Initial Ecological assessment of Outbuildings at Aston Hall, Aston Munslow, Shropshire

Grid reference SO 508 866

on 15th March 2021

Survey by:
Dr Michael Worsfold & Eileen Bowen
Springfields
Station Road
Llanymynech
Shropshire
SY22 6ED

01691 831450
mike.worsfold@tiscali.co.uk

Instructed by:

Giulia Baldin
Giles Quarme Architects
7 Bishops Terrace
London SE11 4UE

Report completed
24th March 2021

Contents

1. Summary

An ecological assessment, particularly in respect of bats, was made of outbuildings at Aston Hall, Aston Munslow, Shropshire, Grid reference SO 508 866

This assessment was done in respect of proposals to develop the buildings for leisure activities.

We found some evidence that bats have used the buildings. Additionally, there were some areas and voids which we were not able to inspect. These include some of the lofts which we were unable to enter and the voids between the roof slates and the roof lining membrane.

The building therefore has moderate potential for use as a bat roost.

It is considered that the works presently proposed could have a negative impact on bats. Further bat surveys, especially bat activity surveys between May and September, should be done before any work is begun which would significantly alter these buildings.

We found some nests of swallows in the western wing. These should not be disturbed between May and September. We recommend provision of alternative nesting sites for swallows to compensate for the potential loss of these sites.

2. Introduction and Background

This report was commissioned by Giulia Baldin, Giles Quarme Architects, 7 Bishops Terrace, London SE11 4UE.

The buildings comprise a typical farm courtyard, although of greater size than average. The presently proposed scheme entails

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

The buildings 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 buildings.

2.1. Scope of the Assessment

The report comprises a preliminary bat roost and ecological assessment by visual inspection as requested by Giulia Baldin, Giles Quarme Architects, 7 Bishops Terrace, London SE11 4UE.

3 Methods

3.1 Personnel

Michael Worsfold (MW) and Eileen Bowen (EMB) (see appendix 11.7)

3.2 Procedures and equipment

All of the accessible parts of the buildings, inside and outside, were searched systematically for any signs of bats, including droppings, insect remains, urine stains and signs of colouration by rubbing. Binoculars were used to examine parts which were otherwise inaccessible.

Photographs were taken of the exteriors and interiors of the buildings and their surroundings, and of any evidence of the presence of protected species on the site.

A risk assessment was made before entering the building.

4 Field Survey

4.1 Environment

The site is on the western edge of the small village of Aston Munslow, in a completely rural environment on the dip slope of Wenlock edge, It is about 2km south east of the edge at an elevation of about 160m. There are small patches of broadleaf woodland within 500m in all directions, and a larger broadleaf wood 1km to the west. The nearest pond is about 250m to the south, with a few others somewhat further to the east and north.

The surrounding fields are largely pastoral with associated mixed arable. Hedgerows are largely moderately managed with many hedgerow trees.

Much of Wenlock Edge is designated a Site of Special Scientific Interest, largely from the importance of the deciduous woodland there as well as the geology.

4.2 Description of the buildings

The three main wings (A, B, C, see Appendix 11.3) form three sides of a square around a courtyard. Two of these wings are barns (in wing A), byres (wing B) and other rooms, generally of two-storey height, while the third is a single-storey open-fronted implement shed. The fourth, east side of the square is partly closed by a lodge and attached storage building set at a slight angle, and extended northwards

by a small range of single-storey sheds (wing D). The lodge and attached building were not accessible internally and not included in this survey

The buildings are generally of local limestone, with wooden wall fill in some places (wing A) and some brick walls (south facing walls of wing B) and minor features. The roofs were generally covered with slates, in good condition.

4.3 Visual inspection ()

A visual inspection of the buildings was done on 15th March 2021 to assess the potential or actual use by bats. 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 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 Appendices 11.5

Exteriors

We found no evidence of bats, such as droppings on ledges or rub marks on walls and soffits, on the outside of any of the the buildings.

We could see very few displaced roof slates, and only occasional probable gaps under the ridge tiles.

Interiors

The separate rooms are given labels in Appendix 11.4. The first letter denotes the wing, followed by a number in sequence starting at the southern end of wing A and continuing clockwise, recommencing at each corner. The next character is either G or L, denoting ground floor or loft, where present.

Wing A

All of the lower walls and most of the upper walls were of roughly coursed limestone rubble, with much missing mortar leaving many crevices throughout. The ground floor party walls between A1 and A2, and between A6 and A7 were of similar construction. The other rooms were divided by rough timber studding, with many gaps. The east facing (courtyard) upper walls of A3 to A6 were of similar rough boards. The roofs were supported throughout on timber rafters and purlins braced over substantial tie beams, which rested directly on the rubble tops of the walls.

We were able to enter the loft of A1 by way of a ladder. The hatch of A2 was blocked, but we were able to enter by erecting a ladder to a pitching door on the west side.

The roofs of A1, A2 and A3 were lined only on the eastern slopes, with a traditional bitumen-hessian membrane. Both slopes of A4, which had no loft, were lined but only the east slopes of A5 to A7. We were not able to gain access to the lofts of A5-A7.

Room A7 had been fitted, apparently recently, with a false ceiling and plastered walls and was in use for storage.

Wing B

Room B1 was open to the courtyard. There was no loft here, and both slopes of the roof at this end of the wing were lined. The rafter and purlin roof was supported on braced king posts over rather light beams, which appeared to be re-used, with many old mortise holes, and which were barely long enough to rest on the wall plates. This was probably a result of outward movement of the walls. Additional support has been provided by insertion of internal steel joists at intervals along the length of the wing. A series of beams at first floor level also also displayed many old mortise holes.

Room B1 gave access to feeding passages B2 and B7 on the west side of the wing, and to room B3, which was a cabin, mostly wood-walled, which had been lined, roofed and floored internally. There was a loft over all the other rooms in this wing. B4, B8-12 were all animal stalls with mangers. A wooden stair at the north end (B14) gave access to the lofts above. All the roofs at this (north) end were unlined. One slope of the roof above B14 was covered with corrugated steel sheet, the rest were covered with slates held on the laths with small wooden blocks attached to their undersides.

The floor of the loft over room B14 was considered acceptably safe, but beyond this area there was much evidence of decay of the floor of the loft and we deemed it unsafe to enter. We did observe a small deposit of moth and butterfly wings on the floor of the loft over B13, indicating a temporary feeding perch of a long-eared bat (*Plecotus* species) or possibly a Natterer's bat (*Myotis nattereri*i). We found no bat droppings. We found no other evidence of bats in any of the rooms of the building.

Wing C

A continuous open-sided implement shed with a pitched rafter and purlin roof covered with unlined corrugated steel sheets. The open side, facing the courtyard, was supported by round brick pillars. The walls, of limestone rubble, had many crevices due to lost mortar.

Wing D

A small range of stone walled single-storey rooms with a pitched roof covered with slates. The party walls are mainly of brick, with some brick lining in places. The roof had no lining membrane, but some of the rooms had ceilings of plywood or

particle board, in various states of completeness. The walls were generally well pointed, with no crevices.

Interpretation

We found very little direct evidence that bats use these buildings apart from sparse feeding remains of a probable long-eared bat, but there were many voids which we were not able to inspect. These include the loft areas which we could not enter, and the voids between the roof lining membranes and the slates.

The wings A, B and C therefore have moderate potential for use as bat roosts. Wind D, because of the lower profile and lack of roof lining or crevices in the walls, and the greater potential of the other buildings, is considered to have very low or negligible potential for bat roosting.

Birds

We found some nests of swallows in the north end of western wing.

5. Assessment of Effects and Mitigation Measures

The wings A, B and C have moderate potential for use as a bat roost.

It is considered that the works presently proposed could have a negative impact on bats. Further bat surveys, especially bat activity surveys between May and September, should be done before any work is begun which would significantly alter these buildings.

The nests of swallows in the western wing should not be disturbed between May and September. We recommend provision of alternative nesting sites for swallows to compensate for the potential loss of these sites.

Residual Effects

Residual effects on bats cannot be assessed until further surveys are completed.

Provided compensation for the loss of the swallows' nest sites is made, then the residual effects on birds will be small.

6. Compensation

Compensation for the loss of swallow nesting sites should be in the form of a building with an open front or a large access opening, and suitable attachment

locations near the roof or ceiling, such as a series of small shelves. We recommend installation of at least four swallow nest boxes to provide an initial nesting resource.

If wing C is to be left open-fronted, then this building would be a good site for provision of mitigation for swallows.

7. Enhancement Recommendations

We recommend attachment of at least 10 nest boxes for birds, including house sparrows, to the buildings. Pending further assessment of bat activity around the site, it is likely that we will recommend installation of some bat boxes.

8. Ecological Constraints

The survey was done during the late winter, outside the active season for bats. Therefore bats which might use the voids which could not be examined would probably not be detected.

9. Monitoring

Dependent of further bat assessment.

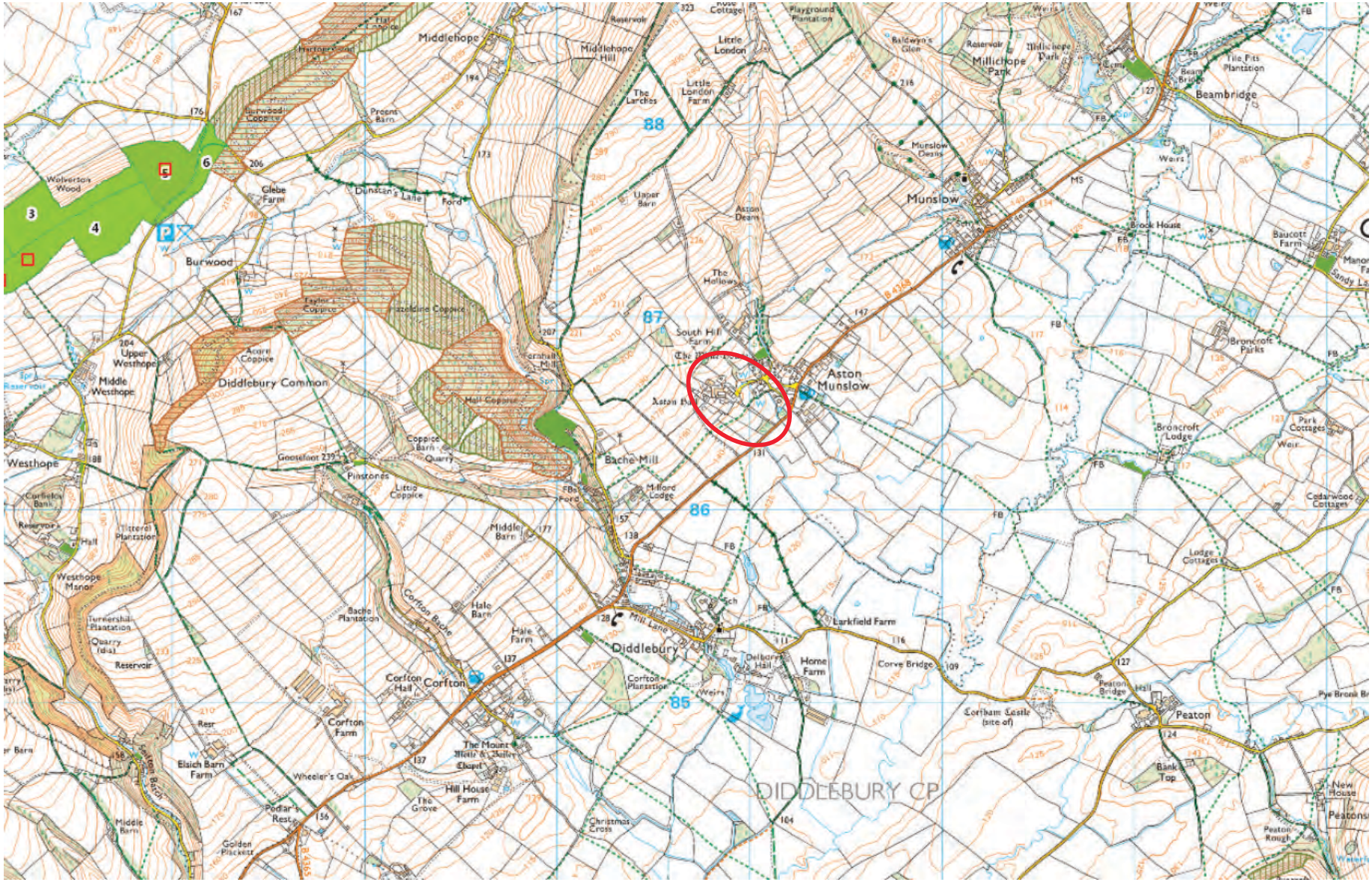
10. Bibliography

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

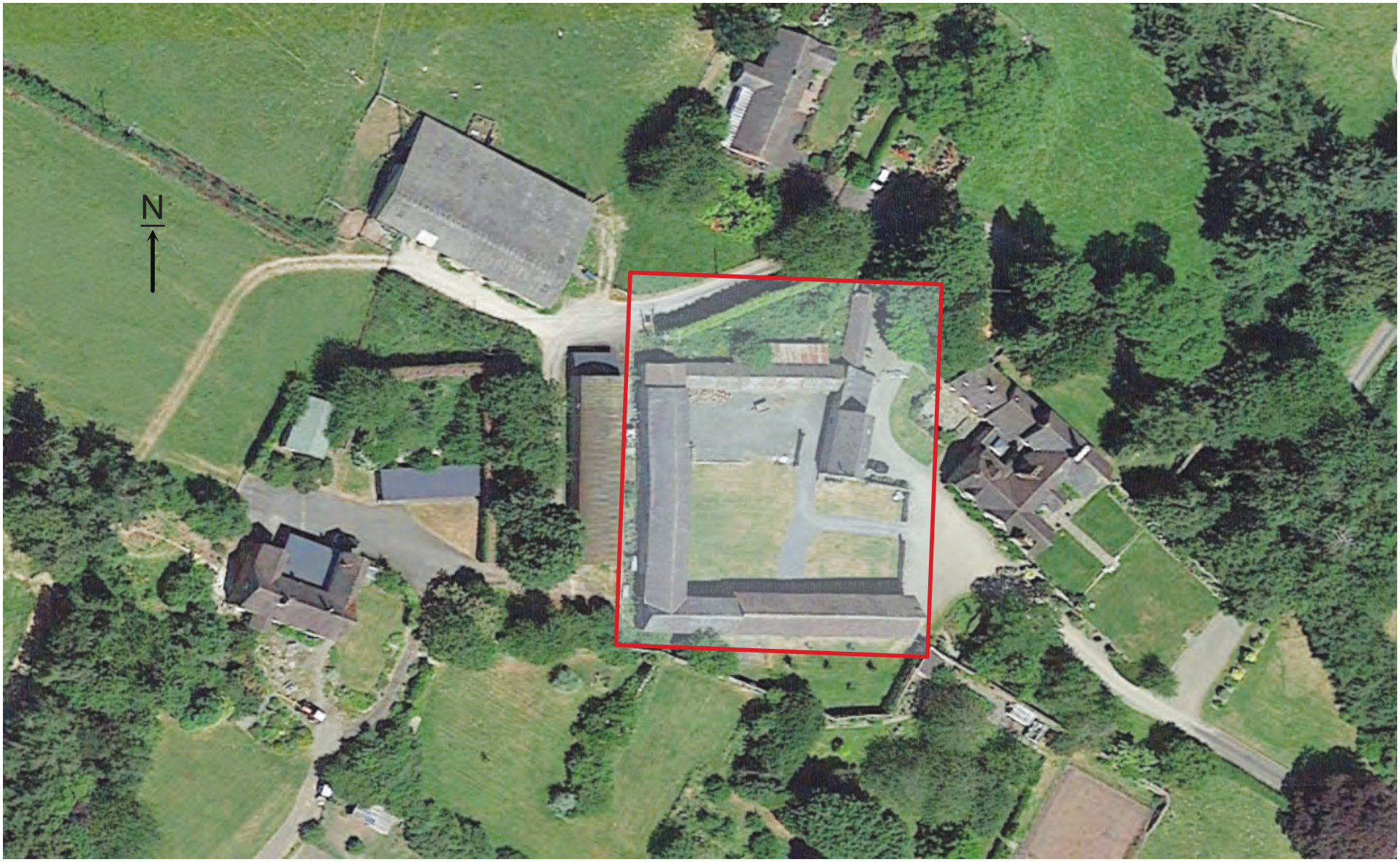
Mitchell-Jones, A. J. and McLeish, A. P. (2004) *Bat Worker's Manual,* Peterborough: Joint Nature Conservation Committee

Appendix 11.1.1: Location map

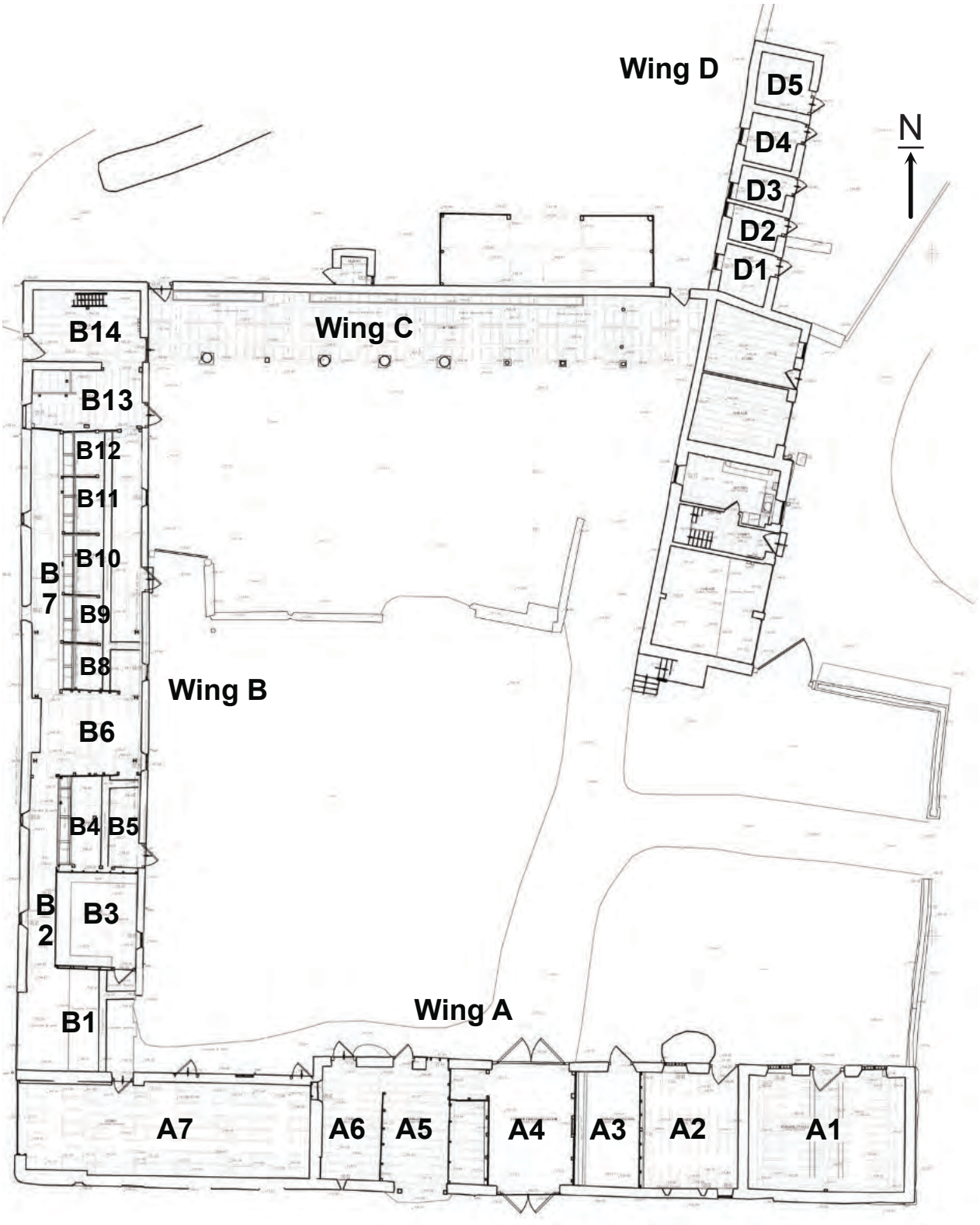


Appendix 11.1.2: Location map

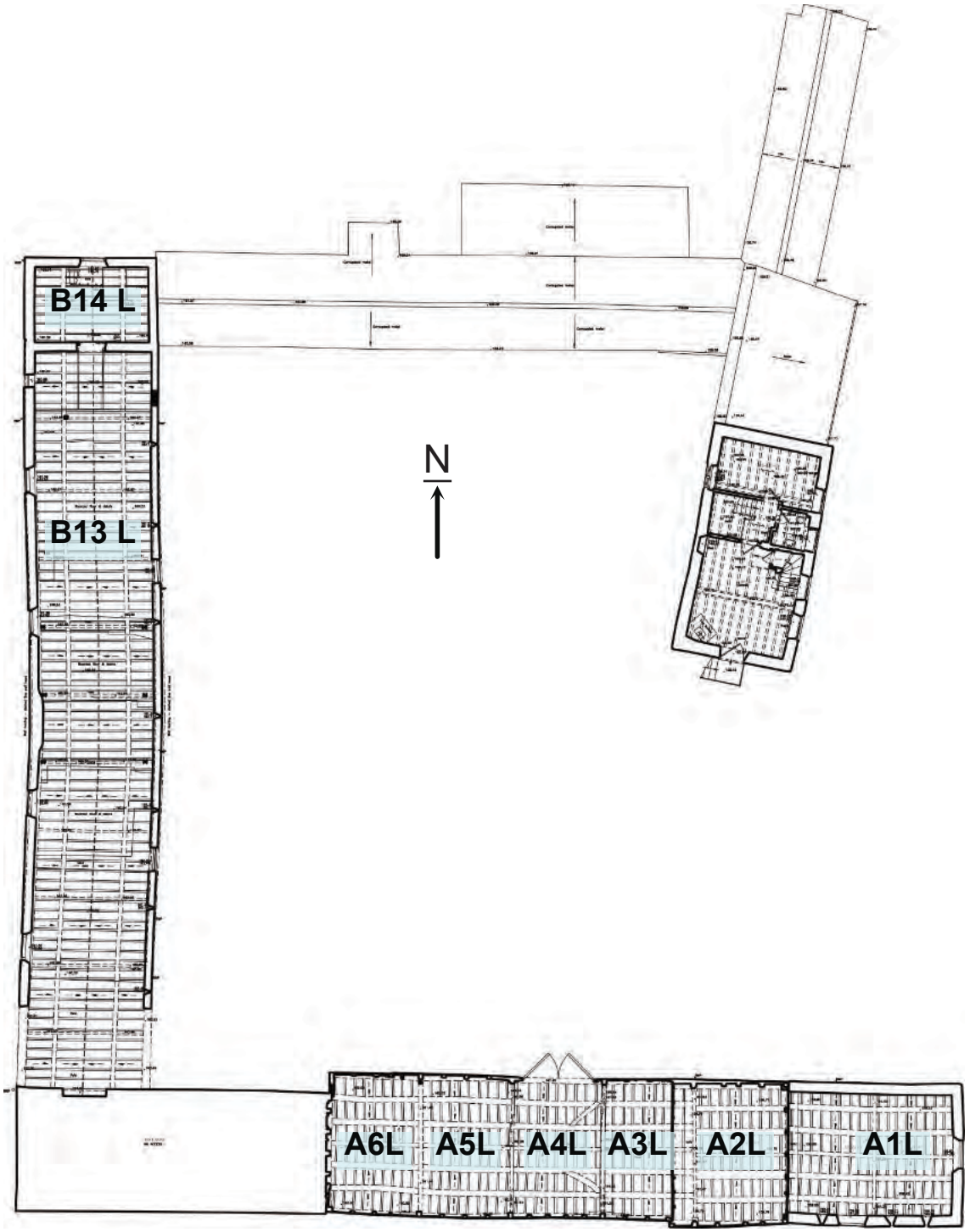
Appendix 11.2: Aerial photograph



Appendix 11.3: Plan of the buildings, ground floor



Appendix 11.4: Plans of the buildings First floors



Appendix 11.5.1 Exteriors

Wing A from the east (composite)

Wing A from the west (composite)

Wing B from the south

Appendix 11.5.2 Exteriors

Appendix 11.5.3 interiors. Wing A

Appendix 11.5.4 interiors. Wing A

Appendix 11.5.5 Interiors Wing B

Appendix 11.5.6 Interiors Wing B


Roof above B8G


Room B10G looking north


Room B13G


Room B14G


Room B14G swallows nests


Room B14G swallows nests


Room B14L


Room B14L

Appendix 11.5.7 Interiors Wing B, Wing C

Appendix 11.5.8 Wing D

Wing D from the south east

Room D1

Room D3

Room D5, north gable end

Appendix 11.6: Worsfold & Bowen

Worsfold & Bowen Ecological Consultants

Worsfold & Bowen have been professional ecological consultants since 2005, after many years' voluntary bat work.

Michael Worsfold PhD.
Bat survey and roost visitor licences held since 1994.
Bat Roost Visitor Trainer licence (Level 2) 2015-14022-CLS-CLS. (Natural England)
Level 4 survey licence 2015-15747-CLS-CLS. (Natural England)
Project licences 2016-26135-SCI-SCI; 2017-28280-SCI-SCI-1 (Natural England)
Bat Survey licence 71974:OTH:CSAB:2016 (NRW).
Great crested newt survey licence CLS0 1727. (Natural England)
Great crested newt survey licence 65948:OTH:SA:2015 (NRW)

Eileen Bowen.
Bat survey and roost visitor licences held since 1996.
Bat Roost Visitor Trainer licence (Level 2) CLS0 1725. (Natural England)
Level 4 survey licence CL20 2015-14028-CLS-CLS (Natural England)
Bat Survey licence 71973:OTH:CSAB:2016 (NRW).
Great crested newt survey licence CLS0 1725. (Natural England)

Current EPS mitigation licences:

2015-16429-EPS-MIT
61698:OTH:EPS:2015
71544:OTH:EPS:2016
2017-32736-EPS-MIT
76625a: OTH:EPS:2018
S086978/1 (2019)