

Preliminary Ecological Appraisal **at**
Moss Bank Farm, Borrass Road, Borrass
Head, Wrexham, LL13 9TN
Grid Ref. SJ 3590 5306
on 3rd December 2019

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Contents

Section	Title	Page
1	Summary	3
2	Introduction	4
3	Methodology	4
3.1	Scope	5
3.2	Desk Study	5
3.3	Field Survey	5
4	Baseline Ecological Conditions/Results	5
4.1	Designated Sites	5
4.2	Habitats	5
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	OS Location Map	10
13.2	Map Showing Zones of Influence for Great Crested Newts	10
13.3	Aerial Photograph	11
13.4	Location Plan	12
13.5	Elevations as Existing	13
13.6	Proposed Floor Plan	13
13.7	Proposed Elevations and Site Plan	14
13.8	Photographs	15
13.9	Legislation Relating to Bats	21
13.10	Legislation Relating to Birds	22

1. Summary

The purpose of the report is to assess the potential ecological impacts of a proposed development at Moss Bank Farm, Borrás Road, Borrás Head and advise on any mitigation measures to comply with local planning policy and government legislation.

The proposed scheme entails demolition of some steel buildings and the renovation and conversion of the brick buildings to a dwelling, with associated access, gardens and parking. A new garage and leisure building are also proposed.

The buildings and associated 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 of the buildings by bats and birds.

No rare or threatened species of plants or animals were found on site or near the site. There was some evidence of use of the brick buildings by bats and birds.

Impacts during the development should be low with respect to birds 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.

Further surveys are needed with respect to bats to ensure no offence is committed:

Three activity surveys between the beginning of May and the end of September are necessary to complete the assessment of the use of the brick buildings and two for the steel buildings to be demolished (this may be done at the same time).

Two out of the three surveys should be completed before the end of August and surveys should be at least two weeks apart.

2. Introduction

This report was commissioned by Blueprint Architectural Services, Office 3K4, Redwither Business Tower, Wrexham. LL13 9XT.

The site, at Moss Bank Farm, Borrass Road, Borrass Head, comprises several farm buildings of various constructions.

The proposed scheme entails the demolition of some of the buildings and renovation and conversion of the brick buildings to a dwelling, with associated access, gardens and parking. A new garage and leisure building are also proposed.

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.

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)

3. Methodology

3.1. Scope of the Assessment

The report incorporates an 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 (Natural England), 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. No protected species were recorded for the past three years. Magic Maps was consulted for the presence of designated sites and protected habitats.

3.3. Field Survey

The buildings and land were examined to establish the presence of any protected species or habitats, and for 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, LED Lenser H14) were used for examination of interiors and under eaves. Binoculars were used to examine parts which were not otherwise accessible. The site and surrounding habitat was examined for signs of use by badgers. Maps of the site and surrounding environment were examined to identify any nearby waterbodies within an influencing distance of the site. Photographs were taken of all areas.

The visual assessment of the buildings and immediate surroundings was carried out in accordance with CIEEM guidelines (CIEEM 2017) on 3rd December 2019 by Susan Worsfold BSc ACIEEM.

4. Baseline Ecological Conditions/Results

4.1 Designated Sites

The nearest designated site is Vicarage Moss/Midland Meres and Mosses Phase 2, (Site of Special Scientific Interest and Ramsar Site) 660 m north.

4.2 Habitats

Site: 960 m from the nearest town of Wrexham. The buildings are surrounded by hard standing and grass. The total area of the site to be affected is approximately 0.4 ha.

Brick Buildings: The T shaped arrangement of brick buildings comprises mainly one story but there is a two storey section at the south west end. The buildings are in a poor state of repair with some large gaps in the roof and most window panes broken. The walls were of brick with no cavity. The doors were missing. Roofs of slate, pitched, with ridge tiles, supported by a timber rafter and purlin frame and no lining. There were no soffits. There were verge boards at the gable end of the south east wing. The buildings are considered to have moderate bat roost potential.

Steel Buildings: Walls were of corrugated steel and wood, roofs were of corrugated steel and wood with metal frame, one pitched, one round and two lean to. Walls were mostly unlined but there was some overlap of wood planks on some walls, and the smaller lean to adjoining building was lined with metal and wood. The buildings were considered to have moderate roost potential.

Adjacent Land: There are five ponds within 500 m, the nearest being 130 m east. This and most of the others are large industrial ponds associated with the adjacent quarry. The nearest significant woodland is 500 m north east. There are no rivers or other watercourses within 500 m. There are few hedgerows near the site.

4.3 Species and Species Groups

Plants

No rare or threatened species of plants were found on site or near the site. The land adjacent to the buildings was bare on three sides and colonised by grasses and a few common ruderal species on the other.

Amphibians and Reptiles

None seen during the survey. Any ponds within influencing distance were not considered suitable for use by great crested newts.

Birds

The buildings could provide shelter for birds and also nesting potential. A passerine nest was found in the south east wing of the brick buildings.

Bats

The buildings are suitable for use by bats and some evidence of use by bats was found in the brick buildings, i.e. several accumulations of butterfly wings which may indicate feeding perches, and a small accumulation of eight scattered droppings which may indicate a transient roost.

Badgers

There were no badger setts, tracks or latrines found on the site or within 30 m of the site.

Dormice

No evidence of dormice was found and the site was not favourable for use by them.

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

5. Description of the Development

The proposed scheme entails demolition of the steel buildings and the renovation and conversion of the brick buildings to a dwelling, with associated access, gardens, garage and parking.

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.

Habitats:

No priority habitat is affected by the proposal. The loss of vegetation will have a low impact on some invertebrate species.

Species:

Amphibians and Reptiles

It is considered highly unlikely that the development would harm any individual GCN, or affect their conservation status.

Birds

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

If birds should gain access to the buildings while work is in progress and begin building nests, then the work in that area must stop until the young have left the nests.

Bats

Three activity surveys between the beginning of May and the end of September are necessary to complete the assessment of the use of the brick buildings and two for the steel buildings (these may be done at the same time) with a possible third survey needed if bats are found to be using the steel buildings to be demolished. Two out of the three surveys should be completed before the end of August and surveys should be at least two weeks apart.

Residual Effects

Birds: No significant residual effects.

Bats: To be confirmed when all surveys completed.

7. Compensation

Bats: to be determined when all surveys complete.

8. Enhancement Recommendations

Bats: to be determined when all surveys complete.

Birds: One woodcrete nests suitable for small birds such as robin, blackbird, tit species and sparrow to be incorporated into the renovated building at the northeast gable end. One artificial swallow nest to be fitted inside the garage at the south west gable end/apex.

House Sparrow Terrace - Wooden (or woodcrete) nest box with 3 sub-divisions to support 3 nesting pairs. To be placed under the eaves of building at northwest side 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 nest - H110mm x W250mm x D140mm. The nest should be placed inside the 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.

9. Ecological Constraints

Further surveys required as given below.

10. Monitoring

To be determined when all surveys complete.

11. Conclusions

Further surveys are needed to fully assess the impact of the development on bats to ensure no offence is committed.

Three activity surveys between the beginning of May and the end of September are necessary to complete the assessment of the use of the brick buildings and two for the steel buildings to be demolished (this may be done at the same time).

Two out of the three surveys should be completed before the end of August and surveys should be at least two weeks apart.

Impacts on other animals and vegetation should be low if compensation and enhancement measures are followed as given above.

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>

Great crested newts: surveys and mitigation for development projects available at: <https://www.gov.uk/great-crested-newts-surveys-and-mitigation-for-development-projects>

Gent A.H, Gibson S.D (eds) (1998) *Herpetofauna Workers' Manual*. Peterborough: Joint Nature Conservation Committee

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

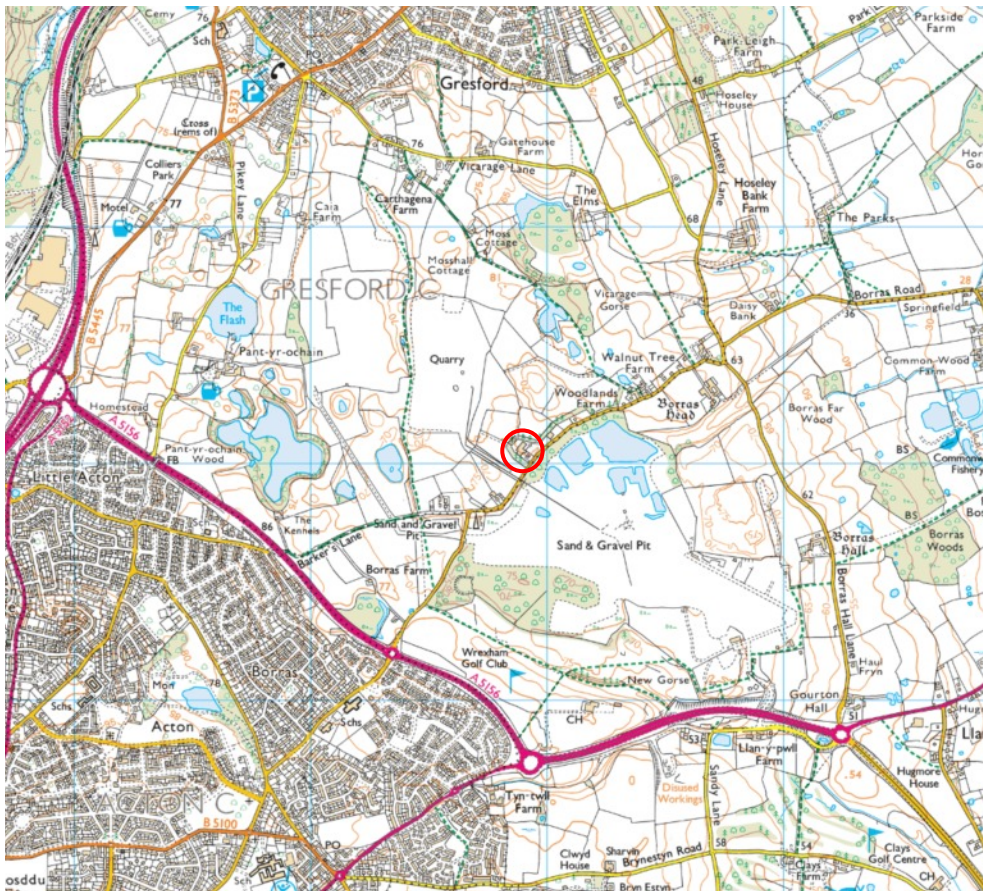
Natural Resources Wales available at: <https://naturalresources.wales/?lang=en>

UK BAP Priority Habitats available at: jncc.defra.gov.uk

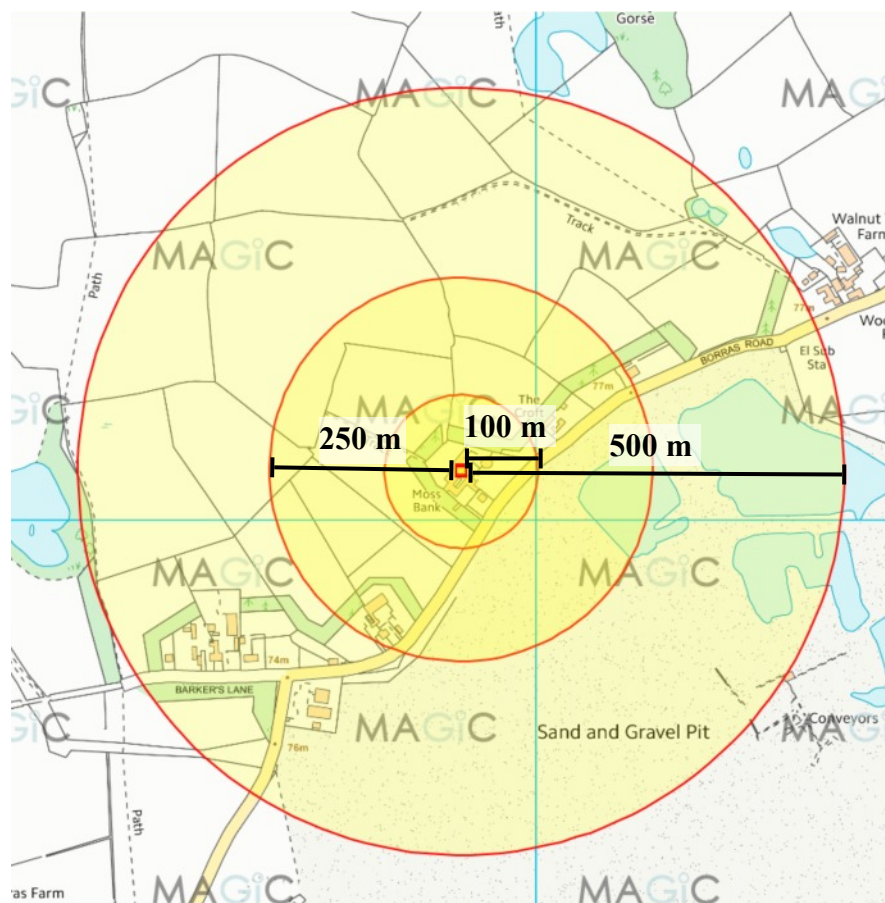
Wildlife and Habitat Conservation available at: <https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation>

Wrexham Council Planning Portal available at: <http://planning.wrexham.gov.uk/Planning/lg/GFPlanningSearch.page>

Appendix 13.1: OS Location Map



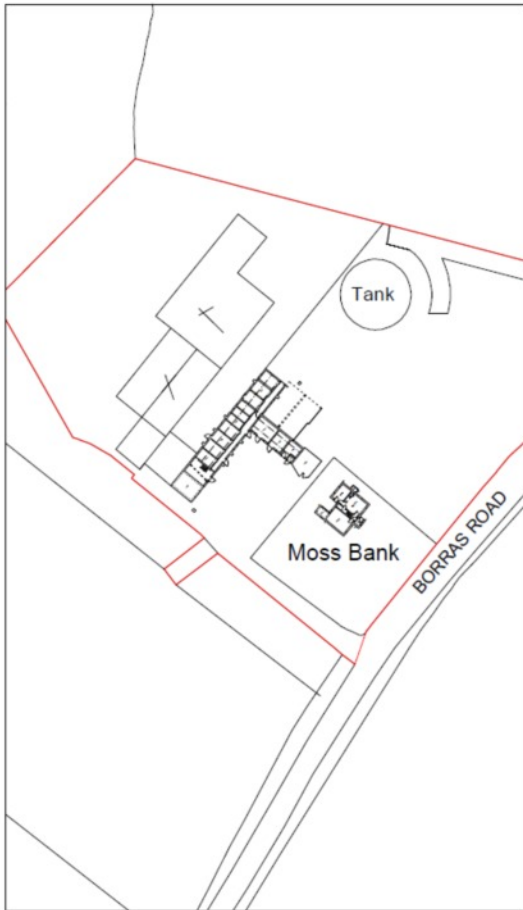
Appendix 13.2: Map Showing Zones of Influence



Appendix 13.3: Aerial Photograph



Appendix 13.4: Location Plan



Site Plan 1:500



Location Plan 1:1250

North Arrow

Proposed Site

Rev	Date	Detail	Initials

Project:
Proposed alterations at
Moss Bank Farm,
Borrás Road, Borrás Head,
Wrexham, LL13 9TN.

Title	Scale (A2)
Site & Location Plan	1:500 & 1:1250

Drawn By:	Date:
E.M. Jackson	Oct 2019

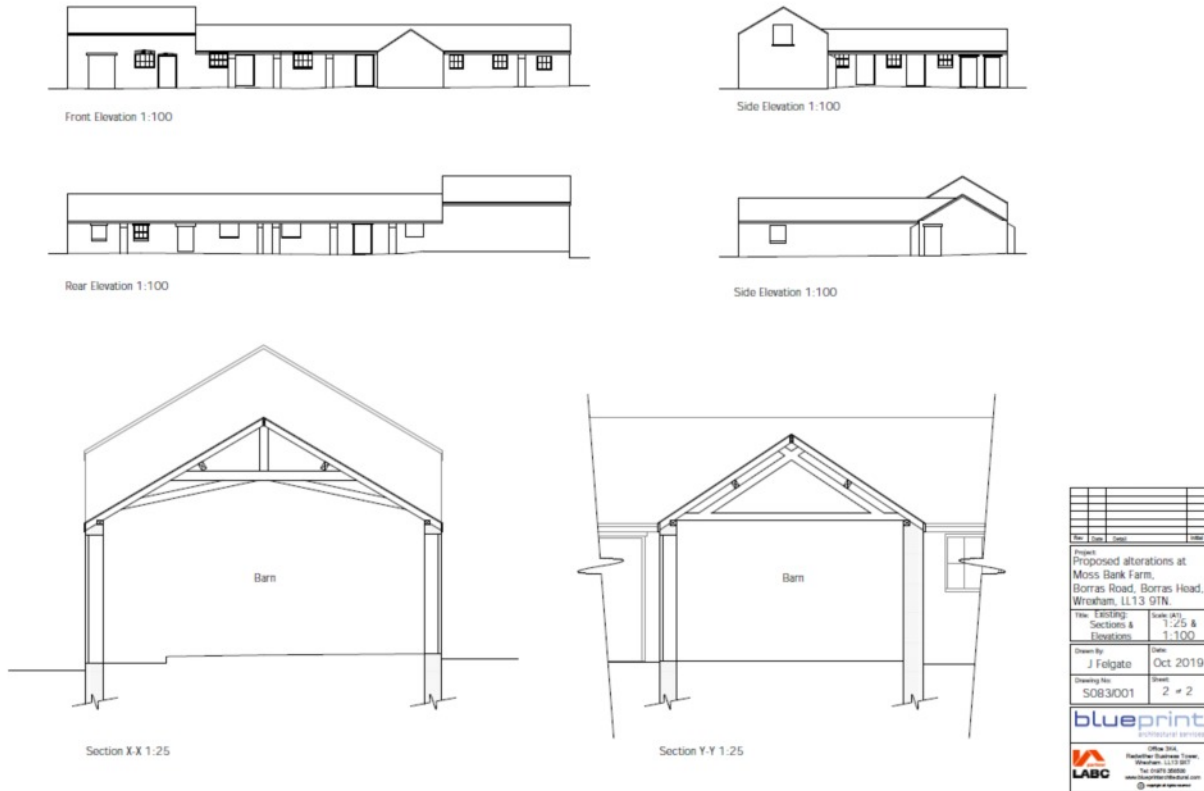
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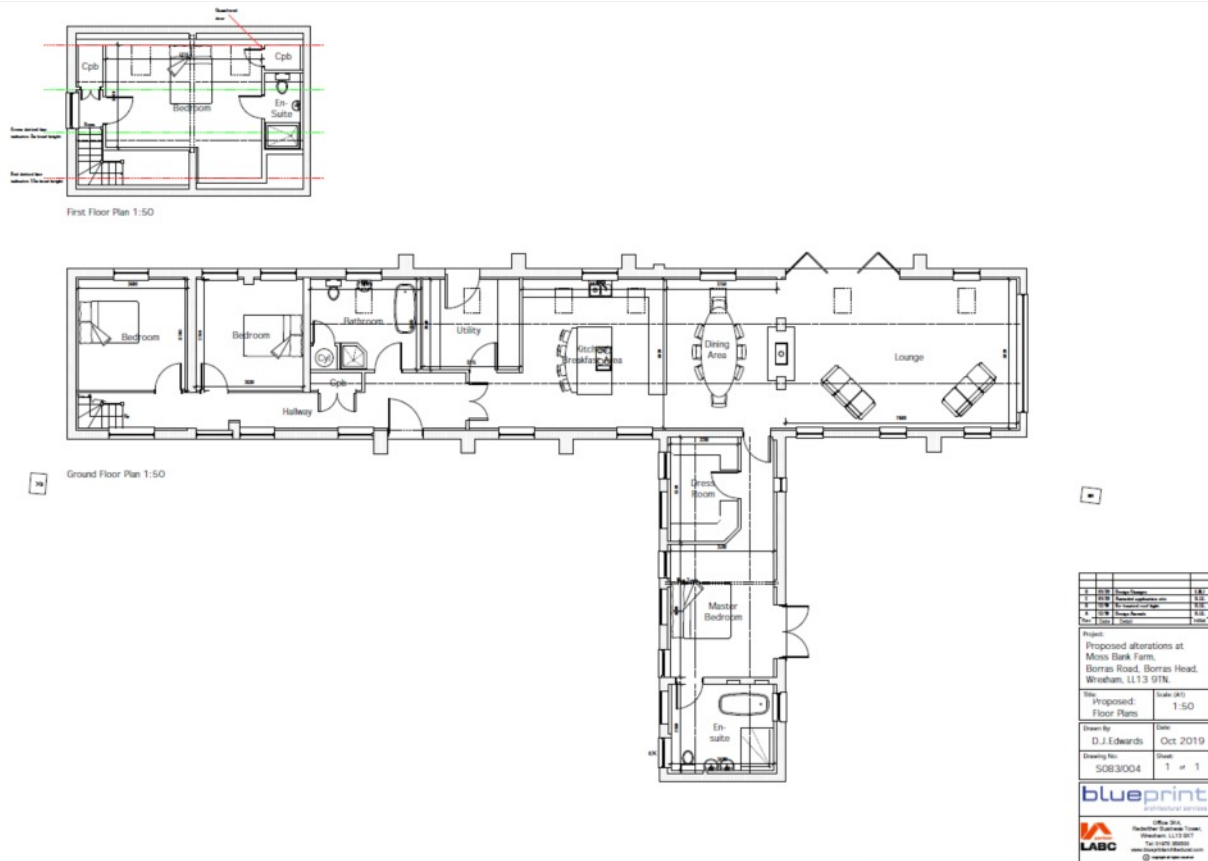
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Appendix 13.5: Elevations as Existing



Appendix 13.6: Proposed Floor Plan



Appendix 13.7: Proposed Elevations and Site Plan



1	Proposed Alterations	1:100
2	Proposed Alterations	1:100
3	Proposed Alterations	1:100
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100	Proposed Alterations	1:100

Project:
Proposed alterations at
Moss Bank Farm,
Borras Road, Borras Head,
Wrexham, LL13 9TN.

Title: Proposed:
Elevations &
Site Plan

Scale (A1):
1:100 &
1:500

Drawn By:
D.J. Edwards

Date:
Nov 2019

Drawing No:
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Appendix 13.8: Photographs of the Buildings



View from the west



View from the north



View from the north east

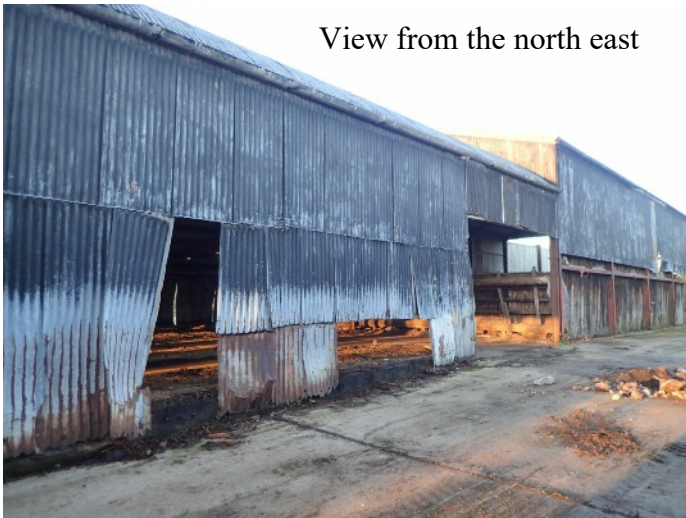


Lean to interior



Large barn adjacent to lean to interior

Appendix 13.8: Photographs of the Buildings



View from the north east



Smaller lean to section



Small building to the south west



View from the south



View from the south

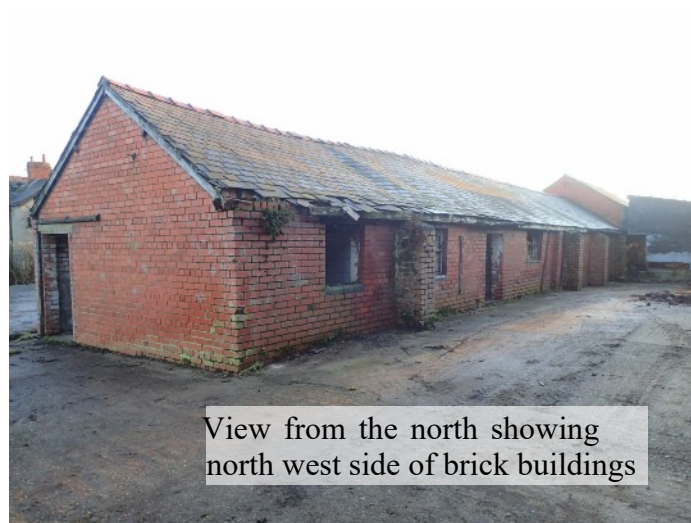
Appendix 13.8: Photographs of the Buildings



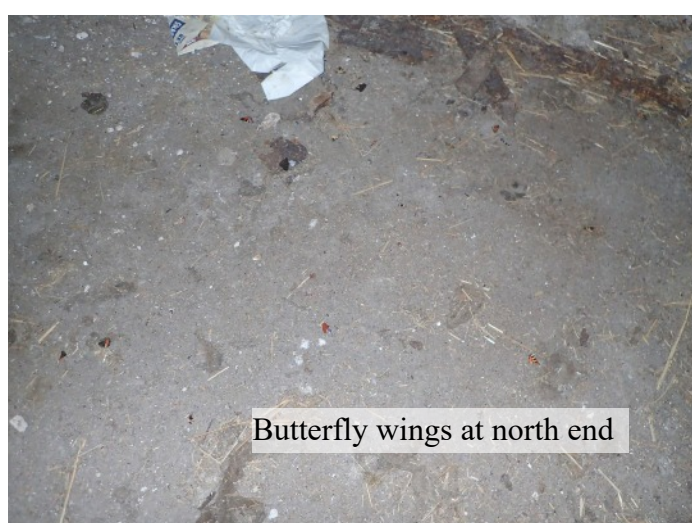
View from the east showing south east wing



View from the east showing north east wing



View from the north showing
north west side of brick buildings



Butterfly wings at north end



North east wing



North east wing

Appendix 13.8: Photographs of the Buildings



Appendix 13.8: Photographs of the Buildings



Butterfly wings at north end



South west wing



Butterfly wings at north end



South west section



Roof detail



Loft

Appendix 13.8: Photographs of the Buildings



Loft



South east wing



Bird nest in south east wing



South east wing



South east wing roof detail



South east wing

Appendix 13.9: 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 13.10: 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', e.g. 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, e.g. noise, lighting and vibration
- taking actions to prevent problems, e.g. 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