

Ecological Appraisal and Impact Assessment **at**

An Outbuilding at Bridge House,

Vicarage Lane, Penley,

Wrexham LL13 0NF

Grid Ref. SJ 4041 8080

On 27th July and 16th August 2018

Report completed 25th November 2018
Ref: BRI270718

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Contents

Section	Title	Page
1	Summary	3
2	Introduction	4
3	Methodology	4
3.1	Scope	4
3.2	Desk Study	5
3.3	Field Survey	5
4	Baseline Ecological Conditions/Results	6
4.1	Designated Sites	6
4.2	Habitats	6
4.3	Species and Species Groups	6
5	Description of the Development	7
6	Assessment of Effects and Mitigation Measures	7
7	Compensation	8
8	Enhancement Recommendations	8
9	Ecological Constraints	8
10	Monitoring	8
11	Conclusions	8
12	Bibliography	9
13	Appendices	10
13.1	Activity Surveys	10
13.2	Survey Conditions	12
13.3	OS Location Map	13
13.4	Map Showing Zones of Influence for Great Crested Newts	13
13.5	Aerial Photograph	14
13.6	Plans as Existing and Proposed	15
13.7	Photographs	17
13.8	Legislation Relating to Bats	19
13.9	Legislation Relating to Birds	20

1. Summary

The purpose of the report is to assess the potential ecological impacts of a proposed development at Bridge House, Penley and advise on any mitigation measures to comply with local planning policy and government legislation.

The proposed scheme entails the conversion of the building to an annex to the main house, comprising a living area and store.

The building and adjacent land were examined to establish the presence of or evidence of use by protected species of animals. A visual inspection was carried out to assess the potential or actual use by bats, of the interior and exterior of the building. One pre-dawn survey and one emergence survey were carried out.

Impacts during the development should be low provided that no bird nests are constructed or occupied while work is taking place. If birds are building nests or any are occupied at any stage of the development work in that area must stop until the young have left the nest. There is not considered to be any significant threat to the conservation status of bats or danger of harm to individuals as the building was not being used by roosting bats. However precautions must be taken to avoid harm to any transient bats which may roost there in future. 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.

There is not considered to be any significant impact on any protected species or habitat as long as the recommended mitigation and compensation measures are followed.

2. Introduction

Susan Worsfold BSc (Hons) ACIEEM is an experienced wildlife surveyor, licensed bat worker and voluntary bat roost visitor. 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) (Natural England) and 72725:OTH:CSAB:2016 (Natural Resources Wales);

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

This report was commissioned by Chris and Karen Schaefer, owners of the site.

The site, at Bridge House, Penley, is a two storey building with car port and workshop extensions. It is in use as a storage area and the workshop and car port are in current use as such. See Appendix 13.6.

The proposed scheme entails the conversion of the building to an annex to the main house, comprising a living area and store.

The purpose of the report is to identify and address any significant ecological effects which are likely to occur as a result of the proposed development. This is necessary to comply with local planning policy and government legislation and avoid any offence being committed. Also, to describe any compensation, mitigation and enhancement measures which should be taken.

3. Methodology

3.1. Scope of the Assessment

The report incorporates a preliminary bat roost and nesting bird assessment, while also searching for use or potential use by any rare, threatened, endemic and non-native invasive species which might be associated with such a site in accordance with:

The Conservation of Habitats and Species Regulations 2017 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. Zones of influence for great crested newts (GCN) were considered using the rapid risk assessment tool, which forms part of the method statement template for GCN mitigation licence, as guidance to evaluate the impacts of the development in the absence of any licensed mitigation.

3.2. Desk Study

Wrexham Planning Portal was consulted for a review of previous ecological surveys carried out in the area. Lesser horseshoe bats and also evidence of use by badgers were recorded 2 km south east. Magic Maps was consulted for the presence of designated sites and protected habitats.

3.3. Field Survey

The building was examined to establish the presence of or evidence of use by protected species of animals. A risk assessment was made before entering the building. A visual inspection was carried out to assess the potential or actual use by bats, of the interior and exterior of the building. It was 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 Appendix 13.7. Some of the photographs in Appendix 13.7 were kindly provided by Chris Schaefer due to some of the ones taken during the visit being unusable. However, I can confirm that they are representative of the site at the time.

A visual assessment of the building and immediate surroundings was carried out on 27th July 2018 by Susan Worsfold BSc (Hons) Grad CIEEM, a licensed 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)

A dusk emergence survey was carried out on 27th July 2018 by Susan Worsfold and Craig Thomas, an experienced assistant. A pre-dawn survey of the building was carried out on 16th August 2018 by Susan Worsfold and Craig Thomas. These were done in accordance with *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)* (Collins 2016) (Appendix 12).

Survey times and conditions are given in Appendix 13.2.

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

4. Baseline Ecological Conditions/Results

4.1 Designated Sites

The nearest designated site is Cloy Brook Pastures, (Sites of Special Scientific Interest (Wales)) 1.4 km north west.

4.2 Habitats

Site: The nearest town is Overton which is 3.2 km west. The building was surrounded by hard standing on all sides. It is in a good state of repair. The walls of the main building are of brick and breeze block with no cavity. The windows were glazed and intact. The doors were of wood. The pitched roof is of slate, lined with thin wood sheets. There were wooden verge boards at the gable ends. The lean to workshop walls were of wood, brick and corrugated steel with a corrugated steel roof. The car port walls were of brick with a corrugated steel roof.

Adjacent land: The building is in a pastoral setting. There is mixed woodland 150 m north west. Emral Brook runs 15 m to the south west. There is a good network of hedgerows surrounding the site with some trees.

4.3 Species and Species Groups

iv. Birds

None nesting in the building. The car port has limited nesting potential.

vi. Bats

The site is being used by foraging and commuting bats. Five species were identified during the two surveys (see Appendix 13.1)

No species of conservation value or Schedule 9 species were seen on site.

5. Description of the Development

The proposed scheme entails the conversion of the building and extensions to an annex to the main house, comprising a living area and store, retaining the workshop. No vegetation is to be affected. The existing access will be retained.

6. Assessment of Effects and Mitigation Measures

Designated Sites:

It is not considered that the development will have any significant impact on any nearby designated sites due to the small scale of the development and distance from the sites.

Species:

Birds

The impacts which the proposed work might have on birds will be minimal, providing that no nests are occupied or being built at the time the work is done.

If birds should gain access and begin building nests during the development, work in that area must stop until the young have left the nests.

Bats

There is not considered to be any threat to the conservation status of bats or danger of harm to individuals as the building was not being used by roosting bats. However, it is possible that transient bats may temporarily roost or perch in the building in the future.

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.

It is recommended that the new buildings use bitumastic hessian roofing felt type 1F, as modern roofing membranes are extremely hazardous to bats as they become entangled in the fibres and cannot escape.

Residual Effects

No significant residual effects anticipated.

7. Compensation

None considered necessary.

8. Enhancement Recommendations

A bat box e.g. Schwegler 1FF to be fitted externally to the conversion. Further information is given in the bat box information pack available at <http://www.bats.org.uk/index.php>. Bat boxes should be placed in a south east to south west facing position if possible.

A lighting plan should be designed in accordance with the Bat Conservation Trust guidelines: http://www.bats.org.uk/pages/bats_and_lighting.html

One woodcrete nests suitable for small birds such as robin, blackbird, tit species and sparrow to be incorporated into the conversion, and one swallow nest.

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.

Swallow nests - H110mm x W250mm x D140mm. The nests should be placed inside an enclosed outbuilding or shed, porch or garage leaving a distance of at least 6cm between the top of the nest and the ceiling. There must be access for the birds through an open window or sky-light. A car port or refuse bin shelter, or an outbuilding with a permanently open window or half door, or simply a space over the door, would suffice. Under the eaves of the buildings would be acceptable but less suitable.

Other designs of nest boxes may also be suitable.

9. Ecological Constraints

None identified

10. Monitoring

None recommended

11. Conclusions

If the recommended mitigation, compensation and enhancement measures are taken the overall ecological impacts of the proposed development will be low due to its small scale and lack of evidence of any rare or threatened species or priority habitat.

12. Bibliography

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

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

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora available at: jncc.defra.gov.uk

Google Maps available at: <https://maps.google.com/maps>

Magic Maps available at: <http://magic.defra.gov.uk>

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

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

Rapid Risk Assessment Tool available at: <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence>

Wrexham Planning Portal available at: <http://planning.wrexham.gov.uk/Planning>

Appendix 13.1: Activity Surveys

27/7/18

Number of observers: 2

Observer 1: Susan Worsfold (SW); equipment: EM3; Station: east corner of building

Observer 2: Craig Thomas (CT); equipment : Anabat SD1; Station: west corner of building

Stationary equipment: Anabat II on ground floor, Anabat II in doorway between rooms on upper floor

Bat species recorded:

First bat:

Soprano pipistrelle (*Pipistrellus pygmaeus*)

Time: 21.39; *Location:* CT station

Subsequently: Frequently, both stations until 22.43

Other species:

Noctule (*Nyctalus noctula*)

Time: 21.40; *Location:* CT station

Subsequently: Twice, both stations until 22.32

Common pipistrelle (*Pipistrellus pipistrellus*)

Time: 21.43; *Location:* SW station

Subsequently: Frequently, both stations until 22.43

Myotis sp., Probably *Myotis daubentonii*

Time: 21.57; *Location:* SW station

Subsequently: Occasionally, CT station until 22.37

At 21.33 A bat was seen at SW station flying south east to north west over the building, and again at 21.45. At 21.54 two bats were seen foraging nearby. At 22.30 two-three bats were foraging continuously south west to north east along the south east side of the building. Bats were also seen several times at CT station between 21.42 and 21.59. No bats were seen to emerge from the building. No bat calls were recorded inside the building.

16/8/18

Number of observers: 2

Observer 1: Susan Worsfold (SW); equipment: EM3; Station: east corner of building

Observer 2: Craig Thomas (CT); equipment : Anabat SD1; Station: west corner of building

Bat species recorded:

First bat:

Common pipistrelle (*Pipistrellus pipistrellus*)

Time: 20.18; *Location:* HM station

Subsequently: Occasionally, both external stations until 20.58

Other species:

Soprano pipistrelle (*Pipistrellus pygmaeus*)

Time: 04.41; *Location:* CT station

Subsequently: Occasionally, both external stations until 05.51

Myotis sp., Probably *Myotis daubentonii*

Time: 04.35; *Location:* CT station

Subsequently: Once, CT station, 05.14

Long eared bat, presumed brown long eared (*Plecotus auritus*)

Time: 04.55; *Location:* SW station

Subsequently: Once, CT station, 05.22

Noctule (*Nyctalus noctula*)

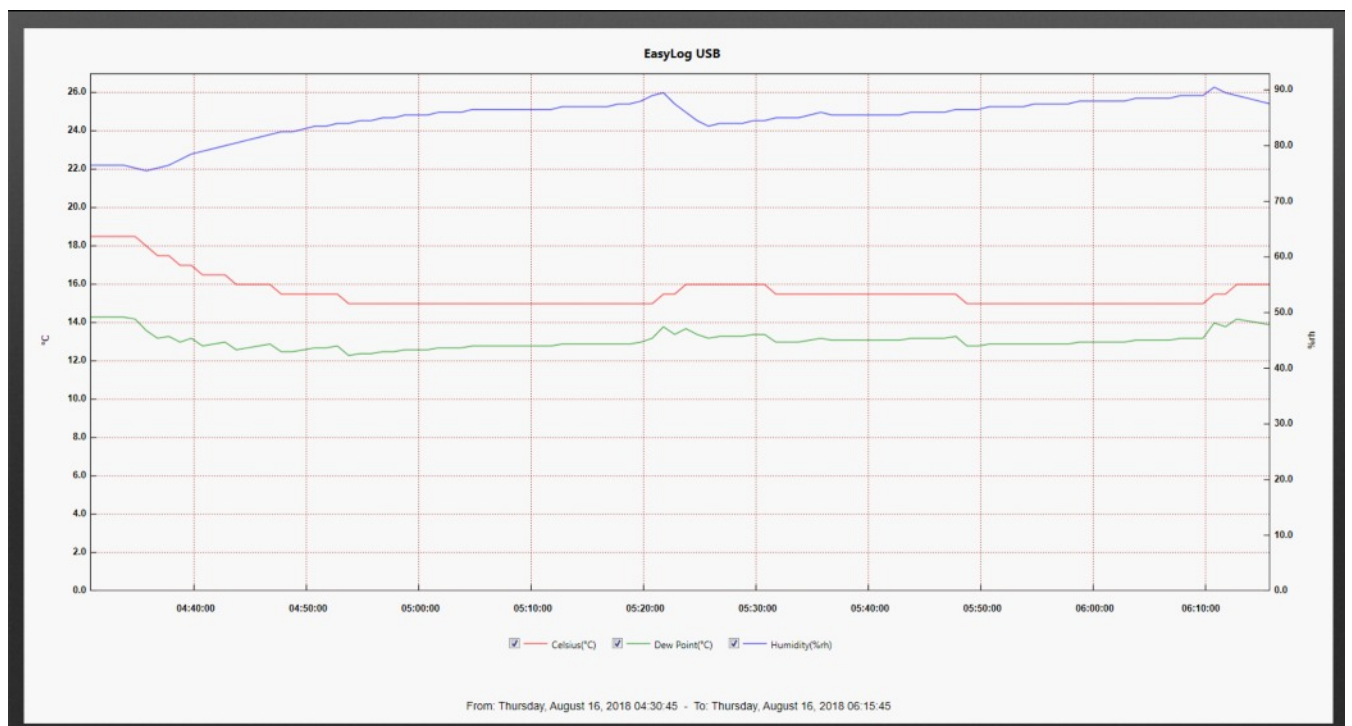
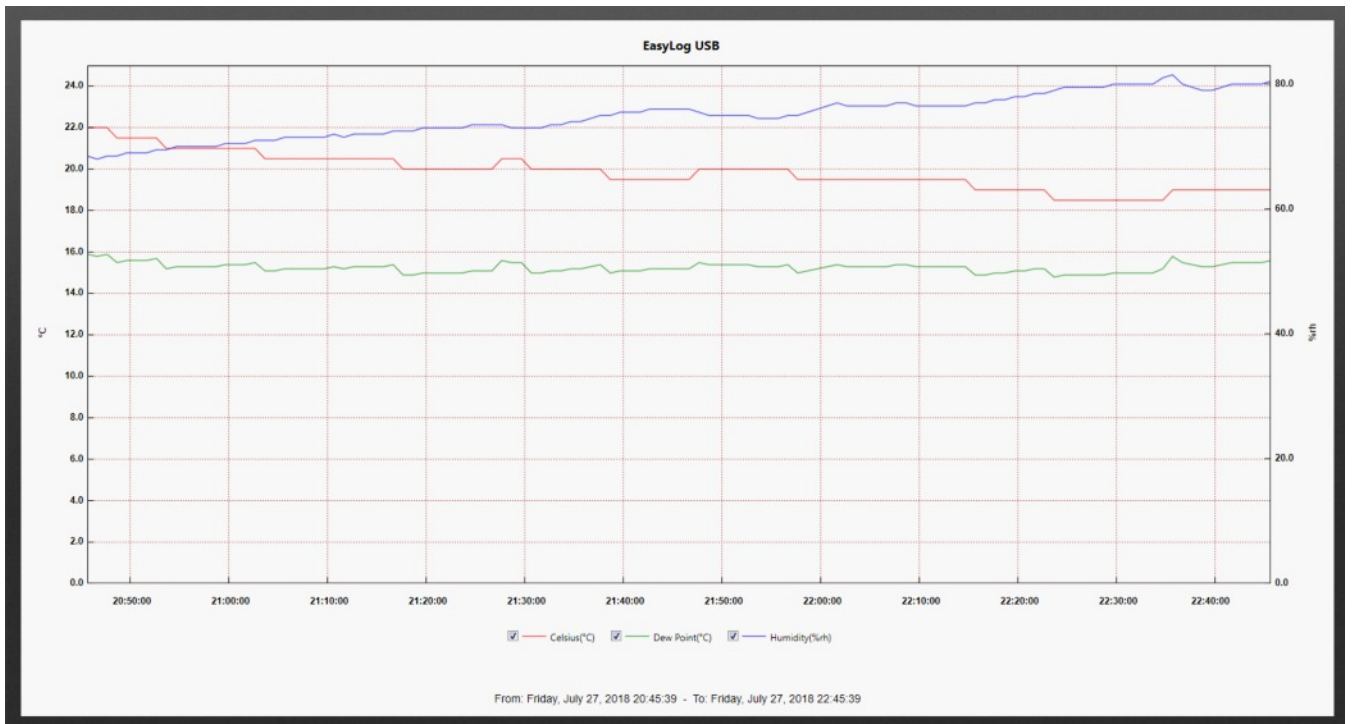
Time: 04.32; *Location:* SW station

Subsequently: None

Bats were seen intermittently near both stations between 05.06 and 05.50. No bats were seen to enter the building.

Appendix 13.2: Survey Conditions

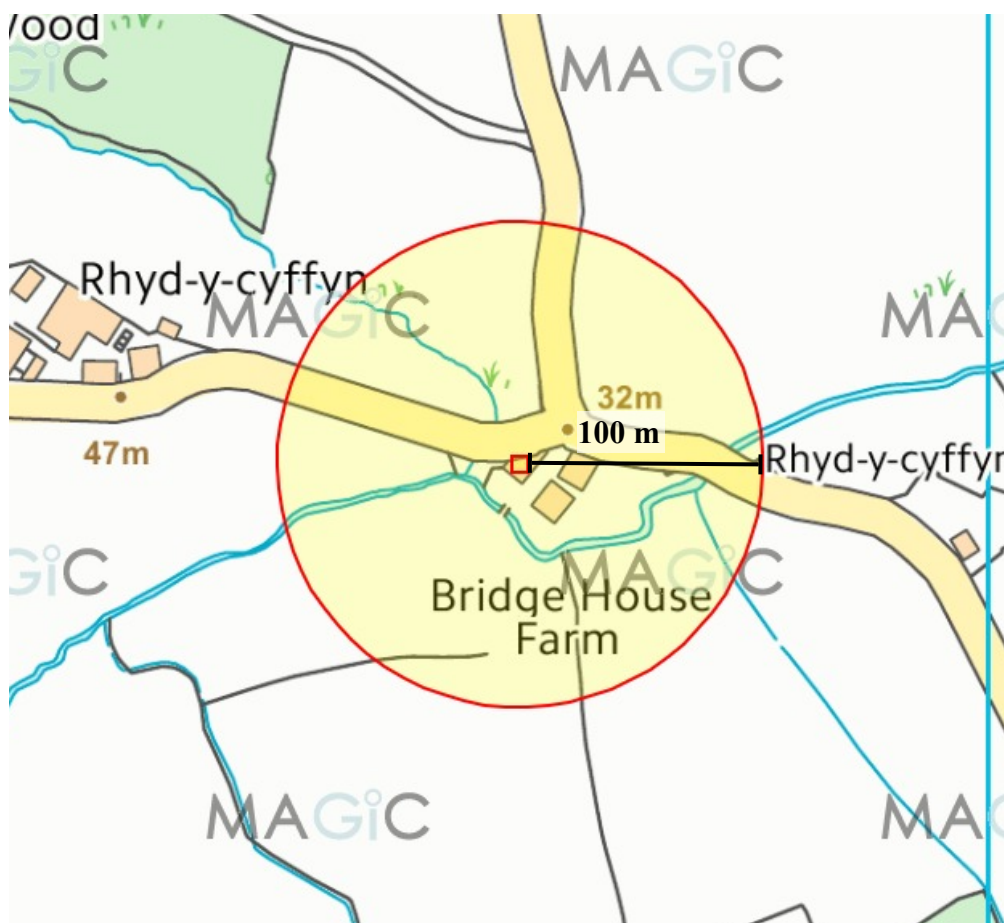
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27/07/18	21.14	20:45	22:50	21	68	18	79	20-100	0-0
16/8/18	05:54	04:20	06:10	18	75	15	88	90-100	1-0



Appendix 13.3: OS Location Map



Appendix 13.4: Map Showing Zones of Influence for Great Crested Newts

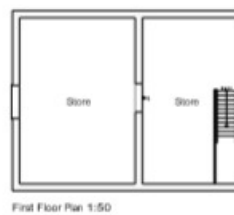
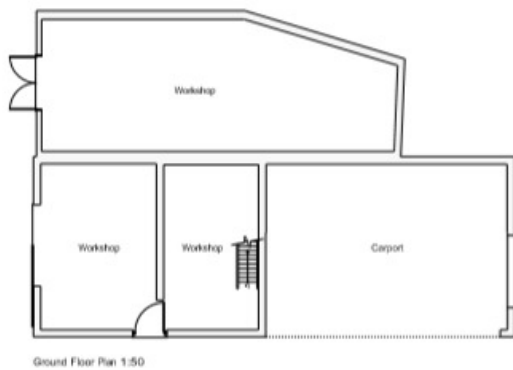
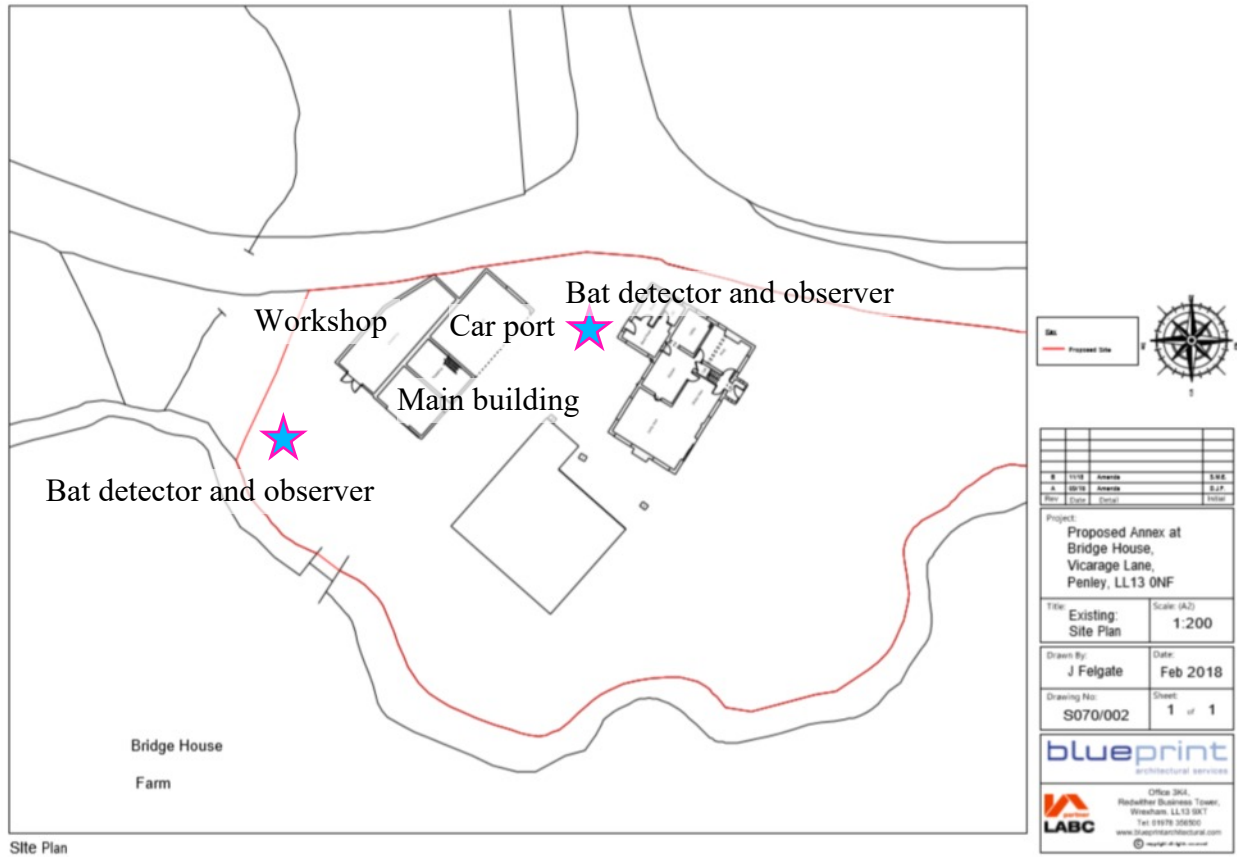


Appendix 13.5: Aerial Photograph



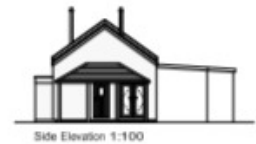
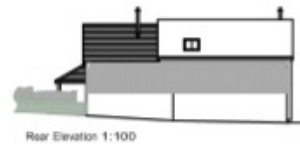
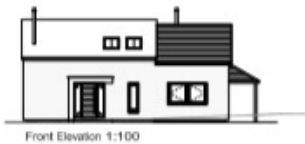
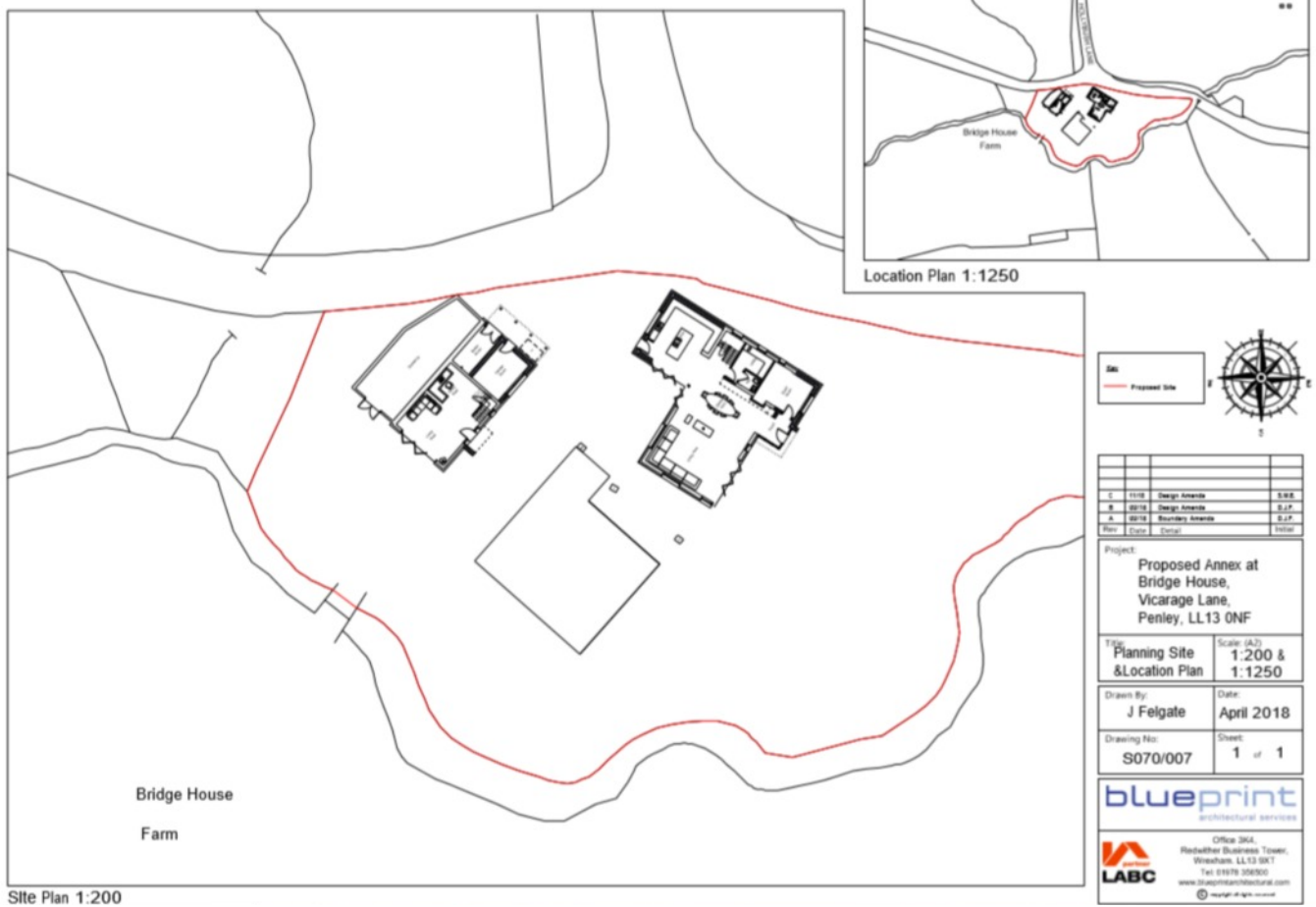
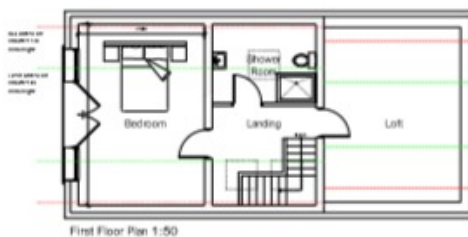
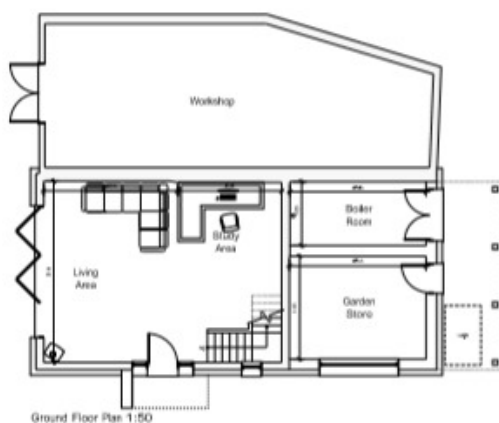
Appendix 13.6: Plans: Existing and Proposed

Plans: Existing

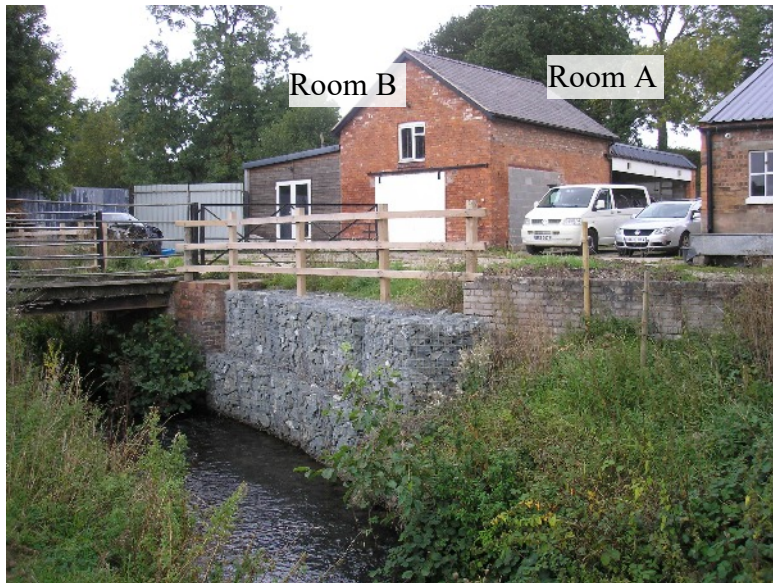


Project:	Proposed Annex at Bridge House, Vicarage Lane, Penley, LL13 0NF
Title:	Existing
Scale:	1:50 & 1:100
Drawn By:	J Felgate
Date:	Feb 2018
Drawing No:	S070/001
Sheet:	1 of 1
blueprint architectural services	
LABC	
Office 361, Rushcliffe Business Tower, Wrexham, LL13 9X7 Tel: 01978 358500 www.blueprintarchitectural.com	

Plans: Proposed

[illegible]

Appendix 13.7: Photographs of the Building



Appendix 13.7: Photographs of the Building



Appendix 13.8: Legislation Relating to Bats

All bat species, their breeding sites and resting places are fully protected by law - they're European protected species.

You may be able to get a licence from Natural England if you can't avoid disturbing them or damaging their habitats, or if you want to survey or conserve them.

What you must not do

You're breaking the law if you do certain things including:

- deliberately capture, injure or kill bats
- damage or destroy a breeding or resting place
- obstruct access to their resting or sheltering places
- possess, sell, control or transport live or dead bats, or parts of them
- intentionally or recklessly disturb a bat while it's in a structure or place of shelter or protection

Either or both of the following could happen if you're found guilty of any offences:

- you could be sent to prison for up to 6 months
- you could get an unlimited fine

Activities that can harm bats

Activities that can affect bats include:

- renovating, converting or demolishing a building
- cutting down or removing branches from a mature tree
- repairing or replacing a roof
- repointing brickwork
- insulating or converting a loft
- installing lighting in a roost, or outside if it lights up the entrance to the roost
- removing 'commuting habitats' like hedgerows, watercourses or woodland
- changing or removing bats' foraging areas
- using insecticides or treating timber

In many cases you should be able to avoid harming the bats or damaging or blocking access to their habitats. A bat survey will show what type, how many and how the bats are using the building or area so you can plan to avoid harming them.

If you can't avoid harming bats or their habitats, you can apply for a mitigation licence from Natural England or Natural Resources Wales.

Appendix 13.9: Legislation Relating to Birds

All wild bird species, their eggs and nests are protected by law. You must always try to avoid harming birds or to use measures which do not kill or injure them before considering taking harmful action.

In most cases you should be able to avoid harming wild birds by:

- timing your work to avoid the breeding season
- using a range of methods that deter but don't harm them

In exceptional cases the law allows certain exemptions to permit legal activities (such as a development with planning permission) and where avoiding harm isn't possible.

What you must not do:

You're breaking the law if you:

- intentionally kill, injure or take wild birds
- intentionally take, damage or destroy a wild bird's nest while it's being used or built
- intentionally take or destroy a wild bird's egg
- possess, control or transport live or dead wild birds, or parts of them, or their eggs
- sell wild birds or put them on display for sale
- use prohibited methods to kill or take wild birds

Some birds, known as 'schedule 1 birds', eg barn owls, have extra legal protection. For these bird species it's also an offence to do the following, either intentionally or by not taking enough care:

- disturb them while they're nesting, building a nest, in or near a nest that contains their young
- disturb their dependent young

You could get an unlimited fine and up to 6 months in prison for each offence if you're found guilty.

Activities that can harm birds

These activities can affect wild birds, particularly during breeding season:

- trimming or cutting trees, bushes, hedges and rough vegetation
- renovating, converting or demolishing a building
- creating disturbance, eg noise, lighting and vibration
- taking actions to prevent problems, eg shooting birds or removing nests

When you can get a licence

There are no licensing purposes to permit development or construction but there are ways you can continue development or construction when birds are present. These activities should rely upon the legal exemptions. You must make sure that you can comply fully with the terms of the exemption so that you don't break the law.

You can apply for a licence from Natural England or Natural Resources Wales in certain circumstances and for certain problems.

Licences are available for disturbing or harming birds for a limited number of reasons that include:

- preserve public health and safety
- preserve air safety
- do work for science, education or research
- prevent damage to crops or animal feed
- conserve plants and animals (including other wild birds)
- prevent damage to fisheries
- take part in photography, falconry, keeping or breeding birds