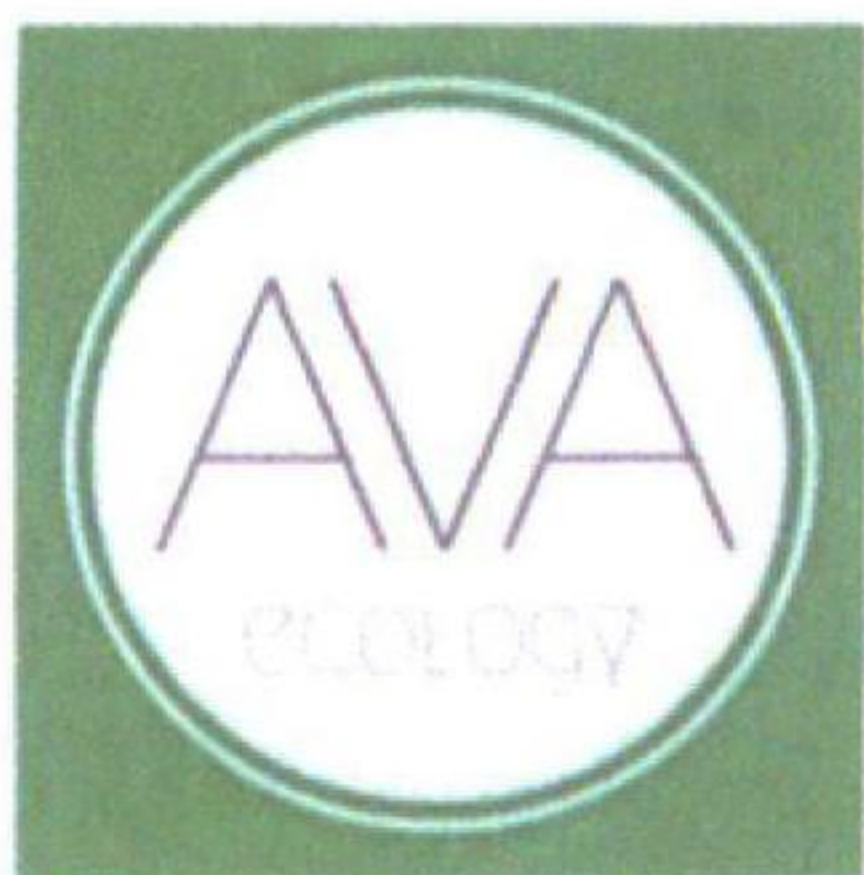




Ecological Surveys and Contracting

Preliminary Ecological Assessment (Bats)

At

Old St Peters Church

Wentlooge

Cardiff

South Wales

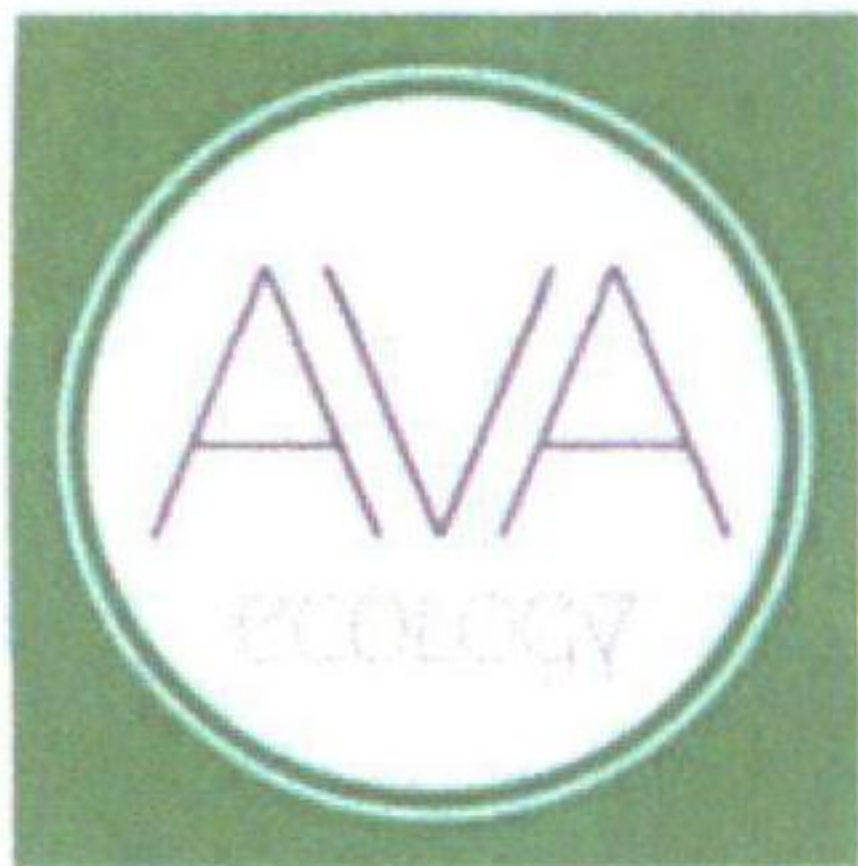
Author. Steve Wadley

Version: V1

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LERC Reference: 0223-066



Document Control

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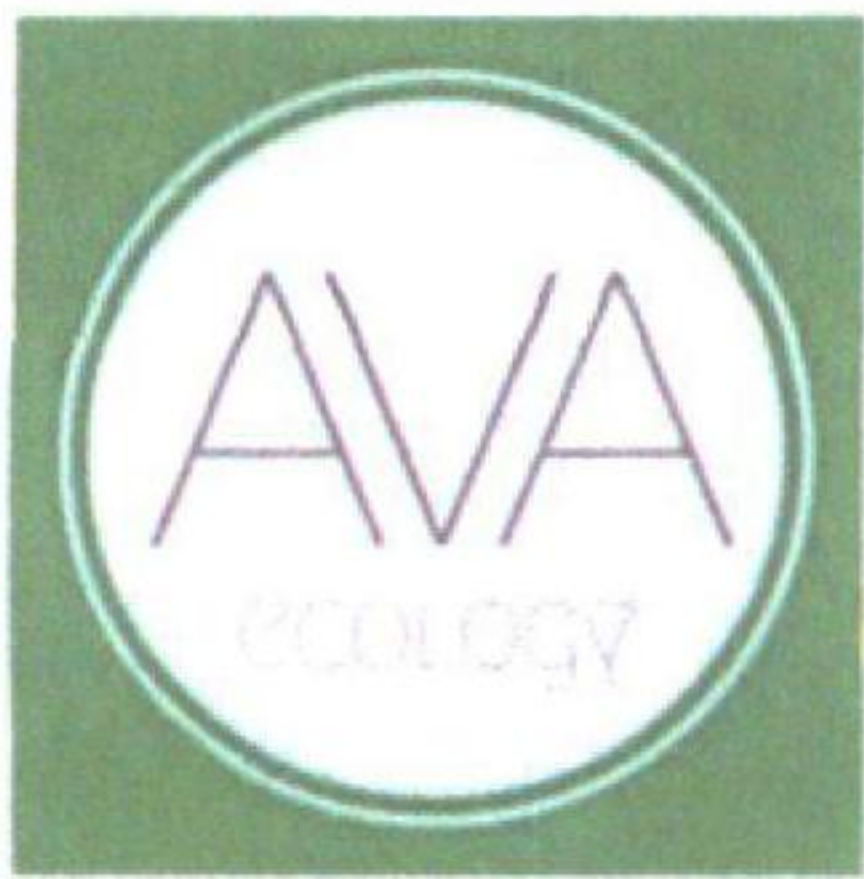
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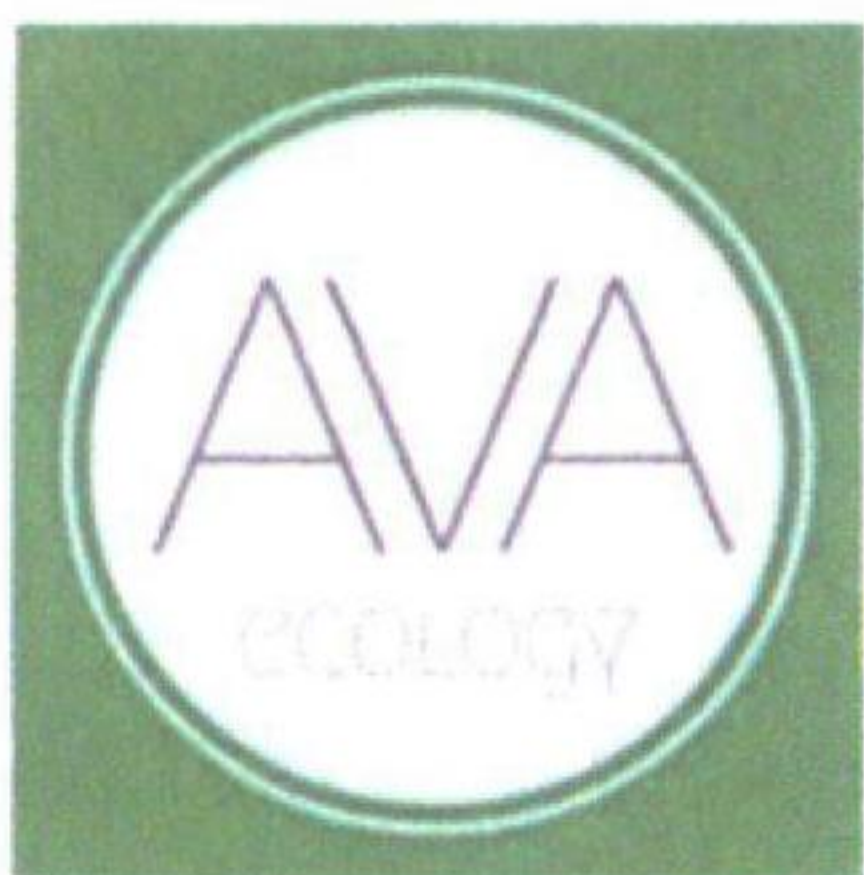
Non Technical Summary

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Non-Technical Summary:

Survey type	Preliminary Ecological appraisal (Bats and roof nesting birds)
Purpose	To assess the building for any potential for bat roosting and birds nesting and identify any evidence of birds or bats being present.
Methodology	Walkover survey, externally and internally following BS42020 and CIEEM guidelines A LBRC search was carried out
Findings	The inspection resulted in the negligible potential for bats or evidence of bats, but a Jackdaw was noted during the survey trying to build a nest above an external security camera.
Potential impacts	It is anticipated there will be negligible impacts to bats or roof nesting birds as a result of the proposed works. (See 6.4 Summary)
Further survey requirements	Further survey is not required as no evidence of bats was identified internally or externally and the proposed works will not impact bat or bird populations locally.
Conclusion	The proposed development would not have a significant impact upon roosting or foraging bats or roof nesting birds, the footprint of the building will not change; and as such no further action is required in terms of ecology survey. Section 6 of this report lists precautionary mitigation and this should be followed carefully. Habitat enhancement has also been included in this report.



1 Introduction

This survey and report were led by Mr Steve Wadley of AVA Ecology Ltd. Mr Wadley has extensive experience of bat conservation, research and commercial survey work in Wales and England.

Licenses Held:

Natural England (NE) class 20 bat survey licence (Number 2016-20666-CLS-CLS)

Natural Resources Wales (NRW) bat licence (S085928/1)

Natural Resources Wales VBRV (Trainer) licence

Memberships:

South Wales Bat Research group (chair)

Herefordshire Mammals group

1.1 Site and Building Description

The site is located at grid reference ST 26788 80160 and is a former church set in grounds surrounded by hedgerow and trees. (See fig 1). This Grade 1 listed church is 15th Century and is large with a bell tower at the East end. The church grounds are laid to grassland with surrounding lapsed hedgerow and trees. The church is within the small village of Peterstone Wentlooge and is immediately north of the Severn Estuary, East of the city of Cardiff and West of the city of Newport in South Wales.



fig1



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1.2 Proposed Development

The proposed development includes internal alterations to the building and the installation of solar panels onto a hidden flat roof on the south elevations (See plans).

1.3 Aims of the study

The aim of this study is to identify evidence of any use of the building by bat species. This survey report aims to assess the level of usage, classification of roost present, and any requirement for a UK Protected Species mitigation licence (UKPS). It will also provide mitigation proposals to be carried out prior to, during and after the works.

2 Methodology

2.1 Desk Study

A LBRC data search for bats and roof nesting birds was carried out (LERC Reference: 0223-066). The data search also includes information on European and UK designated sites (e.g. Special Areas of Conservation (SACs) and Site of Special Scientific Interest (SSSIs). This information was provided by the Statutory Nature Conservation Organisation (SNCO) Natural Resources Wales. The local authority planning website was searched for information on historical developments within the zone of impact of the proposed works to assess cumulative impacts on bats.



2.2 Field Survey

The methods used were appropriate to achieve the aims of the survey and follow Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition) The Bat Conservation Trust London and BS 42020:2013 Biodiversity (Code of practice for planning and development).

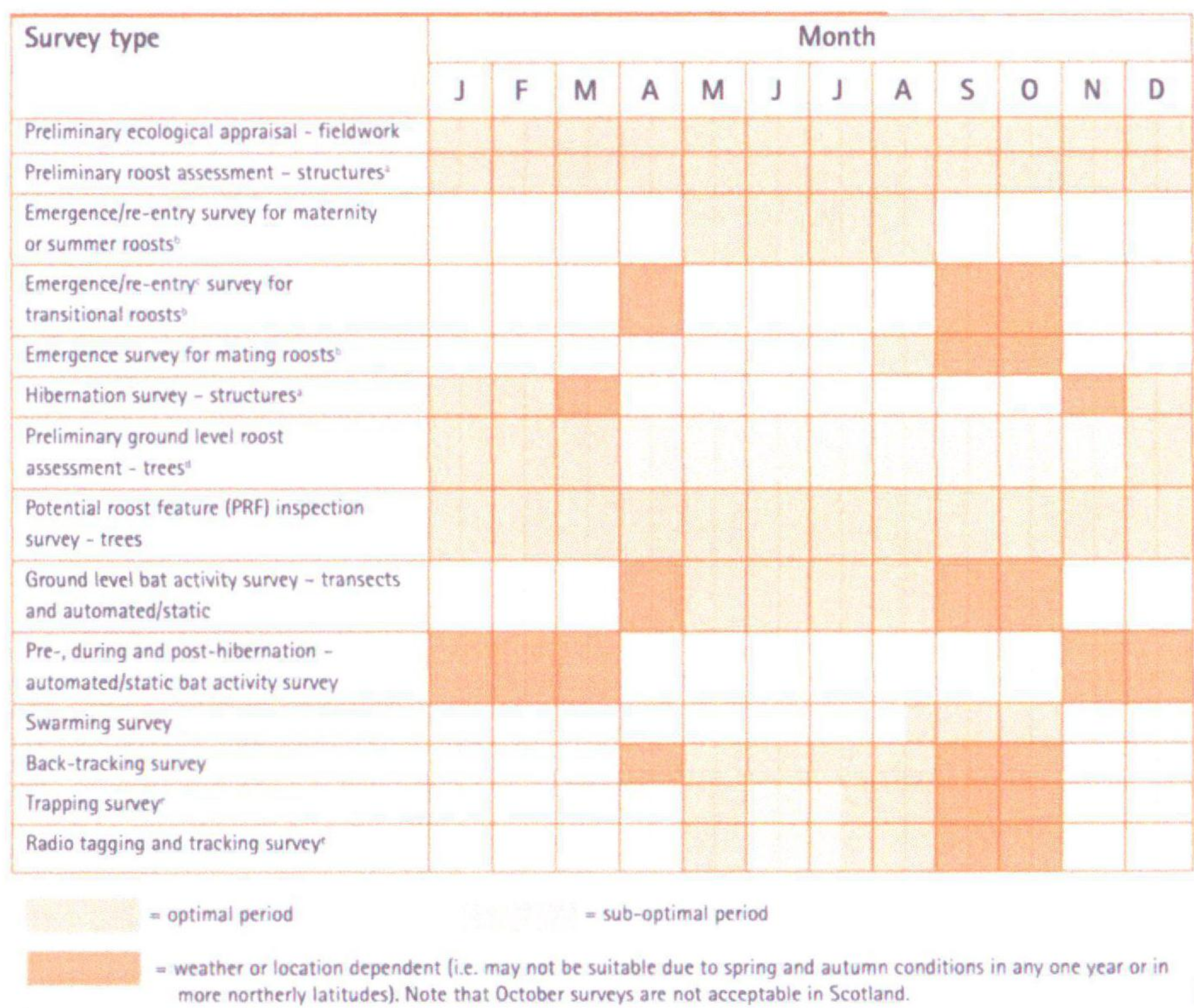


Plate 1

The building was inspected externally and internally using binoculars, ladders, camera and a high-powered torch. Photographs of any evidence of bat or bird activity and potential exit or entry points identified in the building were taken and noted for the report.

Evidence of bat presence/occupation includes:

- droppings
- urine stains
- greasy marks or scratch marks around possible roosting places
- Feeding remains such as piles of insect wings (especially moth)
- live roosting bats, bat skeletal remains or dead bats
- Signs indicating the presence of other protected species, for example nesting birds, were recorded when present.

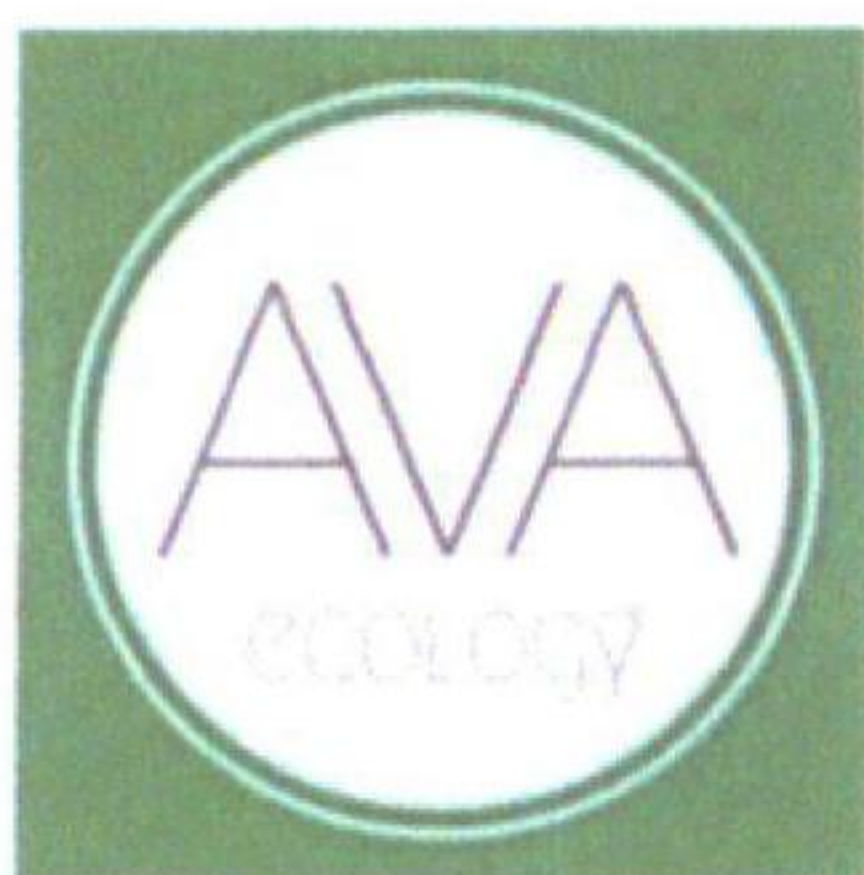


The potential of the building to support roosting bats was established using the following scale:

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions² and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation³). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.²	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ² and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ² and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Plate 2

Date	21/04/2022	Notes
Weather	fair	
Cloud Cover	70%	
Temperature	12°C	
Wind Speed	0-5mph	
Name	Bat Licence	Experience
Steve Wadley	S085928/1	Bat Specialist



3 Results

3.1 Desk Study

3.1.1 Designated Sites

Designated sites of importance to bats the 10 km radius of the site include the following:

- Rupera Castle and Woodlands SSSI (7.6km North-West)

3.1.2 Species List

Birds

Peregrine Falcon on site in 2009

Western Barn Owl 40m in 1973

Swallow 79m

Pied Wagtail 127m

House Sparrow 127m

Starling 127m

Lesser Black Backed Gull 127m

Kestrel 127m

European Herring Gull 445m

Blue Tit 445m

Great Tit 445m

Redstart 445m

House Martin 445m

Swift 865m

Bats (*Foraging, Commuting and roosting*)

Chiroptera Sp. (Roost on site in 2002)

Soprano Pipistrelle (399m in 2013)

Brown Long Eared (797m in 2015)

Myotis Sp. (797m in 2015)

Noctule (797m in 2015)

Common Pipistrelle (797m in 2015)

Whiskered (1.753m in 2014)

Greater Horseshoe (1,944m in 2018-2019)

Nathusius Pipistrelle (1,944m in 2018-2019)

Western Barbastelle (1,944m in 2018-2019)

Serotine (1,944m in 2018-2019)

Daubenton's (1,944m in 2018-2019)

Natterer's (1,944m in 2018-2019)

Leisler's (1,944m in 2018-201

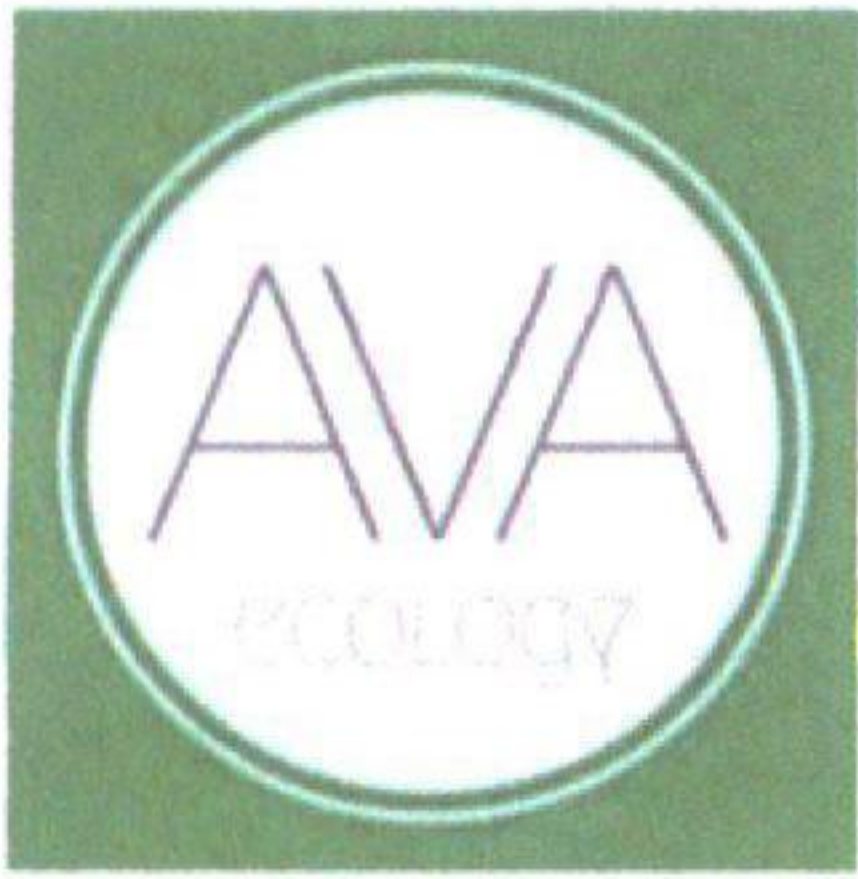


plate 3 Location of Rupera Castle and Woodlands SSSI

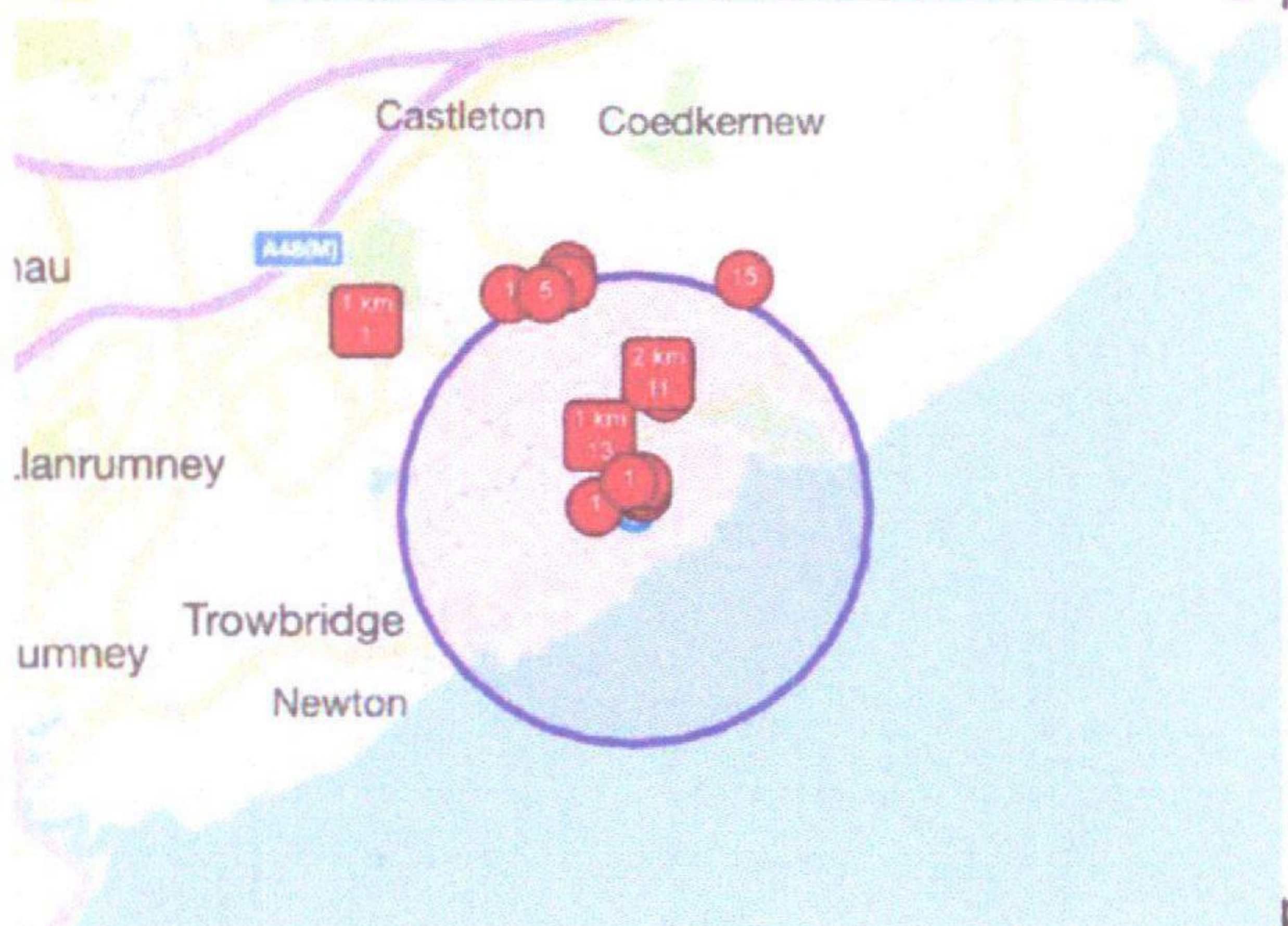


plate 4 Bat and bird records locations

3.2 Field Surveys

3.2.1 Habitat Description

The habitat immediately surrounding the building is grassland leading to native species hedgerow and trees. The vegetation on site is of high potential for foraging and commuting bats.

To the south of the site is a series of small, narrow fields extending the River Severn Estuary which extends west and east to the Gwent levels and Newport wetlands SSSI's.

To the north, East and West of the site is a small residential area extending to low lying areas of fields with tree lined reen's and drainage dykes as is typical of wetland areas.

Ecological connectivity to the site is high potential via reen's, ditches, dykes, tree lines and hedgerows.



fig 3.

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3.2.2 External Survey

The external survey identified:

Potential Level	Justification of Assessment
Negligible	15 th Century church with stone walls with a slate roof and sarking below. Very limited areas of potential bat roosting features or nesting areas. No evidence of bat activity, the building is very well maintained, probably due to the previous owners plans to convert to a residential unit. Cement Soffits and fascia are in good order. Roof appears sound with no gaps in slates or ridge tiles.

3.2.3 Internal Survey

The internal survey identified:

Potential Level	Justification of Assessment
Negligible	No evidence of bats internally, all windows are sealed and the gaps inside the building roof timbers are mostly filled with spider’s webs debris and dust. The roof is vaulted, open to view, and has wood sarking below the roof covering, therefore no gaps for bats to roost. The tower was not surveyed due to height issues and



access. (See 4.1 Survey Constraints and 6.4 Summary)

Overall building potential level	Negligible
----------------------------------	------------

4 Assessment

4.1 Survey Constraints (incl. equipment)

The tower was not surveyed internally due to access and height issues. However, this was not seen as having an impact on the survey results or impacts to bats and nesting birds as the proposed works does not include the tower directly or indirectly.

Any survey for bat species can only be a series of snapshots in time. Bats are very mobile with complex social structures and utilise multiple roost sites during the year. The implications of this are that surveyors must make informed assumptions based on observations, recorded data, local information, and a detailed knowledge of the species.

4.2 Potential Impacts

4.2.1 Bat Roosts

In the absence of mitigation, the proposed development would have no impact on bat roosts, bats were deemed absent from the building.

4.2.2 Bat Foraging and Commuting Habitat

In the absence of mitigation, the proposed development would potentially have negligible impact on bat foraging and commuting routes as no vegetation is planned for removal as part of this proposal or in the future except for the usual maintenance of the grounds

4.2.3 Birds

A partial jackdaw’s nest was identified on the North-east corner above a security camera, the bird was trying to build a nest during the survey.

There is a record of a barn owl within 40m from 1973 but the record does not state if it was nesting, although it does say there were feathers and fresh pellets present in a barn.

It is possible that the owl was nesting nearby but given the age of the record and the fact that the external fabric of the building will not be altered as part of the proposals, it is deemed very unlikely that barn owls will be impacted because of the development.



There is a record of a Peregrine Falcon on site in 2009. Whilst it is possible that a Peregrine falcon may be nesting somewhere unseen, high up on the building, there are also records of Peregrine falcon's commuting nearby so the record may be a foraging record. The recorder was contacted via e mail to verify the status of the record but has not yet replied. However, it is anticipated that Peregrine falcons will not be disturbed due to no significant external work being planned apart from the solar panels installed onto a low level flat roof.

5 Legislation and Policy Guidance

This legislation must be considered at all stages of development.

All bat species occurring in the UK are fully protected by European and UK law.

Under the Conservation of Habitats and Species Regulations 2017

(1) A person who—

(A) Deliberately captures, injures or kills any wild animal of a European protected species,

(b) Deliberately disturbs wild animals of any such species,

(c) Deliberately takes or destroys the eggs of such an animal, or

(d) Damages or destroys a breeding site or resting place of such an animal,

is guilty of an offence.

(2) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—

(a) to impair their ability—

(i) to survive, to breed or reproduce, or to rear or nurture their young; or

(ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or

(b) to affect significantly the local distribution or abundance of the species to which they belong.

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to:

- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used by bats for shelter or protection.
- Intentionally or recklessly disturb bats whilst in their place of rest or shelter
- Sell or advertise for sale or transport bats (including their derivatives)



The Countryside and Rights of Way Act 2000

The Act places a duty on Government Departments to have regard for the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity.

Schedule 9 of the Act amends SSSI provisions of the Wildlife and Countryside Act 1981 including provisions to change SSSIs and providing increased powers for their protection and management. The provisions extend powers for entering into management agreements; place a duty on public bodies to further the conservation and enhancement of SSSIs; increases penalties on conviction where the provisions are breached; and introduce a new offence whereby third parties can be convicted for damaging SSSIs. To ensure compliance with the Human Rights Act 1998, appeal processes are introduced with regards to the notification, management and protection of SSSIs.

Schedule 12 of the Act amends the species provisions of the Wildlife and Countryside Act 1981, strengthening the legal protection for threatened species. The provisions make certain offences 'arrestable', create a new offence of reckless disturbance, confer greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and enable heavier penalties on conviction of wildlife offences.

The UK Biodiversity Action Plan (UKBAP) includes objectives to conserve, and, where practicable, enhance:

- The quality and range of wildlife habitats and ecosystems;
- The overall populations and natural ranges of native species;
- Internationally important and threatened species, habitats and ecosystems;
- Species, habitats and natural and managed ecosystems characteristic of local areas
- Biodiversity of natural and semi-natural habitats where this has been diminished over recent decades.



6 Working Method Statement

6.1 Mitigation Proposals

The mitigation proposals for the development are as follows:

6.1.1 Pre-Works Mitigation

- a) A bat licenced ecologist must be made on call prior to works commencing.
- b) Any change to the plans (amendments) after the date of the planning approval must be notified to the ecologist and biodiversity department at the local authority by the owner prior to works commencing.
- c) The owner must ensure that a copy of this report is issued to the building contractor prior to works, the owner must ensure the contractor is advised to follow this report carefully.
- d) As an enhancement to habitats under the Environment Wales Act, a Beaumaris Woodstone Bat box will be installed onto a tree to the south of the building. The box must be on the south side of the tree at a height of at least 2m.
- e) Prior to installation of the solar panels, a nesting bird survey must be carried out.

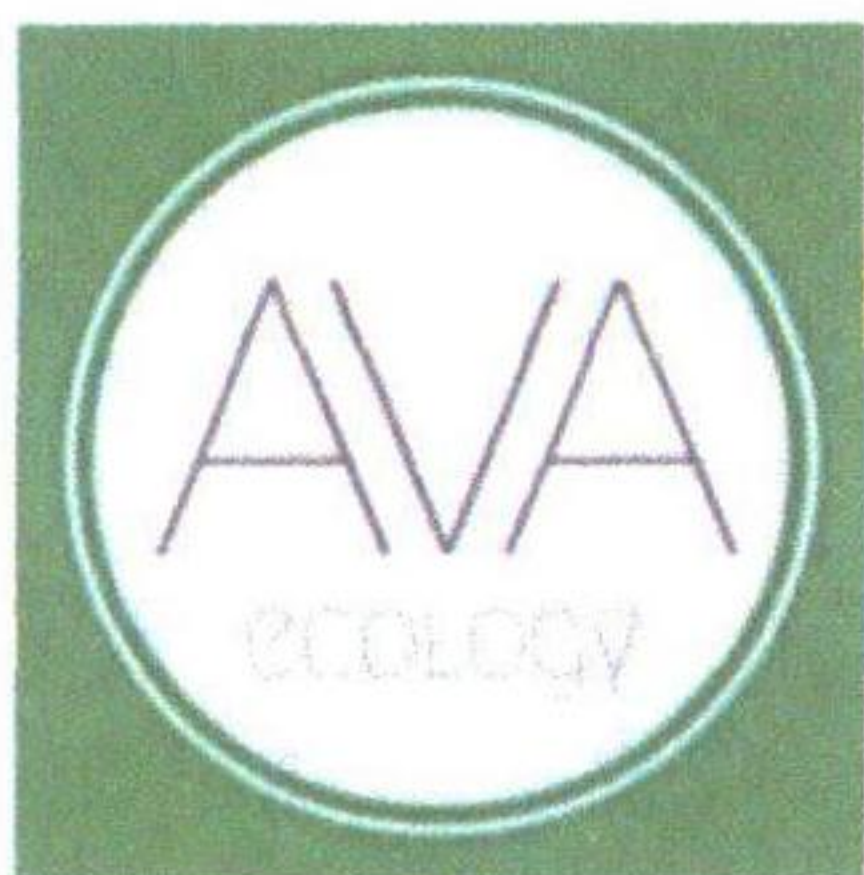
6.1.2 Construction Mitigation

- a) If bats are discovered at any stage of the development the ecologist and NRW must be informed immediately and works stopped until the ecologist has given advice. No bats are to be handled or moved by anyone other than a bat licensed ecologist.
- b) The ecologist must have the necessary equipment to take a discovered bat into captivity and the captive bat will be either released that evening at dusk on site or be placed into a Pre-positioned bat box and allowed to fly at its own will. If weather conditions are poor the bat will be kept overnight by the ecologist and released on site on an evening when the weather conditions are considered optimal.
- c) If works to the tower are planned at any time in the future, a bat emergence survey and nesting bird survey must be carried out prior to works commencing.

6.2 Further Survey

Further survey was not deemed necessary as enough information was gained during the surveys to attain a confident and accurate assessment of no use of the main building by bat species. If the plans change to include works to the tower, then further survey will be needed and should include 2 bat emergence surveys between May and September.

Whilst there is a record of Peregrine falcon (2009) on site, it is deemed very unlikely they are still present due to previous development work and potential disturbance. The records do not state that a nest was present at that time so the birds may have been foraging only. For this reason, and the fact that the external work includes only the installation of solar panels to a single storey flat roof, further survey is not deemed necessary. However, a nesting



bird survey is required immediately prior to the installation of the solar panels on the flat roof. if any birds' nests (Live or defunct) are discovered prior to, or during works, then work will stop; and not resume until the ecologist has confirmed the birds have dispersed.

6.3 Requirement for Licence

A protected species licence is deemed unnecessary as the proposed development would not result in an offence being committed under *The Conservation of Habitats and Species Regulations 2017* if the mitigation in this report is followed carefully.

6.4 Summary

The former St Peters church is very large, has a tall tower and is located within a high potential area for bat foraging and commuting. The building has been semi converted in recent years and was inhabited. The previous owner has maintained the exterior of the building and as such very few places for bat access exist. The bat and roof nesting bird survey resulted in no evidence of bats and negligible potential within the main building although the habitat is of high potential for foraging bats due to proximity to the wetlands and tree lines.

The proposals for development are to install solar panels to a flat roof on the south side of the building and internal alterations. The flat roof area and cement eaves above the flat roof have negligible potential for bat access or roosting, and no areas of bird nesting so would not be impacted by the installation or operation of the solar panels.

The tower was not inspected due to height and access issues but is not proposed for any works in the future. It is possible bats may be using the tower for roosting in summer or winter, but they will not be impacted by the proposals. Security lighting externally is currently significant so it is very unlikely that additional external lighting will be installed.

It is deemed very unlikely that the internal alterations will impact bats because there was no evidence of bats and negligible potential for bat roosting.

There is a record of a Barn Owl in a barn nearby and a Peregrine Falcon on site, but the last record of the Owl was 1973 and the Peregrine was in 2009. It is deemed very unlikely that birds will be impacted by the proposed works but as a precaution, a nesting bird survey will be carried out immediately prior to any external works including the installation of the solar panels on the flat roof.



7 References

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

The bat workers' manual (3rd Edition). Joint Nature Conservation Committee
Mitchell-Jones, A.J. & McLeish, A.P. (2004)

British Bat Calls. Russ. J 2012

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

Bats and Lighting. A. Fure (London naturalist No. 85 2006)

The Conservation of Habitats and Species Regulations 2017

The Wildlife and Countryside Act 1981 (as amended)

Tan 5 Planning Policy in Wales

BS: 42020 / 2013 Biodiversity (Code of practice for planning and development).

Environment (Wales) Act 2016

Chartered Institute of Ecology and Environmental Management's code of professional conduct.

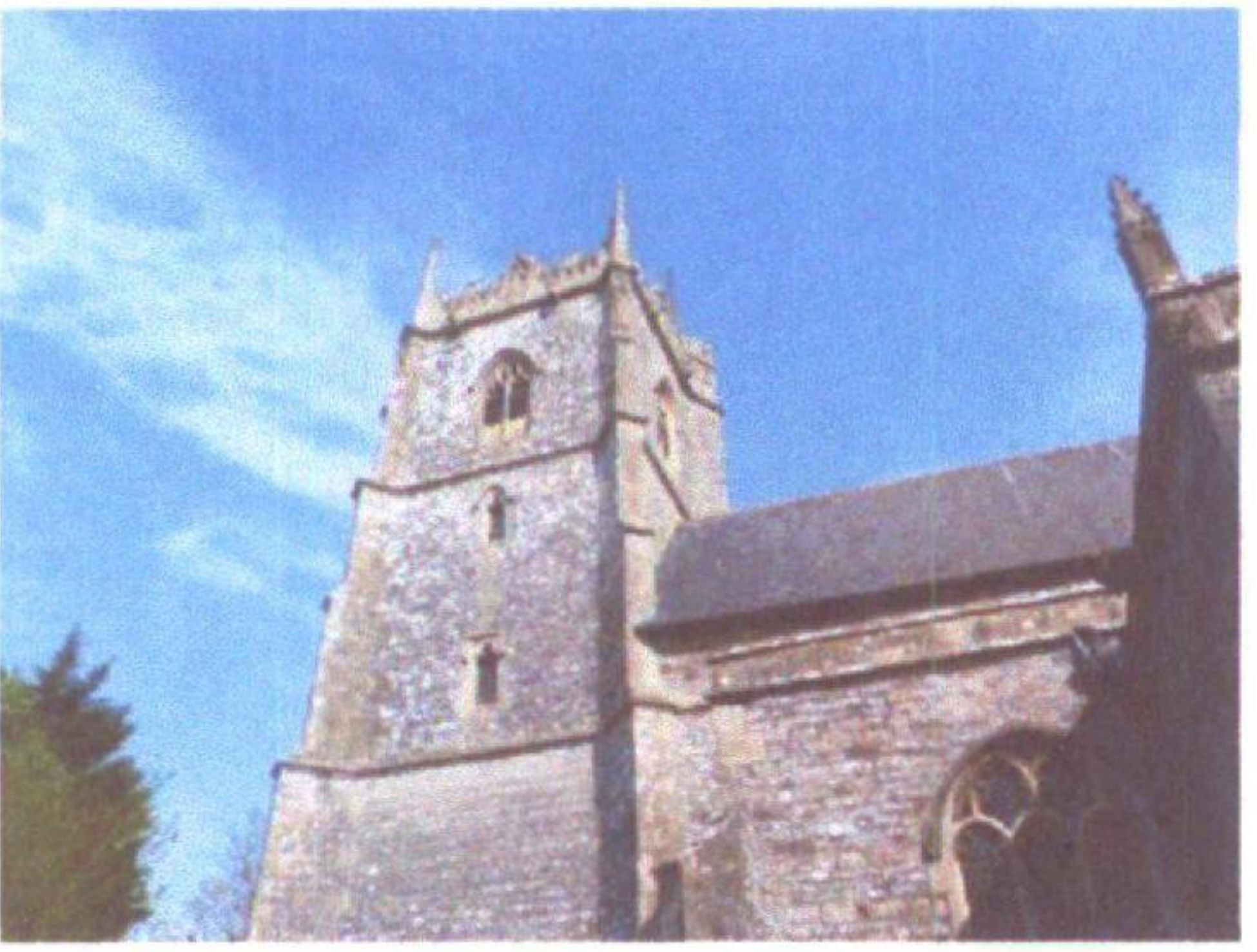


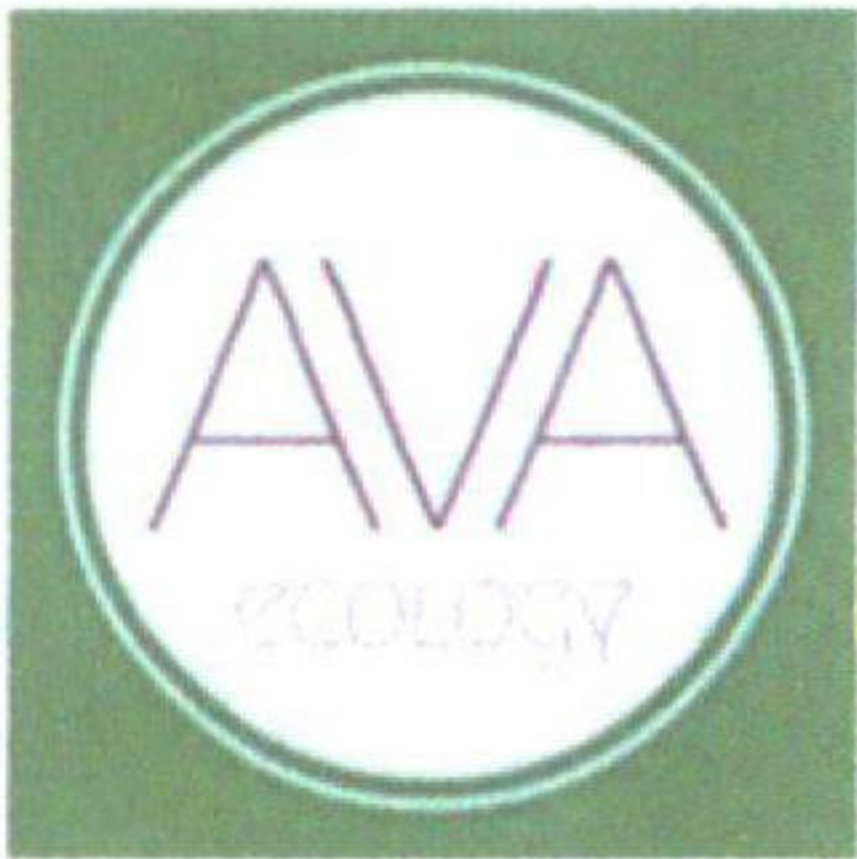
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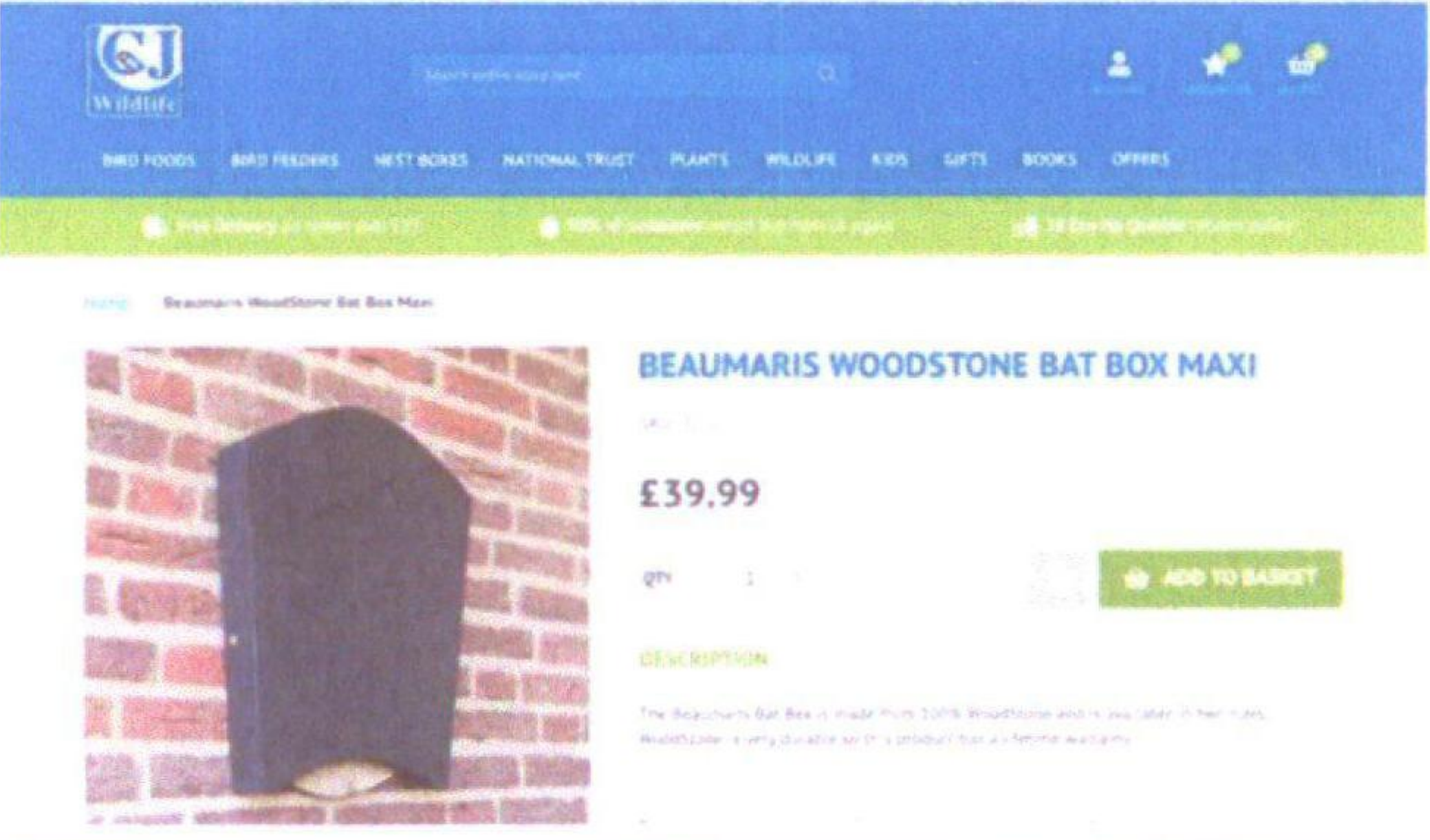
Appendix I: Plans



Appendix II: Supporting Photographs

	
Fig 1 – North elevations	Fig 2 – South Elevations
	
Fig 3 – Tower from the south	Fig 4 Tower Louvres (Open)



	
Fig 4 – Bat box	