

**Preliminary Bat Roost Assessment and Bird Survey  
for,  
Mr. P. Bridgen.  
Buildings at,  
Barn Farm,  
Cranebrook Lane,  
Hilton  
LICHFIELD,  
Staffordshire,  
WS14 0EZ.**

**Map Ref SK 0811 0568**

**27<sup>th</sup> July 2021.**

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**Natural England Bat Mitigation Class License**

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## **Summary.**

- **There is no evidence of bats using the buildings as a place of shelter.**
- **There was evidence of birds using Barn 2 as a nest site.**
- **There are no bat roosting opportunities in either barn.**
- **The conversion of the properties to dwellings, if approved by the Local Authority must not occur if birds are nesting in the building until the young have fledged.**
- **A method of working must be put in place with contractors to ensure that in the event of bats being found they will not be injured.**
- **New roosting opportunities for bats can be created by installing a bat boxes on site on the gable end of the building at the rear of the site.**

## Introduction.

An inspection and building survey for bats was requested by C T Planning on behalf of Mr. P. Bridgen. The survey was to be undertaken in relation to the submission of a planning application to Lichfield District Council to convert the existing buildings to new dwellings. The property was visited on the 13<sup>th</sup> July 2020 and the surveyor spent 0.75 hour on site.

Temperature; 17°C      Wind; 0-1 Beaufort Scale      Cloud Cover; 8/8<sup>th</sup>.



## Legislation concerning bats.

The Wildlife and Countryside Act 1981 (WCA) protects bats and their roosts in England, Scotland and Wales. Some parts have been amended by the Countryside and Rights of Way Act 2000 (CRoW) which applies only in England and Wales, and by the Nature Conservation (Scotland) Act 2004 which applies in Scotland.

The Conservation and Habitats Regulations 2010 (better known as the Habitats Regulations) implements the Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora. All bats are listed as 'European protected species of animals'

Under Regulation 41 of the Conservation of Habitats and Species Regulations 2010 it is illegal to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species (EPS),
- Deliberately disturb wild animals of an EPS (affecting ability to survive, breed or rear young) – disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young,

- Deliberately disturb wild animals of an EPS (impairing ability to migrate or hibernate) – disturbance of animals includes in particular any disturbance which is likely to impair their ability in the case of hibernating or migratory species to hibernate or migrate,
- Deliberately disturb wild animals of an EPS (affecting local distribution and abundance) – disturbance of animals includes in particular any disturbance which is likely to affect significantly the local distribution or abundance of the species to which they belong,
- Deliberately disturb wild animals of an EPS (whilst occupying a structure of place used for shelter or protection) – intentionally or recklessly disturb any wild animal while it is occupying a structure or place which it uses for shelter or protection,
- Damage or destroy a breeding site or resting place of a wild animal an EPS.

Under the Wildlife and Countryside Act 1981 (as amended) it is illegal to:

- Recklessly or intentionally kill, injures or take any wild animals included in Schedule 5.
- Recklessly or intentionally damage or destroy, or obstruct access to any structure or place which any wild animal included in Schedule 5 uses for shelter or protection,
- Recklessly or intentionally disturb any such animal while it is occupying a structure or place which it uses for shelter or protection.

#### **Legislation concerning birds.**

All common wild birds are protected under The Wildlife and Countryside Act 1981 (and as amended). Under this legislation it is an offence to:

- kill, injure or take any wild bird
- take, damage or destroy the nest of any wild bird while it is in use or being built
- take or destroy the egg of any wild bird

Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

#### **Methodology for bats.**

The building surveys have been undertaken in accordance with Bat Surveys for Professional Ecologists- Good Practice Guidelines, 2016, the Bat Conservation Trust. Surveys of the buildings were undertaken during the daytime to look for evidence of bats using the buildings, or likely roosting sites. The evidence of bats using a building as a place of shelter can include bat droppings, grease marks, urine stains or actual bats. This evidence is then considered when planning evening emergence counts and activity surveys, using bat detectors. These surveys provide evidence of where bats are roosting and activity across the site by foraging or commuting bats.

The Bat Surveys for Professional Ecologists- Good Practice Guidelines, 2016, specify that emergence surveys are undertaken dependent upon the roost potential of the buildings on the survey site, as set out below;

<b>Roost potential.</b>	<b>Number of surveys.</b>
<b>High.</b>	3
<b>Low to moderate.</b>	2
<b>Low.</b>	1

The surveys are started at sunset, with bats emerging from roosts at different times, dependent upon the species, and continued for two hours. Emergence surveys can only be undertaken from the beginning of April to the end of September when bats are active. The optimum period of undertaking surveys is the beginning of May to the end of August. Their emergence is dependent upon the weather, the bats only leaving their roost on warm nights when there will be sufficient insect prey around to make flight worthwhile. While bats will emerge in light rain and moderate winds, the surveys would not be undertaken when there is heavy rain and/or strong winds as this would not provide reliable data upon which to base the conclusions of the surveys. Mild weather in April and September will produce bat activity, particularly providing information on forage areas, commuting routes and pre-maternity group roosting.

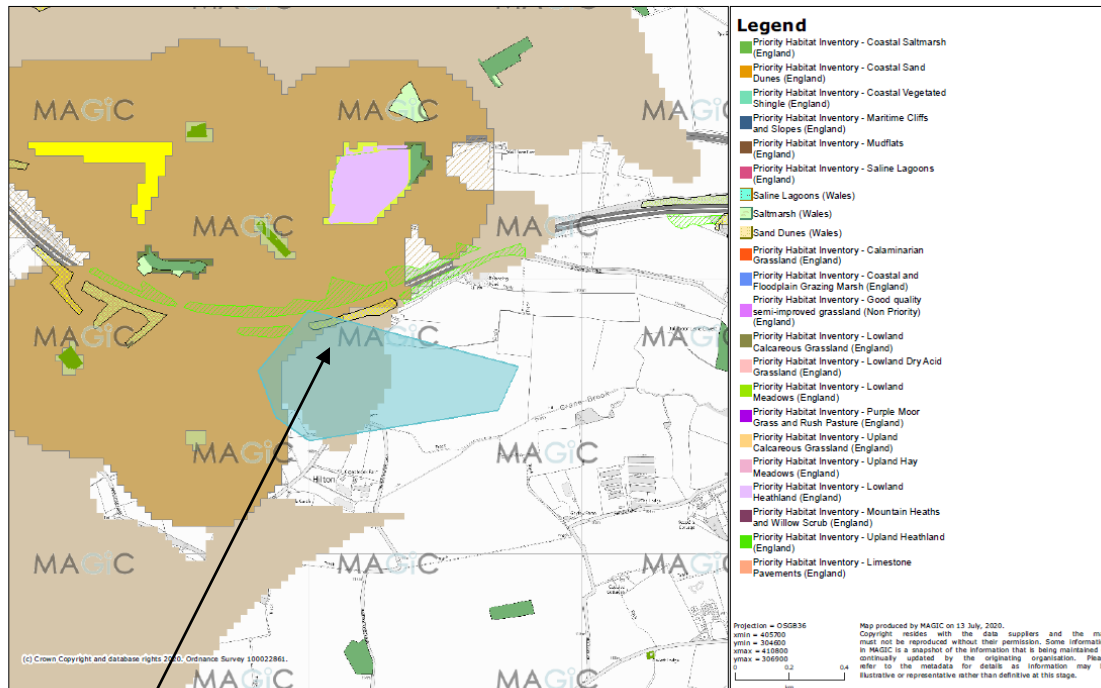
Any trees on site are surveyed following the methodology set out in the Bat Tree Habitat Key, Henry L Andrews et al 2013, which produces a key for identifying Potential Roost Features in trees and their likelihood of being used by bats. Trees on any site being surveyed will have Potential Roost Features identified from ground level surveys and highlighted in the report.

#### **Bat records and habitats.**

A search of public records has revealed the presence of the following bats within 3km of the site;

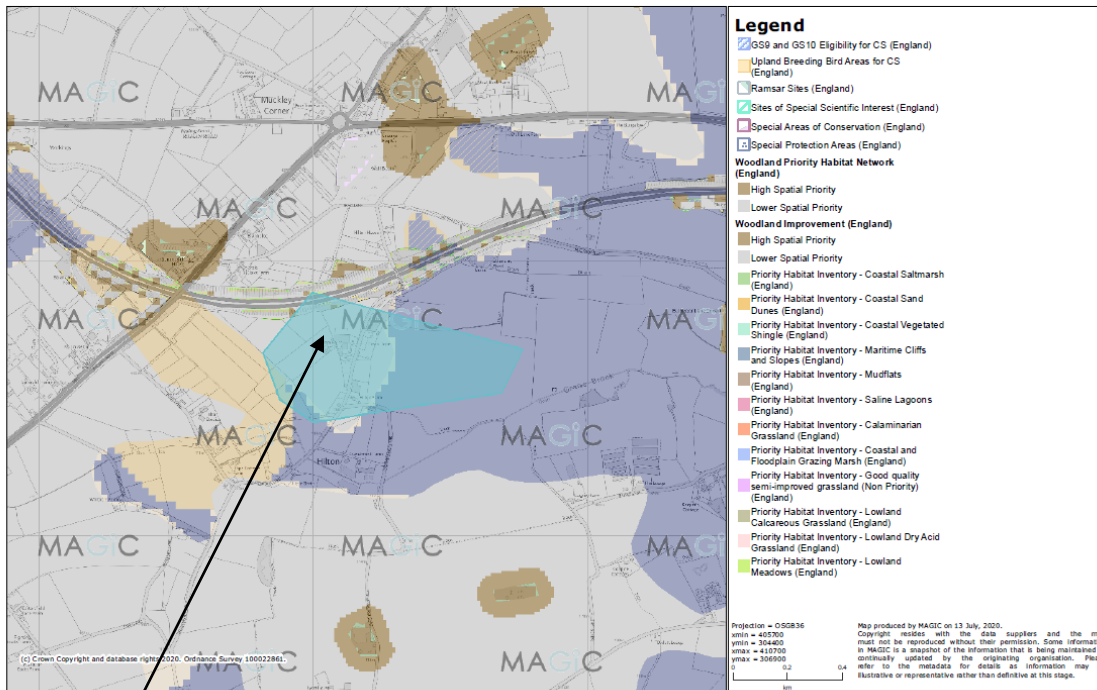
Myotis daubentonii.  
Myotis mystacinus/Brandtii.  
Nyctalus noctula.  
Pipistrellus pipistrellus.  
Pipistrellus pygmaeus.  
Plecotus auritus.

A search of the DEFRA MAGIC Dataset shows that there is an area of Lowland Heathland on the Priority Habitat Inventory to the north the site which of a special nature conservation status or significance. There are no habitats adjacent to the site which of a special nature conservation status or significance. There are small areas of Deciduous Woodland on the Priority Habitat Inventory to the north and south of the site. There is agricultural land surrounding the site. The small areas of deciduous woodland on the Priority Habitat Inventory in the landscape and the Lowland Heathland will provide forage opportunities for bats and there is connectivity between the woodlands, the hedgerows being a mixture of hedgerows with some mature trees and some being post and wire fences. The habitats around the site will provide only poor forage for bats. The site is in the National Habitat Network All Habitats Combined Network Enhancement Zone



**Barn Farm.**

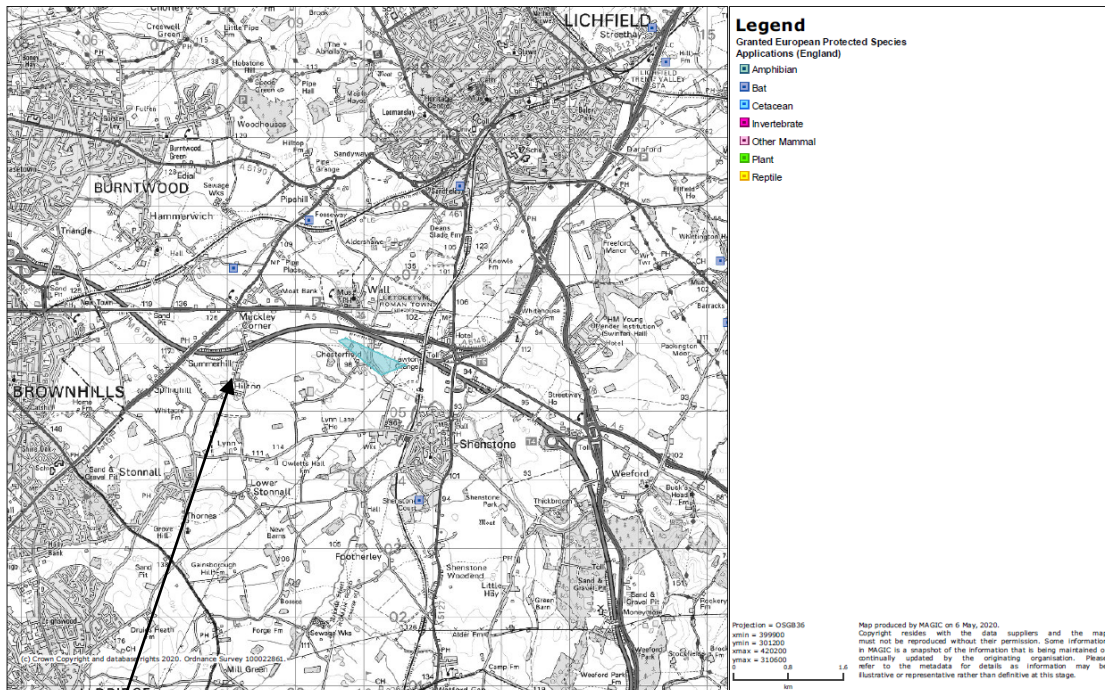
A search of the DEFRA MAGIC Dataset shows that the site falls inside of a Farm Wildlife Package area where there is support for Lapwings through Countryside Stewardship targeting. The site does not fall into the buffer zones around the Deciduous Woodland to the north and south of the site. There are no other biodiversity enhancement areas adjacent to the site.



**Barn Farm.**

A search of the DEFRA MAGIC Dataset shows that there have been a number of European Protected Species licenses granted locally. None of the sites is adjacent to the property being surveyed. Those highlighted yellow were obtained by the bat Consultant.

Species.	Destruction of or damage to a breeding site for bats.	Destruction of or damage to a resting place for bats.
Common pipistrelle bats	No	Yes
<b>Brown long eared bats.</b>	<b>No</b>	<b>Yes</b>
Common pipistrelle, Brown long eared bats.	No	Yes
<b>Common pipistrelle, Whiskered bats.</b>	<b>No</b>	<b>Yes</b>
Brown long eared, Common pipistrelle bats.	No	Yes
Brown long eared, Common pipistrelle bats.	Yes	Yes
Common pipistrelle, Brown long eared, Natterer's bats.	Yes	Yes



**Barn Farm.**

### Constraints.

The building survey was undertaken in the summer when evidence of bats internally can still be seen but external evidence may be unavailable after heavy rain. There was occasion light rain during the morning of the survey. The surveyor does not believe that the weather masked any evidence or access points for bats. There were no constraints to the surveyor for access in the building survey for bats. The survey was undertaken during the Covid-19 period of social distancing but there were no constraints to the surveyor for access in the building survey for bats.



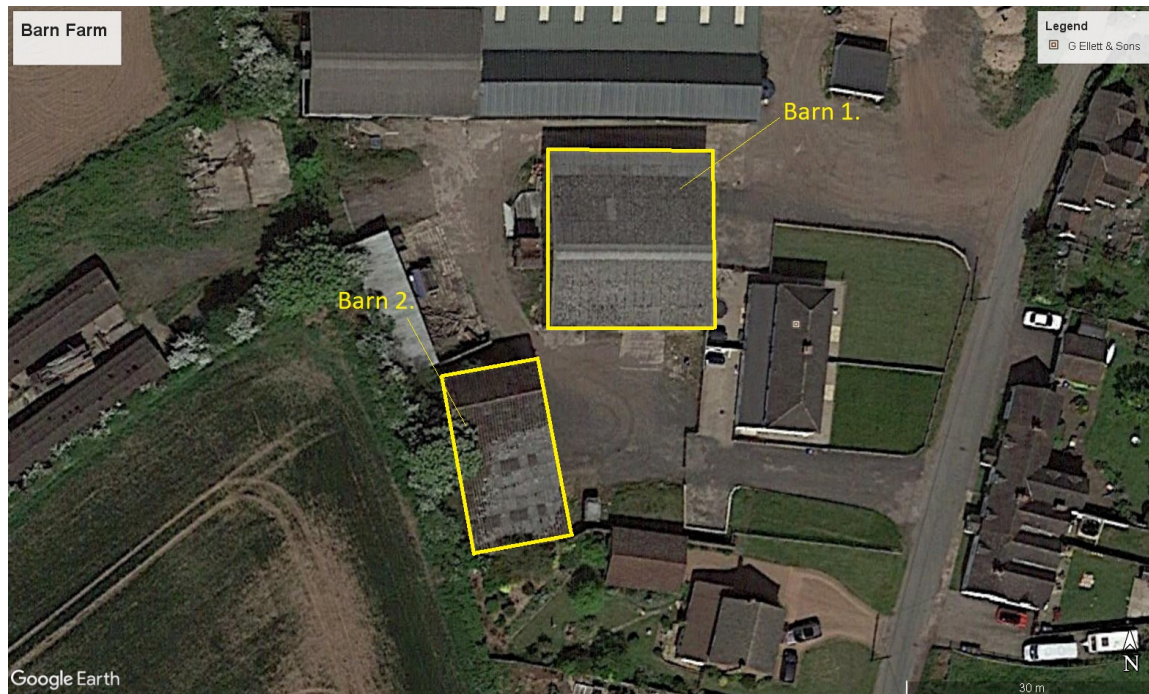
## Building Survey.

The buildings to be surveyed consisted of two steel portal framed agricultural buildings.

**Barn 1.**



**Barn 2.**



The results of the building survey are presented as the likelihood of bats using an area/feature;

- |                  |  |
|------------------|--|
| <b>None.</b>     | Bats are unlikely to use the feature/area in any way.  |
| <b>Poor.</b>     | Bats may use the feature/area but it is not thought to be likely.  |
| <b>Possible.</b> | The feature/area provides an area that may be used by bats but no direct evidence of occupation was found. |
| <b>Definite.</b> | Clear evidence of the use of a feature/area as a place of shelter, such as droppings.                      |

**Barn 1.**

This is a steel portal framed building with a pitched roof.



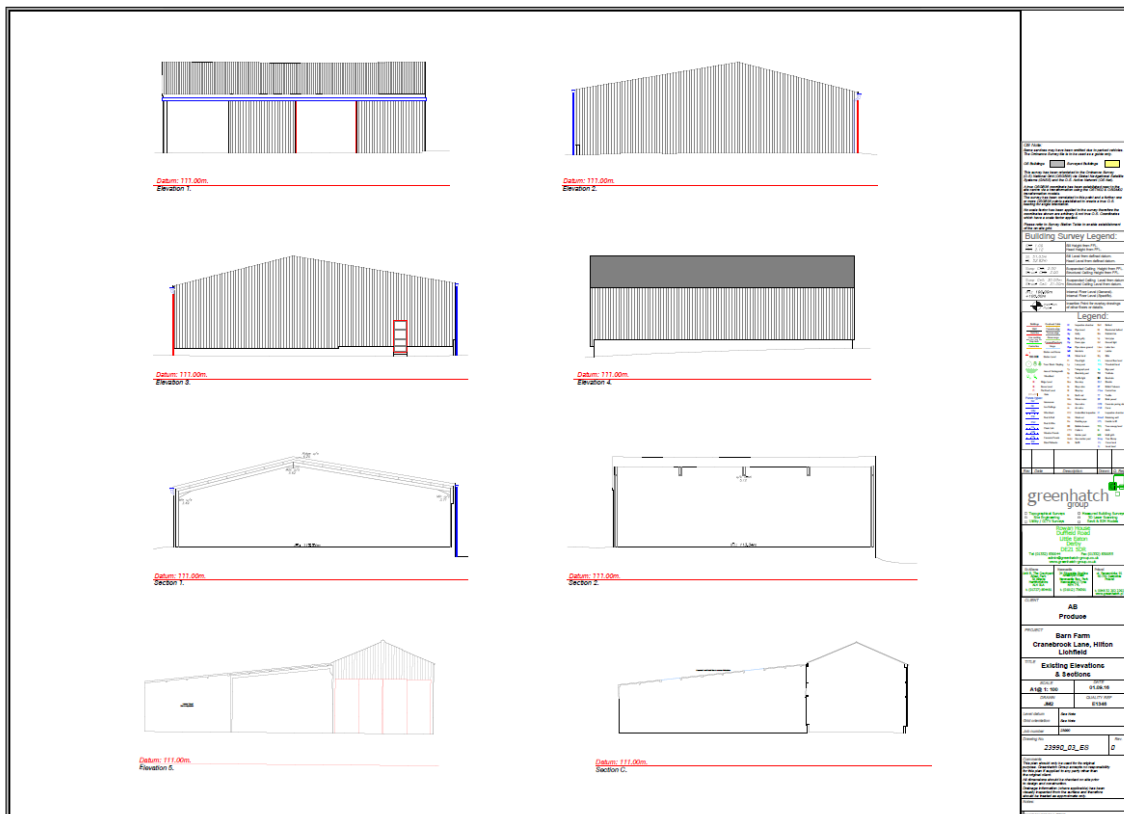
The building has timber sheeting rails with fibre cement vertical and roof sheets.





There is no access for bats to the space between the rear of the fibre cement roof sheets and the timber sheathing rails because of the closed cell insulation does not allow bats any access to the gaps and the surface is not conducive to bat movement.

**Bat roosting opportunities; None**



## Barn 2.

This is a steel portal framed barn with a steel framed mono pitch extension.



The steel portal framed barn has angle iron roof trusses and sheeting rails with corrugated iron vertical sheets. The roof has fibre cement sheets fixed to angle iron sheeting rails. There is no roosting for bats between the roof sheets and the sheeting rails because the iron surface provides no good surface for bats to move along.





The mono pitch extension has a steel frame with timber sheeting rails.



There is a closed cell insulation board between the rear of the fibre cement vertical and roof sheets and the sheeting rails. As a result of this and the metal skin to the insulation there is no access or roosting for bats.



**Bat roosting opportunities; None**

## Birds.

There was no evidence of birds nesting in Barn 1. There is access to the inside of the barn through the broken fibre cement sheets but there was no evidence of bird nesting.



There was evidence of birds nesting in Barn2 with a Blackbird's nest and a Swallow's nest. The Swallow nest currently has young and the Blackbird was seen in the barn but there was no evidence of any eggs at this time.



Birds are nesting in other barns on the site.



### **Conclusion.**

There was no evidence of bats using the buildings as a place of shelter

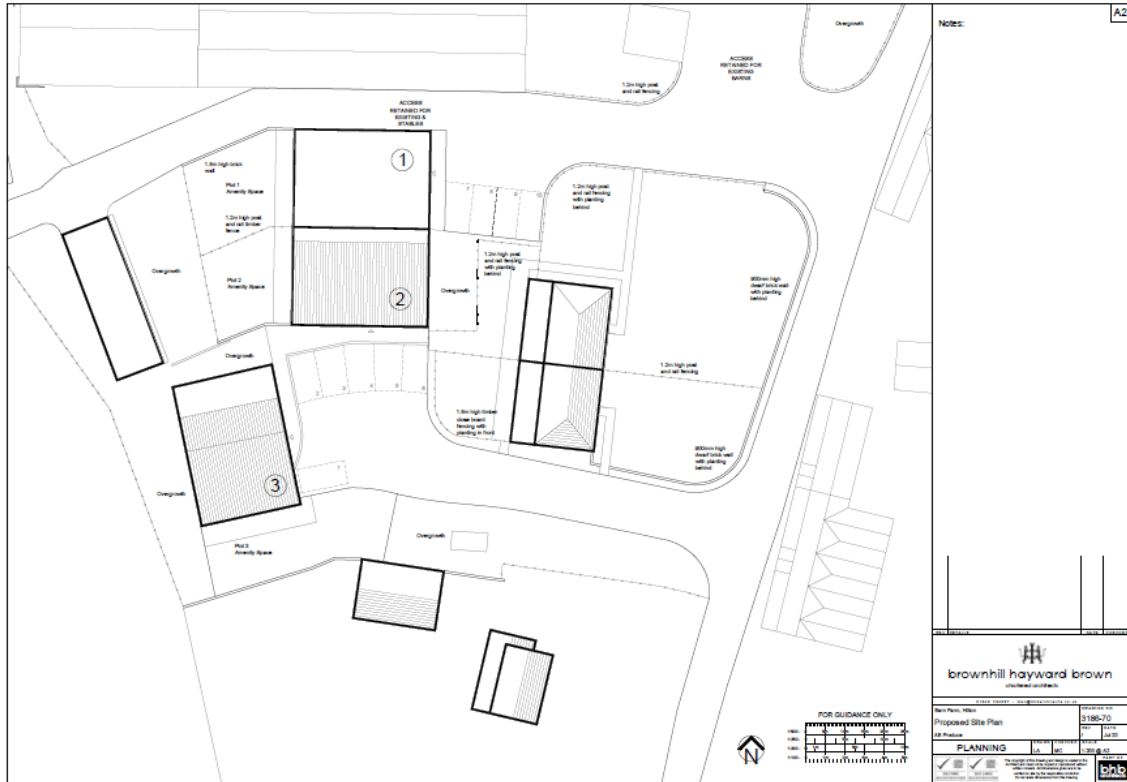
The conversion of Barn 1 and Barn 2 to a dwelling will not affect a place of shelter for bats. New roosting opportunities for bats can be created by installing a bat box on the site.

The conversion of Barn 1 to a dwelling will not affect nesting birds.

The conversion of Barn 2 to a dwelling will affect nesting birds. Replacement nesting opportunities for birds can be provided by installing new bird boxes on site.

Birds are nesting in Barn 2. There must be a check for nesting birds if development commences between the beginning of March and the end of August in any year. If birds are nesting no work can commence until the young have fledged. Conversion of the building between the beginning of September and the end of February in any year will not affect nesting birds.

The site has low value to biodiversity being hard standing and areas of rough grass and weeds. Proposed plans include the creation of gardens with amenity grassland, trees and ornamental shrubs which will result in no net loss in biodiversity for the site.



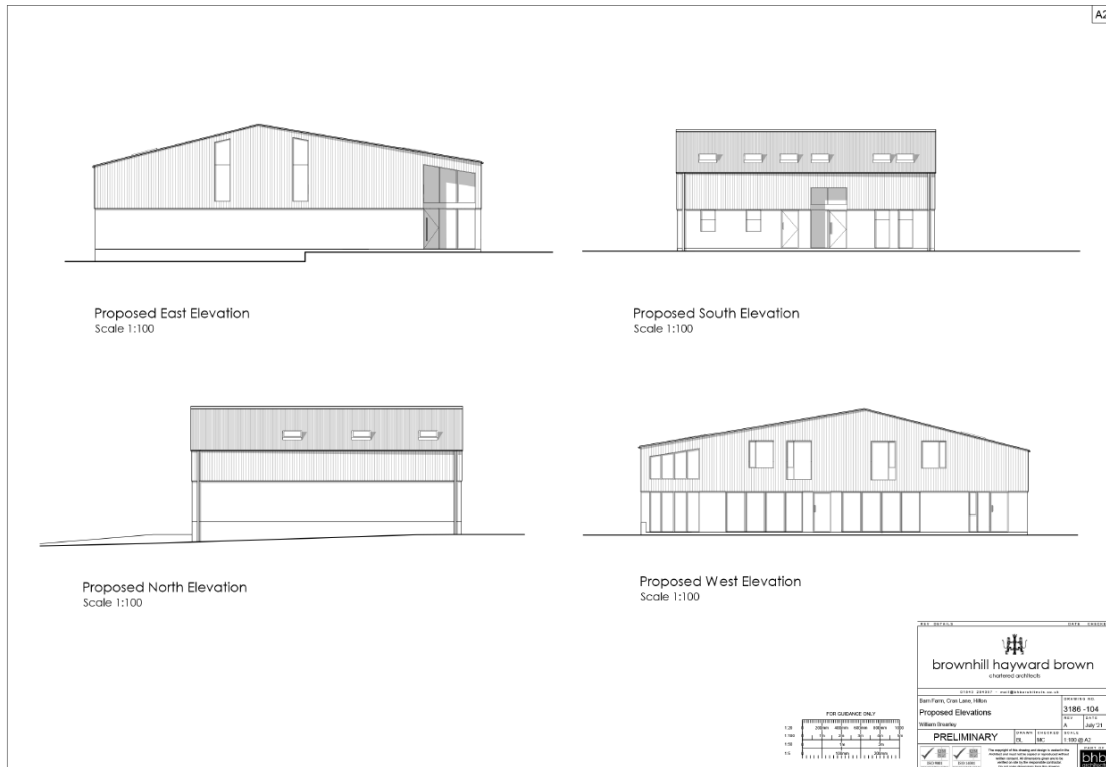
**Impacts on bats.**

The conversion of the property will have no impact on bats. The method of working below must be followed to ensure that the potential for disturbing or harming bats, however small, is minimized and avoided.

There is no loss of habitat for bats from the proposed development and there will be no impact on habitat, forage or commuting routes from the proposed development.



## Enhancements for bats.

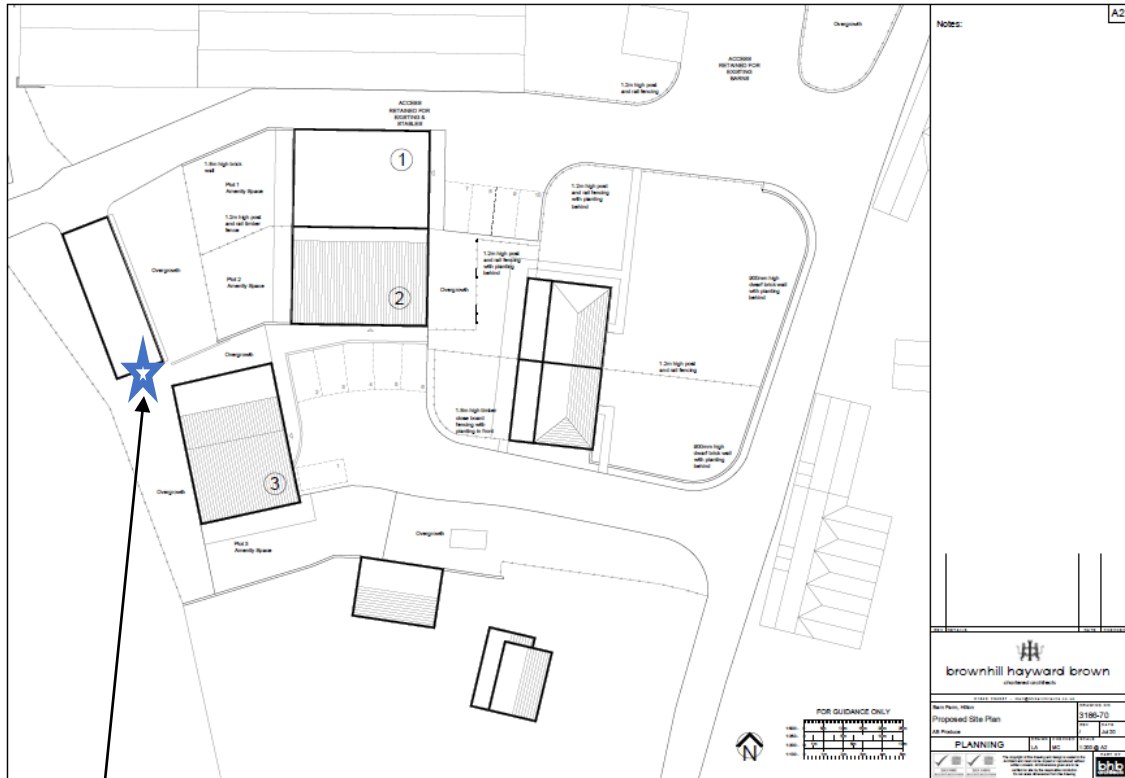


The materials for the proposed development do not offer opportunities for bats to roost in the building due to the metal and plastic vertical and roof cladding. The low level brick and blockwork will not provide a good site for bat boxes because of the low height.



The best way to achieve enhancements for bats will be to fit a bat box, such as that shown below, to the gable end of the retained building to the rear of the site. This will benefit from having a southern elevation and being close to the hedgerows for bat forage and commuting routes.





**Bat box.**

There should be no direct illumination of the new bat roosting opportunity. Lighting around the site will be by low wattage down lights at low level to provide security and safety lighting for the dwelling and service area. This lighting will be set no higher than the head height of the ground floor windows and will minimise the possible disturbance to bats in this area. Any security lighting will use PIR's to ensure they turn off automatically once the movement has ceased.

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Is that a Bat?, N Middleton, 2020



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S.Christopher Smith MRICS MSc CEnv.

## Appendix 1.

### Roost Types as designated by Natural England and the Bat Surveys for Professional Ecologists, Good Practice Guidelines.

- A. 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.
- B. 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.
- C. Feeding roost: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.
- D. 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.
- E. Swarming site: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites
- F. Mating sites: sites where mating takes place from later summer and can continue through winter.
- G. Maternity roost: where female bats give birth and raise their young to independence.
- H. Hibernation roost: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.
- I. 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.
- J. Other – Explain what the roost type is if not one of the above (it is recognised that roost types are interchangeable and not always easy to classify according to the nuances of certain species).