



ARBOR VITAE

ECOLOGY • FORESTRY • LAND USE



PRELIMINARY BAT ROOST ASSESSMENT

PINE RIDGE

Project name: Pine Ridge, Pitsyll Hill, Marford, Wrexham, LL12 8LE

Grid Reference: SJ36105535

Date: 08/03/2022

Prepared by: Phillipa Stirling MSc ACIEEM

Checked by: William Prestwood BSc Director

Requested by: Base Architects

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1 INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT

Planning permission will be sought for the extension and renovation of an existing residential property in Marford, Wrexham.

1.2 SCOPE OF SURVEY

Arbor Vitae were commissioned by Base Architects to undertake a Preliminary Bat Roost Assessment (PBRA) to establish the potential of the buildings to be used by roosting bats.

Bats and their roosting sites are legally protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981.

The survey was also designed to assess the presence of any breeding birds using the buildings.

All wild nesting birds, their nests and eggs are legally protected under The Wildlife and Countryside Act 1981.

1.3 KEY PRINCIPLES

All ecological surveys conducted by Arbor Vitae Environment Ltd are underpinned by the following key principles, as outlined by CIEEM (2018):

Avoidance - Seek options that avoid harm to ecological features (for example, by locating on an alternative site).

Mitigation - Adverse effects should be avoided or minimized through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

Compensation - Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.

Enhancements - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

2 SITE DESCRIPTION

2.1 LOCATION, LANDSCAPE, AND BACKGROUND

Pine Ridge is located off of Pistyll Hill in Marford, accessed from Claypit or Hoseley Lane (Figure 1). The property sits amongst numerous other residential houses with the B5445 running along the north boundary of the site (Figure 2).

The proposals will include a small extension at the north-west elevation, creation of pitched roof areas and internal alterations.

2.2 BUILDING DESCRIPTION

The property is a detached modern construction layered over three storeys. The elevations are mostly rendered with some small areas of timber tongue and groove cladding fitted as features. Some brickwork remains exposed around the base of the house and on the chimney stack. There are numerous composite doors and windows of UPVC in place.

The roof is flat with gently sloping, inverted sections at the upper floor for drainage. Most of the roof is flat and covered with felt. The eaves of the property are boxed in with composite soffit and fascia boards which are tightly fitted to the building. There are gutters and down pipes fixed to these which are directed into covered drains.

There is single roof void present about the entrance hall of the house which is accessed via a large hatch within. The space is insulated with some boarding to the floor and exposed, modern beams.

There is a large driveway which is blockwork hardstanding and a continuous paved way around the perimeter of the house. Beyond this, the house is surrounded by amenity lawn, *Leylandii* hedges and ornamental shrub planting. There is an open air pool in the garden of the property and associated plant room beneath the house.

There are a number of mature broadleaved and coniferous trees present within the garden and on neighbouring land which form small collections of vegetation and provide links to other nearby woodland habitat.

3 SURVEY METHODOLOGY

3.1 DESKTOP STUDY

An initial desk study was composed to gain background information regarding any protected species or designations within the area. The main sources of information were MagicMap, Lle Geoportal and NBN Atlas.

3.2 PRELIMINARY BAT ROOST ASSESSMENT

One visit was made to survey the property on 07/03/2022.

The objective of the survey was to find and record any signs of use by bats, for example:

- Droppings, sometimes in concentrations below roost sites,
- Feeding signs such as butterfly and moth wings,
- Staining of timber, brickwork around access points.

The general structure of the building was assessed for its potential to provide bats with roosting opportunities.

The surrounding landscape and links to other nearby habitats were also taken into consideration during the assessment.

3.3 BREEDING BIRDS

The building was assessed for its potential to provide birds with nest sites, and to record any existing evidence of previous nesting.

3.4 PERSONNEL

One surveyor was used: Phillipa Stirling MSc ACIEEM, Ecologist. Natural Resources Wales bat licence no.: S089403-1.

3.5 CONSTRAINTS

There were no constraints to the survey being carried out successfully.

4 SURVEY RESULTS

4.1 DESKTOP STUDY

Name	Designation	Distance
Marford Quarry	SSSI North Wales Wildlife Trust Nature Reserve Restored Ancient Woodland Plantation on Ancient Woodland Ancient Semi Natural Woodland	0.3km
Cox Wood	Ancient Semi Natural Woodland	0.7km
Search included: SSSI, SAC, SPA, Ramsar, AONB, LNR and NNR.		

Species	Protection	Distance
Common pipistrelle Natterer's Brown long-eared	The Conservation of Habitats and Species 2017 Wildlife and Countryside Act 1981	0.3-1km

4.2 PRELIMINARY BAT ROOST ASSESSMENT

The construction style of the property significantly reduces the likelihood of bats being able to use it for roosting. The flat roof is in good condition and the eaves of the building are boxed in with tight-fitting composite soffit and fascia boards. The elevations are mainly rendered offering no external roosting opportunities and where timber cladding is present it is modern and fits together with no gaps or crevices present.

The small roof void above the entrance porch was inspected thoroughly and there was no evidence of bats within nor any potential access points.

The house provides 'negligible' potential as a bat roost as per Table 4.1 of the Bat Survey Guidelines (2016).

4.3 BREEDING BIRDS

No evidence of past or present nesting was identified in association with the house and there are very limited opportunities for breeding birds on site.

5 EVALUATION OF RESULTS AND IMPACT

5.1 BATS

The property on site provides 'negligible' potential as a bat roost and no further survey work will be required. The proposed work will have no impact upon bat species or their roosting sites nor any indirect impacts.

The proposals will have no impact on nearby habitat features nor will it result in any inadvertent consequences for bats in the landscape.

A European Protected Species Mitigation Licence will **not** be needed for works to proceed.

5.2 BREEDING BIRDS

The proposals will have no impact upon breeding birds nor features which could be used by them. No further survey work or mitigation is required.

6 MITIGATION AND ENHANCEMENT

6.1 BATS

The proposed development will have no impact on bat species and mitigation will not be required.

6.2 BREEDING BIRDS

Mitigation is not required for breeding birds.

6.3 ENHANCEMENT

In order to provide opportunities for protected species on site, the following is recommended:

- Two general purpose Woodcrete bat boxes will be installed into a nearby mature tree. These should be positioned at least 3m from the ground and face south west.
- Two Woodcrete bird boxes with 28 or 32mm opening will be installed into a mature tree on site. This will be at least 2.5m from the ground.

7 SUMMARY

Planning permission will be sought for the extension and renovation of an existing residential property in Marford, Wrexham.

Arbor Vitae were commissioned by Base Architects to undertake a Preliminary Bat Roost Assessment (PBRA) to establish the potential of the buildings to be used by roosting bats. The survey was also designed to assess the presence of any breeding birds using the buildings.

The construction style of the property significantly reduces the likelihood of bats being able to use it for roosting. The property on site provides 'negligible' potential as a bat roost and no further survey work will be required. The proposed work will have no impact upon bat species or their roosting sites nor any indirect impacts.

No evidence of past or present nesting was identified in association with the house and there are very limited opportunities for breeding birds on site. The proposals will have no impact upon breeding birds nor features which could be used by them. No further survey work or mitigation is required.

In order to provide opportunities for priority and protected species, the following wildlife boxes will be installed on site:

- Two Woodcrete bat boxes,
- Two Woodcrete bird boxes.

8 REFERENCES

Bat Conservation Trust (2018) Bats and artificial lighting in the UK. *Bats and the Built Environment series*, Guidance Note 08/18. Institution of Lighting Professionals.

Collins, J. (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

Hundt L (2012) Bat Surveys: Good Practice Guidelines, 2nd edition, Bat Conservation Trust.

Mitchell-Jones, T., (2004) Bat mitigation guidelines. External Relations Team, English Nature.

FIGURE 1 LOCATION. 1:50,000



FIGURE 2 AERIAL PHOTOGRAPH



APPENDIX 1 PHOTOGRAPHS



Area of the house to be extended (NW).



Small roof void above entrance.



Eaves detail.



Lawn, Leylandii hedge and trees surrounding.



Interior of roof void.



South-east elevation.