

Protected Species Surveys of Two Barns at  
Charity Farm,

Haighton Lane, Bangor on Dee,

Wrexham LL13 0BW

GR SJ 42911 42359

On 4<sup>th</sup> April, 22<sup>nd</sup> May and 14<sup>th</sup> June 2017

Report completed 11.7.17

Survey by:  
Susan Worsfold BSc Hons GradCIEEM  
for Worsfold and Bowen  
of Springfields, Station Road,  
Llanymynech,  
Shropshire. SY22 6ED

01691 772310/07752 105600  
s.worsfold@hotmail.co.uk  
01691 831450  
mike.worsfold@tiscali.co.uk

Requested by:  
Rob Adams  
Toad Hall,  
Haighton Lane,  
Bangor on Dee  
Wrexham  
LL13 0BW

## Summary

Protected species surveys at two barns at Charity Farm, Haighton Lane, Bangor on Dee, Wrexham LL13 0BW were carried out on 4<sup>th</sup> April and 22<sup>nd</sup> May and 14<sup>th</sup> June 2017 by Susan Worsfold, Paul Roberts, Dawn Thompson Byrne and Rachel Thompson for Worsfold and Bowen of Springfields, Station Road, Llanymynech, Shropshire SY22 6ED.

The areas investigated are shown in Annexes 1-2.

Evidence of protected species was searched for at the request of Rob Adams of Toad Hall, Haighton Lane, Bangor on Dee, Wrexham LL13 0BW in relation to proposed conversions.

Details of the survey methods and findings are included. The findings are supported by photographic evidence.

### *Birds*

Swallows have been using Barn 2, therefore compensation should normally be provided for the loss of this nesting site in the form of an outbuilding or porch. However, the associated farm buildings are to remain and are currently being used by swallows so it is considered that these would be adequate. Bird boxes should be included as described on page 23.

### *Great crested newts (GCN)*

There is not considered to be any risk of harm to individual GCN or threat to their conservation status.

### *Bats*

It is not considered that the proposed work would have any significant negative impact on bats or their conservation status as there was no evidence of bats roosting in either building. However, in the interest of biodiversity enhancement it is recommended that a bat box is incorporated into each converted building.

### *Other protected species*

There was no evidence of any other protected species on the site or within 30 m of the site.

## Scope

Protected species surveys at two barns at Charity Farm, Houghton Lane, Bangor on Dee, Wrexham LL13 0BW were carried out on 4<sup>th</sup> April and 22<sup>nd</sup> May and 14<sup>th</sup> June 2017 by Susan Worsfold, Paul Roberts, Dawn Thompson Byrne and Rachel Thompson for Worsfold and Bowen of Springfields, Station Road, Llanymynech, Shropshire SY22 6ED at the request of Rob Adams of Toad Hall, Houghton Lane, Bangor on Dee, Wrexham LL13 0BW in relation to proposed conversions. Evidence of the presence of protected species was sought as defined in:

The Conservation of Habitats and Species Regulations 2010 and listed in:

Schedule 2. European protected species of animals

Schedule 5. European protected species of plants

The protection of Badgers Act 1992

Protected species which might be associated with such a site include bats, owls and other breeding birds. The area around the site might be used by badgers, dormice, amphibians and reptiles, and might contain protected plant species.

## Background

The barns are part of a working farm but are not being used to their full potential and are therefore partly redundant. They are still in use as stabling for young cattle and sheep and storage.

## Procedures and equipment

The buildings were examined to establish the presence of or evidence of use by protected species of animals. A risk assessment was made before entering the buildings. A visual inspection was carried out to assess the potential or actual use by bats, of the interior and exterior of the buildings. They were searched systematically for any signs of bats, including droppings, rub marks and urine stains at entrances to roosts and insect remains, such as moth or butterfly wings. Crevices were checked where possible.

Powerful lamps (LED Lenser P14, Cluson Clulite CB2) were used for examination of interiors and under eaves. Binoculars were used to examine parts which were not otherwise accessible. Photographs were taken of all areas and those of relevance are shown in Annex 4.

One dusk emergence survey and one pre-dawn re-entry survey were carried out in accordance with *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)* (Collins 2016).

Frequency division detectors were used to record any bat sounds in and around the barns for later analysis on the computer. These were Anabat SD1, Anabat II, Echo Meter EM3, Anabat Express and Song Meter SMZC.

### *Personnel*

Susan Worsfold (SW) BSc Hons Grad CIEEM is a licensed and experienced bat worker and VBRV, registration number CLS0895 2015-12555-CLS-CLS (CL15 Bat Roost Visitor Level 1) and registration number CLS 0895 2015-12556-CLS-CLS (CL18 Bat Survey Level 2 ) (NE) and 72725:OTH:CSAB:2016 (NRW);

Licensed great crested newt worker, registration number 2015-8194-CLS-CLS (NE) and 72936-OTH-SA:2016 (NRW)

Paul Jonathan Roberts (PR) is a licensed and experienced bat worker, licence numbers 2015-15009-CLS - CLS (NE) and 55319:OTH:CSAB:2016 (NRW)

Dawn Thompson Byrne (DTB) and Rachel Thompson (RT) are in training

### **Annexes:**

|                                                 |     |
|-------------------------------------------------|-----|
| Location maps                                   | 1   |
| Aerial photograph                               | 2   |
| Floor Plans and Elevations as existing (Barn 2) | 3.1 |
| Floor plan as proposed (Barn 2)                 | 3.2 |
| Photographs of the buildings                    | 4   |
| Bats and the Law                                | 5   |
| Birds and the Law                               | 6   |

### **Environment**

|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| Elevation               | 46 m                                                     |
| Nearest town & distance | Wrexham, 10 km north west                                |
| Situation               | Rural, pastoral                                          |
| Nearby woodland         | Several small areas of woodland within 500 m             |
| Nearby ponds            | 10 ponds within 500 m                                    |
| Rivers etc              | Brook 170 m south west                                   |
| Hedges                  | Good network of well maintained stock hedges, some trees |
| Nearest designated site | Cloy Brook Pastures (SSSI) 3.2 km west                   |

## Findings

### *Description of the barns and signs of use or potential for use by protected species*

#### Barn 1

The building is one storey and one room. The walls are of double skin brick with no cavity, unlined. Windows are glazed and intact. Doors are of wood and intact but some are left open. The pitched roof is of asbestos, unlined, with overlaps at each gable end and ventilation structures at the apex. The frame is of steel. No evidence of use by bats or birds was found.

#### Barn 2

This is the larger of the two barns and is of two storeys. The walls are of double skin brick with no cavity, unlined. The roof is pitched, tile, partly lined with bitumastic felt with timber rafter and purlin frame. Some windows were glazed and intact while others were not glazed. Doors were of wood. Ceilings/floors were of wood. There were eight rooms including loft spaces. No evidence of use by bats was found There were 3 swallow nests on the first floor.

## Activity Surveys

| Date    | Sunset/<br>Sunrise | Start | End   | Temp<br>Start °C | RH Start<br>% | Temp<br>End °C | RH End<br>% | Cloud % | Wind<br>0-6 |
|---------|--------------------|-------|-------|------------------|---------------|----------------|-------------|---------|-------------|
| 22/5/17 | 21.12              | 20.4  | 06:25 | 19               | 59            | 13             | 72          | 20      | 1           |
| 14/6/17 | 4.48               | 3     | 21.15 | 16               | 70            | 10             | 90          | 20      | 0           |

### 22/5/17

*Number of observers: 3*

*Observer 1:* SW; equipment: Echo Meter EM3; Station: north corner of barn 1, watching barns 1 and 2

*Observer 2:* ; PR; equipment : Anabat SD1; Station: east corner of barn 2, watching barns 1 and 2

*Observer 3:* DTB; equipment : Anabat SD1; Station: north corner of barn 2, watching barn 2

Stationary equipment: Anabat Express in doorway between G and H, Song Meter SMZC in K.

*Bat species seen and/or recorded:*

*First bat:*

Common pipistrelle (*Pipistrellus pipistrellus*)

*Time:* 21.38; *Location:* PR and DTB stations

*Subsequently:* Frequently, all stations except internally between G and H

*Myotis sp*

*Time:* 21.51; *Location:* DTB station

*Subsequently:* Occasionally, all stations except internally between G and H

|Noctule (*Nyctalus noctula*)

*Time:* 22.12; *Location:* PR station

*Subsequently:* None

A bat was seen foraging in and out of barn 1 from 22.00 for around 5 minutes. Bats were seen foraging in the courtyard between 21.45 onwards. Two bats were seen foraging in and out of barn 2 between 21.41 and 22.20. No bats were seen to emerge from either building without having previously entered it.

### 14.6.17

*Number of observers: 3*

*Observer 1:* SW; equipment: Echo Meter EM3; Station: south corner of barn 2, watching barn 2

*Observer 2:* ; PR; equipment : Anabat II; Station: east corner of barn 2, watching barn 2

*Observer 3:* RT; equipment : Anabat SD1; Station: north corner of barn 2, watching barn 2

Stationary equipment: Anabat Express in doorway between G and H, Song Meter SMZC in K.

*Myotis sp*

*Time:* 03.34; *Location:* DTB station

*Subsequently:* Frequently, all external stations

Common pipistrelle (*Pipistrellus pipistrellus*)

*Time:* 03.39; *Location:* PR station

*Subsequently:* Occasionally, all external stations

*Last bat:*

Noctule (*Nyctalus noctula*)

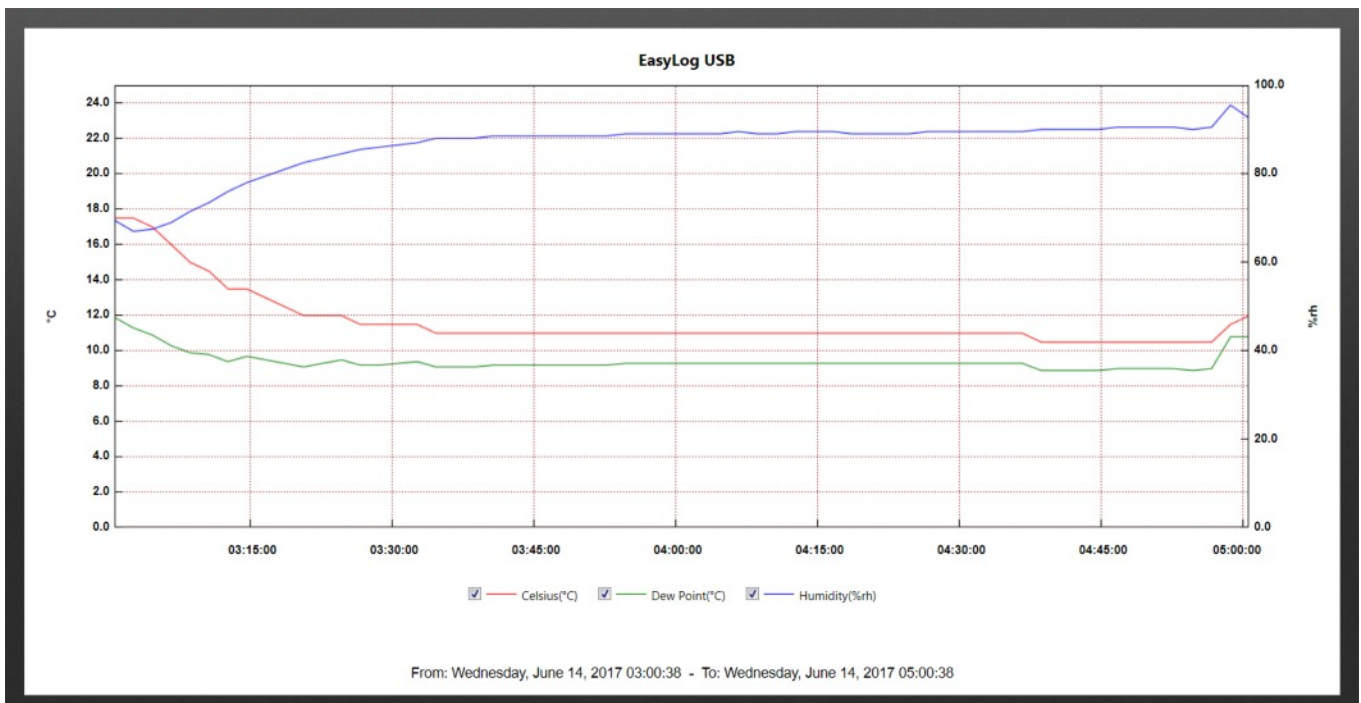
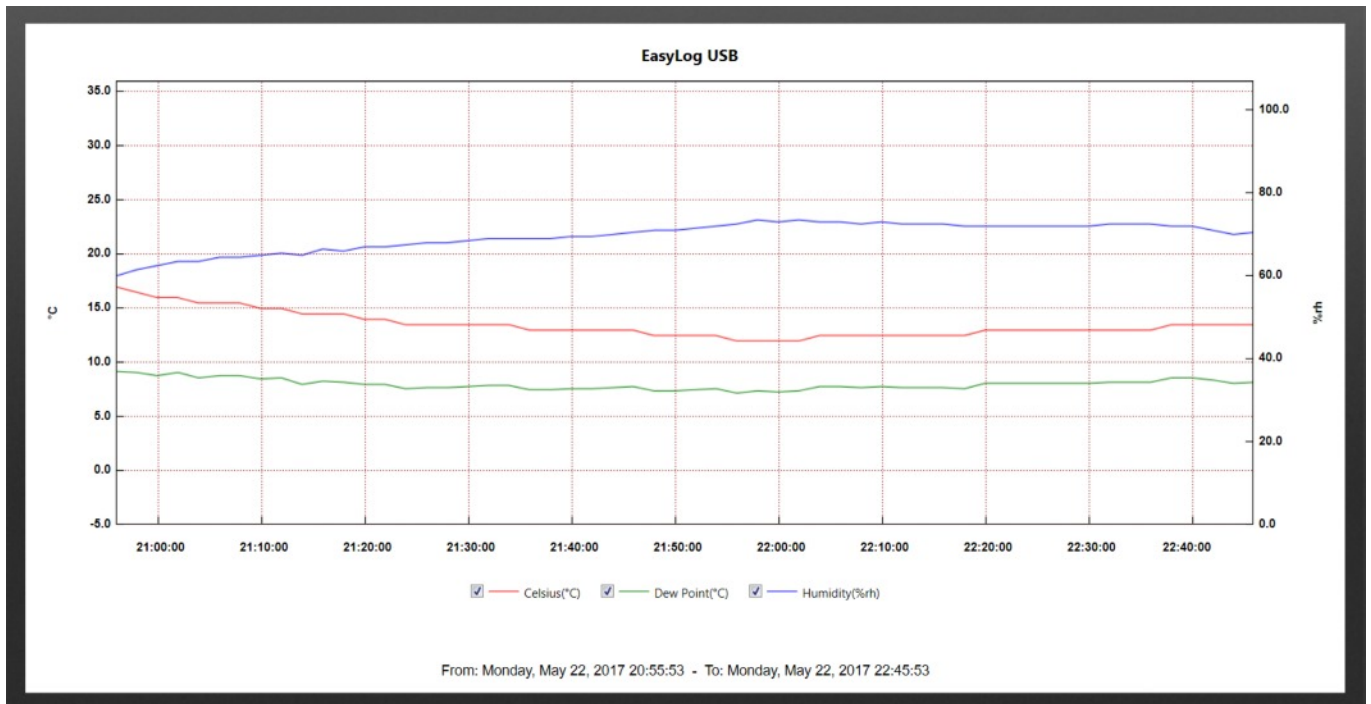
*Time:* 04.07; *Location:* SW station

*Subsequently:* None

No bats were recorded internally.

No bats were seen to enter the building (barn 2). Bats were seen foraging around the barn and along the road.

# Temperature and Humidity Charts



## Conclusions and Impact Assessment

### *Birds*

1. The proposed development would entail the loss of nesting sites for swallows, therefore compensation should normally be provided for the loss of this nesting site in the form of an outbuilding or porch. However, the associated farm buildings are to remain and are currently being used by swallows so it is considered that these would be adequate..

2. The impacts which the proposed development might have on other breeding birds should be small, providing that no nests are occupied or being built at the time the work is done.

3. It is recommended that two woodcrete nests suitable for small birds such as robin, blackbird, tit species and sparrow should be incorporated into the new or renovated buildings, and one woodcrete nests suitable for swallows. One swift brick is also recommended:

House Sparrow Terrace - Wooden (or woodcrete) nest box with 3 sub-divisions to support 3 nesting pairs. To be placed under the eaves of buildings or incorporated into walls. Entrance holes: 32mm diameter. Dimensions: H310 x W370 x D185mm. Also suitable for tits, redstarts and spotted flycatchers. Place at least 2 m from the ground.

Swift brick - an entrance hole of 55cm x 33cm. and external box/brick dimensions: Height 18cm x width 26.5 x depth 22cm.

Other designs of nest boxes may also be suitable.

4. If birds should gain access to the buildings and begin building nests before or during the work, then the work in that area will have to stop until the young have left the nests (see Annex 5).

5. No owl pellets or droppings were found that would indicate that either of the buildings are being used by owls.

### *Bats*

6. There was no evidence of bats roosting in the buildings, despite a full survey according to the published guidelines. In our opinion the proposed development will not affect individual bats or the conservation status of bats.

7. However, in the interest of biodiversity enhancement it is recommended that two bat boxes are fitted externally or incorporated into the converted buildings. Further information is given in the bat box information pack available at <http://www.bats.org.uk/index.php>

8. Any chemical treatment of timbers should not take place between the beginning of October and the end of March to avoid harm to hibernating bats.

9. No pointing or repairs of any gaps or crevices which cannot be easily seen to be empty should take place without consulting a licensed bat worker, to minimise the possibility of incarcerating bats.

10. If bats are found at any stage of the development then work in that area must stop and a licensed bat worker contacted for advice.

11. A lighting plan should be designed in accordance with the Bat Conservation Trust guidelines: [http://www.bats.org.uk/pages/bats\\_and\\_lighting.html](http://www.bats.org.uk/pages/bats_and_lighting.html)

### *Other protected species*

No badger setts were seen on the site or within 30 m of the site.

No evidence of use by dormice was found on or near the site.

## Bibliography

Bat Conservation Trust available at: <http://www.bats.org.uk/index.php>

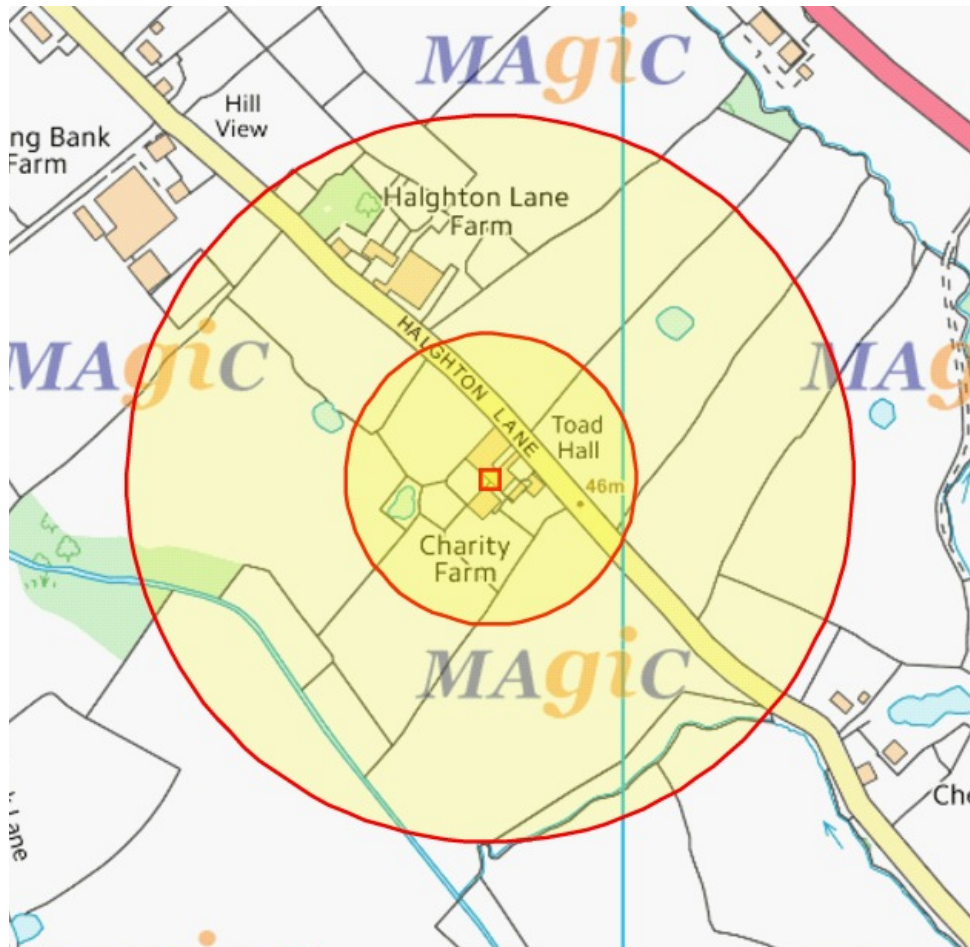
Collins J. (Ed) (2016) *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)*. The Bat Conservation Trust, London

Mitchell-Jones, A. J. and McLeish, A. P. (2004) *Bat Worker's Manual*, Peterborough: Joint Nature Conservation Committee

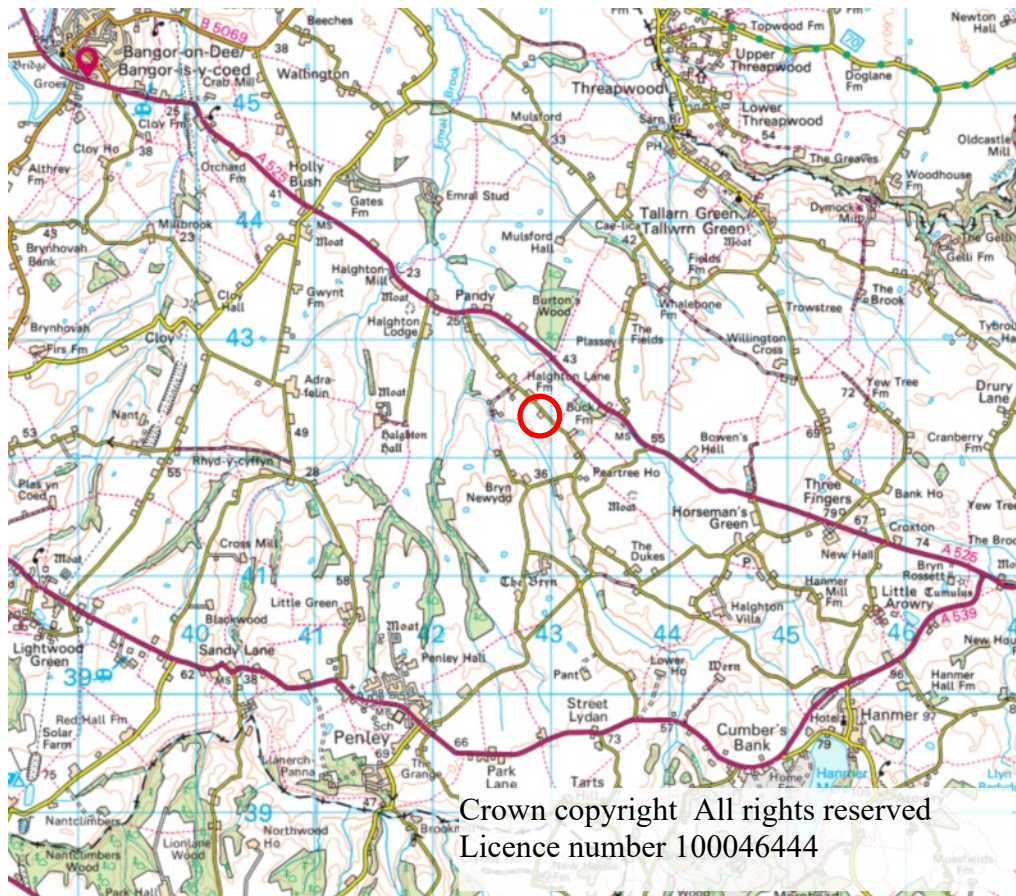
Mitchell-Jones, A. J. (2004) *Bat Mitigation Guidelines*, Peterborough: English Nature

Natural Resources Wales available at: <https://naturalresources.wales/?lang=en>

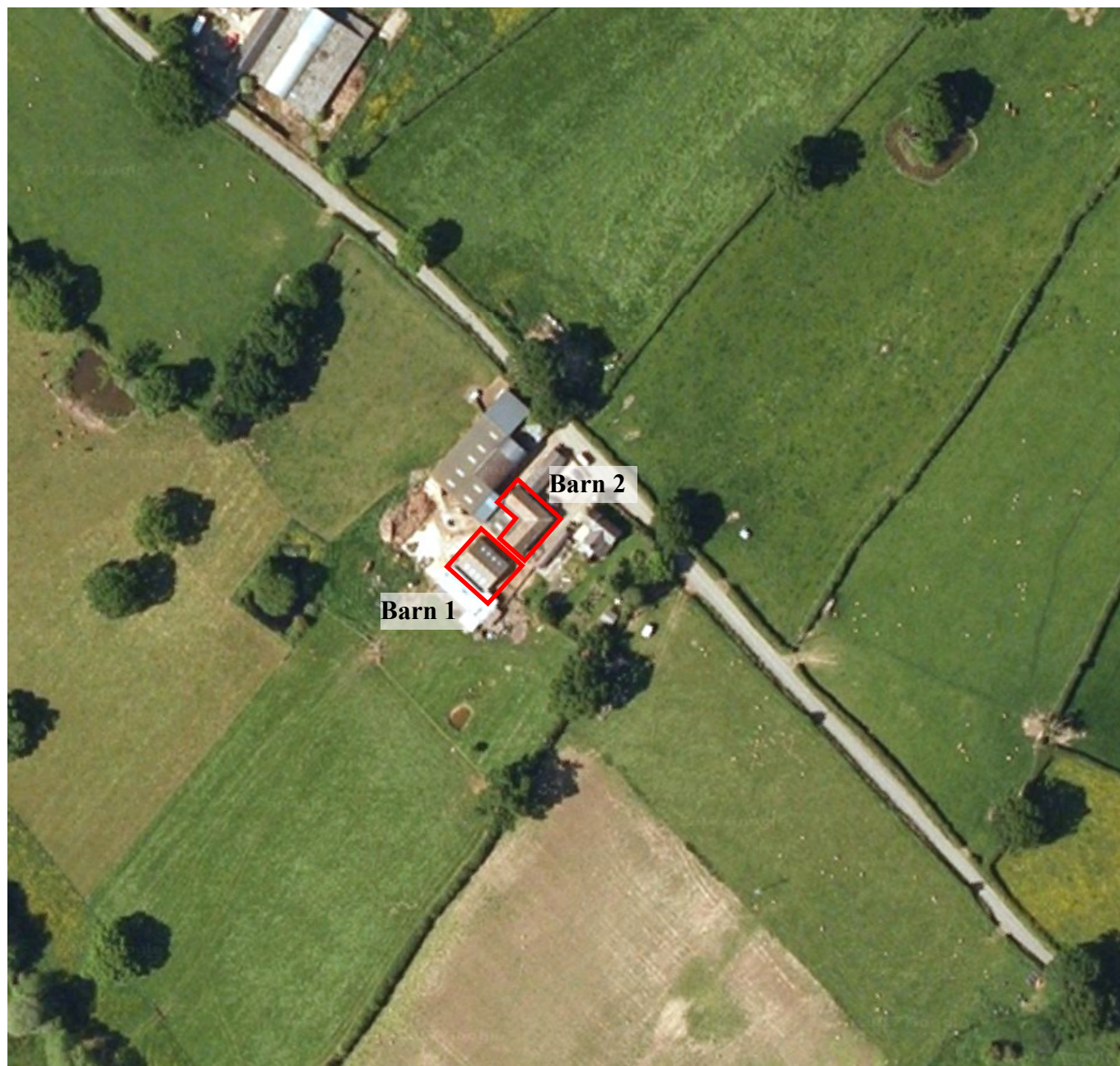
## Annex 1.1: Location Map



## Annex 1.2: Location Map



## Annex 2: Aerial Photograph





The image displays two architectural floor plans for a house, labeled 'Ground Floor Plan 1:50' and 'First Floor Plan 1:50'.

**Ground Floor Plan 1:50:** This plan shows a large lounge area on the left with a sofa and armchairs. Adjacent to it is a kitchen/breakfast area with a curved breakfast bar. A WC and utility room are located near the center. A large boat room is situated at the rear. The plan also includes a snug, a bathroom, and a kitchen. A note indicates 'Boat room door opening to the garden'.

**First Floor Plan 1:50:** This plan shows a master bedroom with a bay window, two other bedrooms, a bathroom, and a store. A landing area connects the bedrooms. A note indicates 'Bedroom door opening to the garden'.

| Title                                                                                                        | Class       | Level      | Index |
|--------------------------------------------------------------------------------------------------------------|-------------|------------|-------|
| Project:<br>Proposed alterations at<br>Chantry Farm, Hailgilton Lane,<br>Bongor on Des.<br>Whisham, LL18 0BW |             |            |       |
| Title:                                                                                                       | Planning:   | Scale (A1) |       |
|                                                                                                              | Floor Plans | 1:50       |       |
| Drawn by:                                                                                                    | Date:       |            |       |
| D.J. Edwards                                                                                                 | March 2017  |            |       |
| Drawing No:                                                                                                  | Sheet:      |            |       |
| A043/005                                                                                                     | 1 of 2      |            |       |



Office 24/5  
 36 Heather Business Park,  
 Birmingham, B14 7BT  
 Tel: 0121 705 0050  
 www.blueprint-arch.co.uk  
 © copyright blueprint

#### Annex 4.1: Photographs of Barn 1 Exterior



View from the east



View from the north



View from the west

## Annex 4.2: Photographs of Barn 1 Interior



# Annex 4.3: Photographs of Barn 2 Exterior



# Annex 4.4: Photographs of Barn 2 Interior Ground Floor



#### Annex 4.5: Photographs of Barn 2 Interior First Floor



Roof detail of G



**Annex 4.6: Photographs of Barn 2 Interior First Floor**



## Annex 5: Bats and the Law

Taken together, the Wildlife and Countryside Act 1981 (WCA) (as amended), the Countryside and Rights of Way Act 2000 (CRoW), and the The Conservation of Habitats and Species Regulations 2010 make it illegal to:

- intentionally or deliberately kill, injure or capture (or take) bats;
- deliberately disturb bats (whether in a roost or not);
- recklessly disturb roosting bats or obstruct access to their roosts
- damage or destroy bat roosts;
- possess or transport a bat or any part of a bat, unless acquired legally;
- sell (or offer for sale) or exchange bats, or parts of bats.

The word 'roost' is not used in the legislation, but is used here for simplicity.

The actual wording in the legislation is 'any structure or place which any wild animal ...uses for shelter or protection' (WCA) or 'breeding site or resting place' (Conservation of Habitats & Species Regulations).

Because bats tend to re-use the same roosts after periods of vacancy, legal opinion is that the roost is protected whether or not the bats are present at the time.

### Enforcement

The police are the main enforcement body for wildlife offences, and in some cases local authorities may also take action.

Section 24(4) of the 1981 Act gives English Nature (or, in Wales, NRW (Natural Resources Wales) the function of providing advice or assistance to the police in respect of alleged offences.

The maximum fine on conviction of offences under Section 9 of the 1981 and Regulation 41 currently stands at £5000 and/or imprisonment for up to 6 months.

**Note:** Fines may be imposed in relation to each offence committed, so operations involving many animals or repeated offences can potentially accrue large fines.

In addition, items which may constitute evidence of the commission of an offence may be seized and detained.

The CRoW Act 2000 also amends the Police and Criminal Evidence Act 1984 to render Section 9 offences 'arrestable', giving the police significant additional powers.

### The use of a NRW licence in respect of bat species

A Welsh National Assembly licence is a licence which permits an action that is otherwise unlawful,

To ensure that no illegal activities are undertaken during the course of a development, it is recommended that a licence is applied for if, on the basis of survey information and specialist knowledge, it is considered that

- the site in question is demonstrably a breeding site or resting place for bats
- the proposed activity is reasonably likely to result in an offence

No licence is required if the proposed activity is unlikely to result in an offence.

Natural England's view (we are not aware of equivalent guidance published by NRW) is that:

“ a licence **is** needed if the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity **is reasonably likely** to result in an offence under Regulation 41 (animals) or 45 (plants); or

If the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity **is reasonably unlikely** to result in an offence under regulation 41 or 45 then no licence is required. However, in these circumstances Natural England would urge that reasonable precautions be taken to avoid affecting EPS during works. If EPS are found then work should cease until you have assessed (in consultation with a consultant ecologist) whether you can proceed without committing an offence. A licence should be applied for if offences are unavoidable and the work should not be re-started until a licence is obtained.”

## **Annex 6: Birds and the Law**

All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, To:

- a) intentionally kill, injure or take any wild bird
- b) intentionally take, damage or destroy the nest of any wild bird while it is in use or being built
- c) intentionally take or destroy the egg of any wild bird
- d) have in one's possession or control any wild bird (dead or alive) or part of a wild bird which has been taken in contravention of the Wildlife and Countryside Act 1981 or the Protection of Birds Act 1954
- e) have in one's possession or control an egg or part of an egg which has been taken in contravention of the Act
- f) have in one's possession or control any birds of a species occurring on Schedule 4 of the Act unless registered and ringed in accordance with the Secretary of State's regulations.
- g) intentionally (or recklessly, in England and Wales only) disturb any wild bird listed on Schedule 1 while it is nest building or is at (or near) a nest with eggs or young; or disturb the dependent young of such a bird.