. The box should be installed in a suitable location within 200m of the development site, away from disturbance and at least 30 days prior to works starting on site.

4. A check should be made for active bird nests prior to works. If any active nests are discovered, work to these immediate areas shall be delayed until any chicks have fledged in order to avoid disturbance.

## 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 2010.

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 2010, 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:

- 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;
- 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;
- development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- opportunities to incorporate biodiversity in and around developments should be encouraged;
- 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. Legislation in relation to barn owls

**11.1** Barn owls are afforded full protection under the Wildlife and Countryside Act, 1981. Their inclusion in Schedule One protects against wilful disturbance whilst an owl is at or near the nest, and makes it an offence to carry out any of the following actions:

- Killing or injuring a barn owl
- Catching a barn owl
- Taking or destroying any egg of a barn owl
- Damaging or destroying the active nest site with eggs or young or before eggs are laid
- Disturbing the dependent young of a barn owl
- Possessing, offering for sale or selling a barn owl (but see exceptions)
- Release or allow the escape of a barn owl into the wild (but see exceptions)

These actions are punishable by a maximum fine, upon conviction, of £5,000. Nesting has been recorded in every month of the year.

**11.2** Protection is also given under the Countryside and Rights of Way Act, 2000 against reckless disturbance whilst nesting.

**11.3** Because of recent declines in numbers, and concern over their current status, barn owls are also listed in the EC Birds Directive and Appendix II of the Bern Convention. They are an Amber Listed species in "Birds of Conservation Concern" (RSPB).

## 12. References

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Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System.
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UKBAP 1995. *UK Biodiversity Action Plan*. http://www.ukbap.org.uk/

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The Barn Owl Trust (http://www.barnowltrust.org.uk/)

Barn Owl Trust (2012) *Barn Owl Conservation Handbook*, Pelagic Publishing, Exeter

## Appendix 1: Glossary of bat roost terms

*Bat Roost Definitions:*

**Day roost**: a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

**Night roost**: a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.

**Feeding roost**: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.

**Transitional / occasional roost**: used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.

**Swarming site**: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites.

**Mating sites**: where mating takes place from later summer and can continue through winter.

**Maternity roost**: where female bats give birth and raise their young to independence.

**Hibernation roost**: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.

**Satellite roost**: an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

## 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.

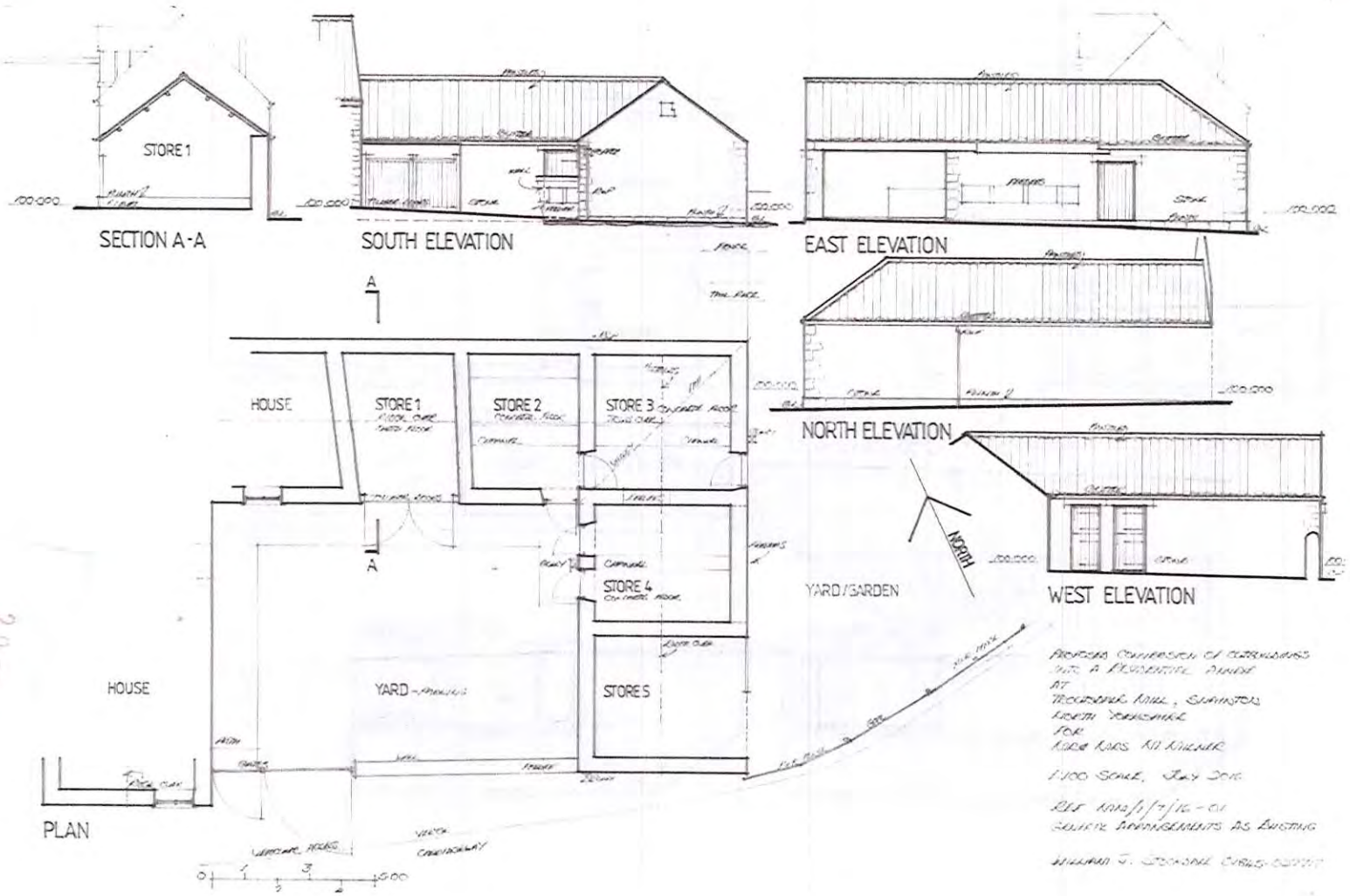
- Any existing mortar to be raked should be done so by hand (not with a mechanical device).

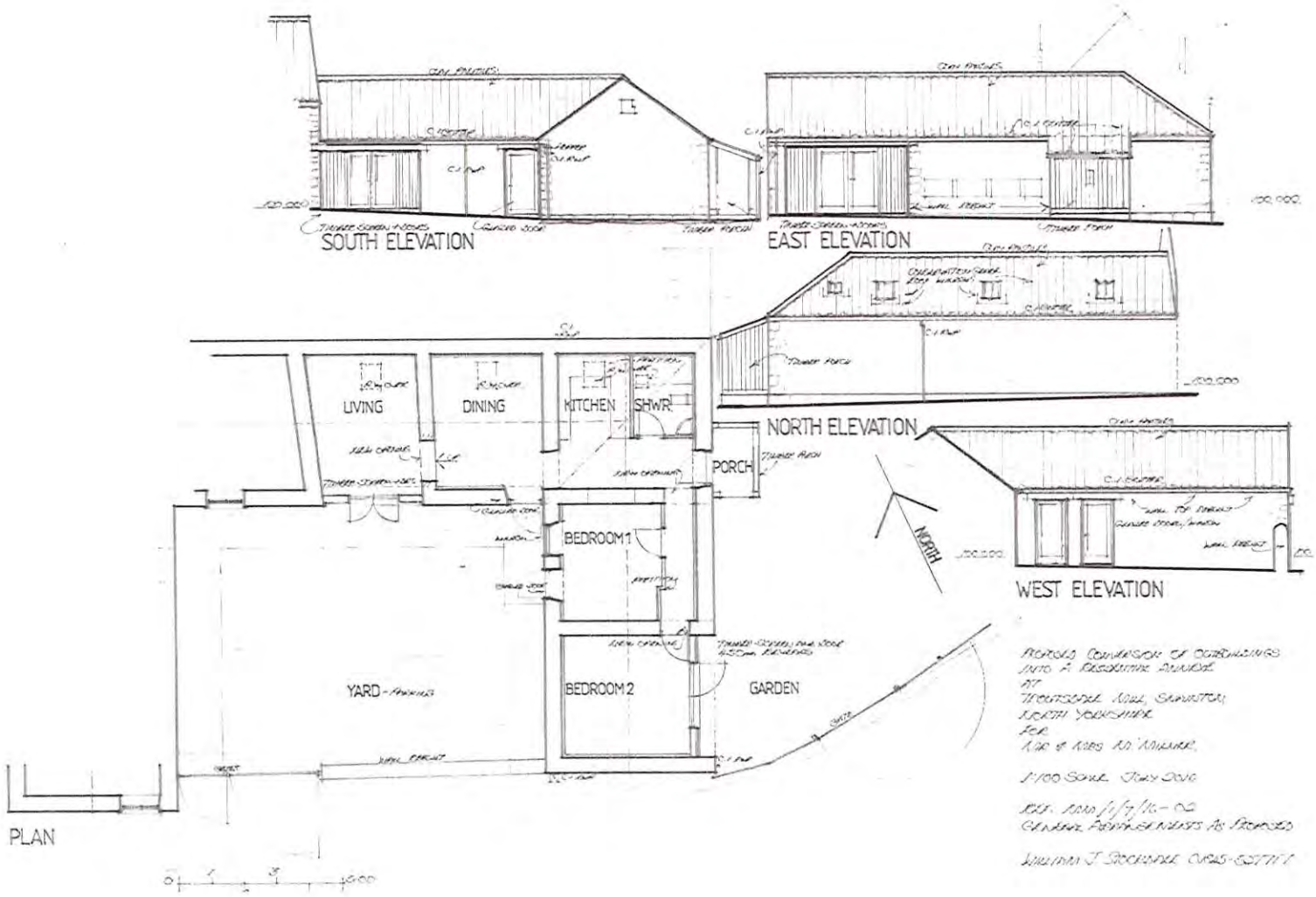
- Look out for bats during construction works. Bats are opportunistic and may use gaps overnight that have been created during works carried out in the daytime.

- 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.

## Appendix 3: Development plans




SOUTH ELEVATION
EAST ELEVATION
NORTH ELEVATION
WEST ELEVATION
LIVING
DINING
KITCHEN
SHWR
PORCH
BEDROOM 1
BEDROOM 2
YARD
GARDEN
NORTH
PLAN