Whitcher Wildlife Ltd.
Ecological Consultants.

IVY COTTAGE.

OS REF: SK 07205 41640.

BAT SURVEY.

Ref No:- **160934.**

Date: **21st September 2016.**

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1. INTRODUCTION.

1.1. Previous bat surveys of Ivy Cottage, Alton , Staffordshire have been carried out by others.

1.2. A further survey is required and Whitcher Wildlife Ltd has been contracted to carry out that survey.

1.3. The survey was carried out on the evening of 20th September 2016. This report summarises previous surveys and includes the results of the latest survey.

1.4. Appendix I of this report provides additional information on bats and the protection afforded to them and is designed to assist the reader in understanding the contents of this report.

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2. SURVEY METHODOLOGY.

2.1. The buildings were thoroughly checked internally and externally for potential bat roosting sites by looking for the following signs:-

* Holes, cracks or crevices.
* Bat droppings.
* Prey remains.
* Staining on external walls.

2.2. Unless otherwise stated, all lofts were accessed and inspected using a high powered torch and where necessary an endoscope.

2.3. A thorough external inspection was carried out from ground level for any gaps or openings in the roof and ridge tiles, behind soffits and fascias and in the walls of the structure for suitable roost access points and field signs to indicate possible use by bats.

2.4. All window cills, walls and the ground around the structure were checked for signs of bat droppings or staining to indicate possible use by bats. Where necessary, ladders were utilised to gain access within the limits of health and safety.
Any access constraints encountered are outlined within the following report.

2.5. All survey work was carried out in line with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition).*

2.6. This survey was followed by a dusk emergence survey.

2.7. This survey was undertaken by a team from Whitcher Wildlife Ltd led by Derek Whitcher who has over twenty years' experience of surveying for wildlife and has run his own wildlife consultancy since 1998. He has extensive experience of a wide variety of survey techniques for a variety of species of protected wildlife supplemented by attendance on a wide range of training courses through CIEEM, FSC and BCT. As a member of CIEEM he is committed to continuous professional development, a continual process of learning and career development, a condition of CIEEM membership. He holds current Natural England survey licences for barn owl, bat, great crested newt and white clawed crayfish.

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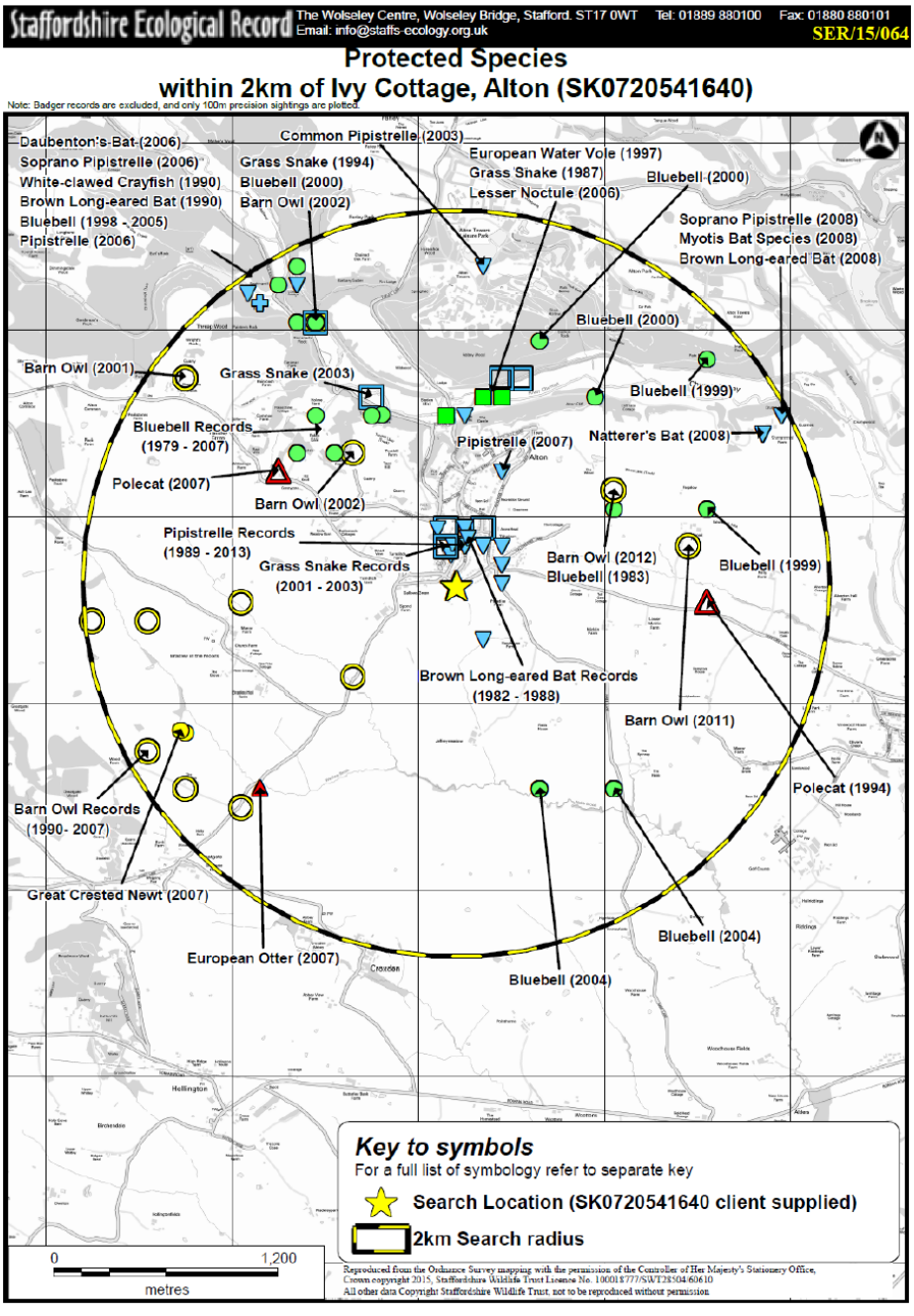
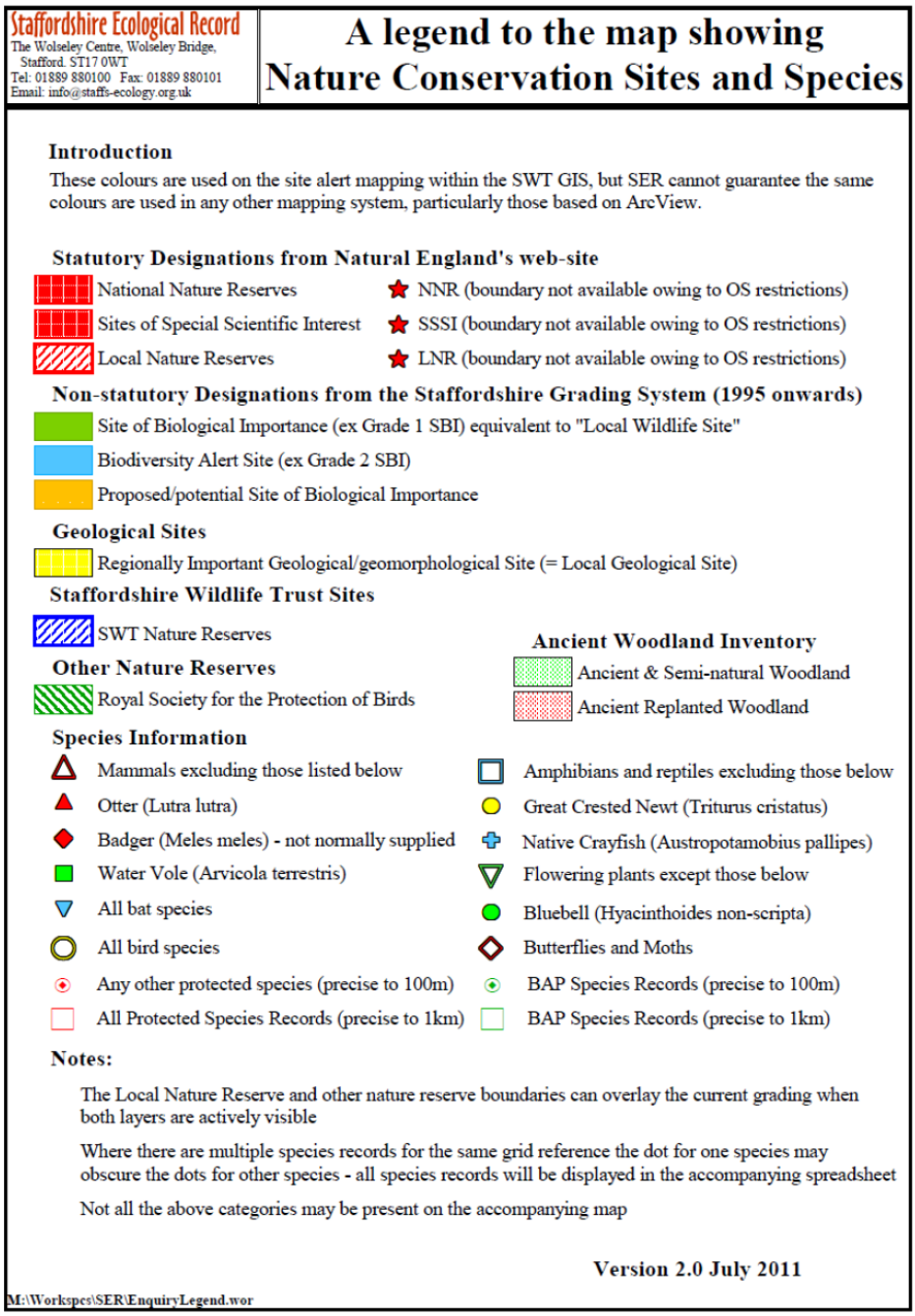
3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A desk top data search was undertaken in connection with a previous survey by others. Data provided by Staffordshire Ecological Record identified records of a number of bat species including brown long eared bats, Common Pipistrelles, Daubenton's, Leislers, Natterer's and Soprano Pipistrelles. The map below shows the data search results.





3.1.2. There were no records on the site but there is a Common Pipistrelle roost recorded in 1989 and 2013 and a Brown Long Eared bat roost identified to the north of the site and recorded in 1982 and 1988.

3.2. Site Description.

3.2.1. Ivy Cottage is located at the southern limit of Alton village, as shown on the aerial photograph below. Hence the village of Alton lies to the north with open farmland and hedgerows to the remaining three sides.

3.2.2. The site itself comprises a stone built cottage with a commercial orchard to the south. The photograph below shows the northern aspect of the stone cottage overlooking the B5032.

3.2.3. The photograph below looks south, from the house across the land that goes with the house.

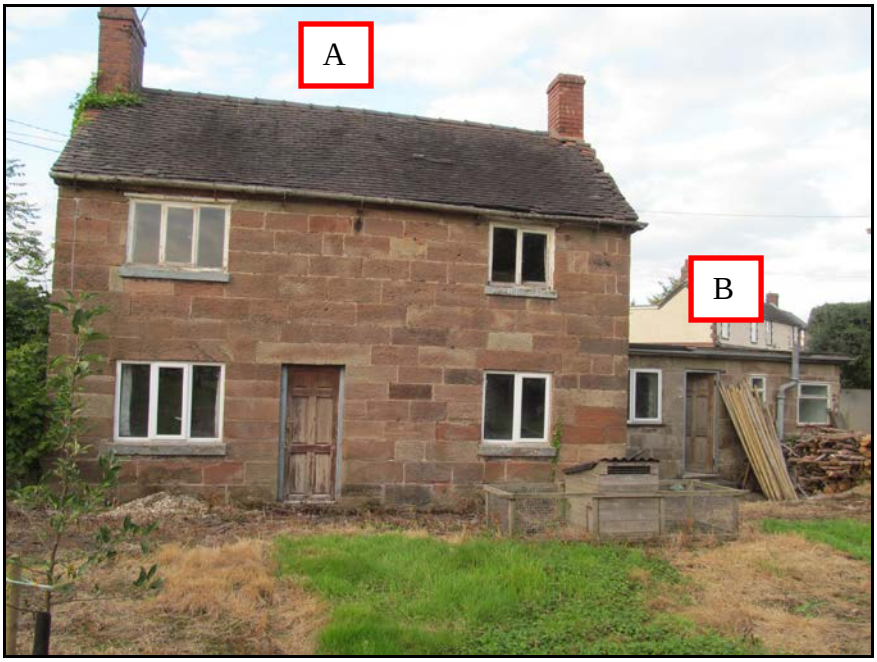
3.3. Previous Surveys.

3.3.1. A day time inspection survey was carried out on 19th May 2015 and that identified no bats or bat field signs inside or outside of the house.

3.3.2. Two dusk activity surveys have been carried out by others on 19th and 28th May 2015. These were carried out by two surveyors and identified a low level of foraging activity around the house and over the land to the south but no bats emerged from the house. All activity was Common Pipistrelle bats.

3.3. Daytime Survey Results.

The building on the site comprises two distinct sections. The main cottage (A) is a two storey stone cottage with a rosemary tile covered pitched roof with a single storey, flat roofed extension on the eastern end(B). Both are shown below and are separately described below.



3.3.1. Building A.

3.3.1.1. Building A is a stone built cottage constructed with large, solid blocks of coursed stone. Western end of the building is covered with a dense area of ivy

3.3.1.2. The remainder of the walls are good and solid with the exception of a small number of cracks and crevices on the eastern gable end wall. These have the potential for roosting bats although close examination with a pole mounted camera identified no signs of use by bats.

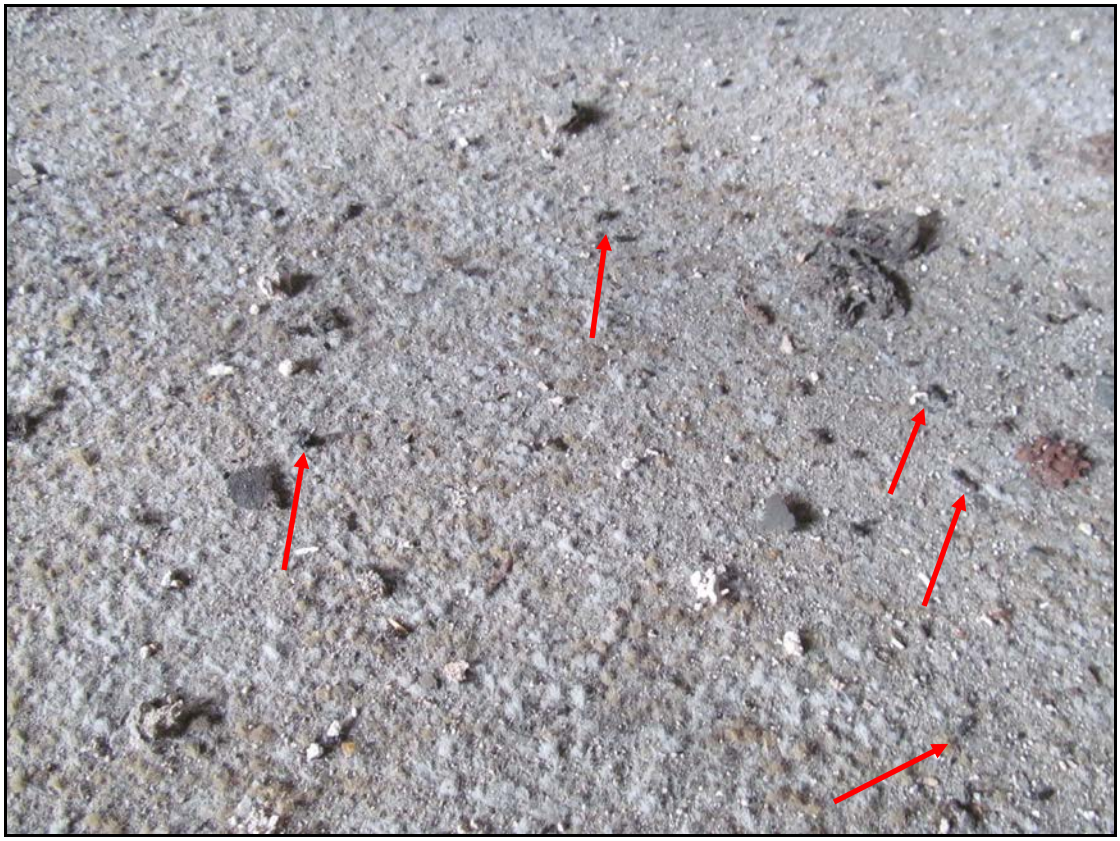
3.3.1.3. The roof is generally in fair condition but there are slipped and displaced tiles, particularly down the southern side of the eastern gable end that provide access for bats to the loft space. There are also some small gaps beneath the ridge tiles.

3.3.1.4. The loft space is quite low because the top floor rooms extend into the loft. However, the majority of the ceilings are down opening the loft space into the two bedrooms.

3.3.1.5. There is no felt beneath the roof tiles and therefore the slate laths and torching are exposed as shown below. There are areas where the torching has deteriorated and this has exposed various gaps. There are also gaps leading up beneath the ridge tiles and occasional gaps to the outside of the roof, particularly around the chimney at the eastern end of the roof.

3.3.1.6. A small group of approximately 20 to 30 bat droppings were found on the carpet in the western room beneath the ridge. These were all quite small and were assessed to be fairly fresh, black but drying, as shown in the photograph below. A sample of these was collected and compared to library samples. They were assessed to be Pipistrelle droppings.

3.3.1.7. No other bat field signs were identified anywhere else inside of outside this building.



3.3.1. Building B.

3.3.2.1. Building B is a stone built single storey extension on the eastern end of Building A. Like the cottage, it is constructed with large, solid blocks of coursed stone with a flat roof.

3.3.2.2. The walls are in good condition with no visible cracks and crevices but the fascia and soffit boards are rotten and in a poor state with gaps around. However, these were low down and easy to visually inspect. There were a number of cobwebs present but no signs of use by bats.

3.3.2.3. There are no opportunities for bats to roost within the flat roof or inside this part of the building.

3.4. Dusk Emergence Survey Results.

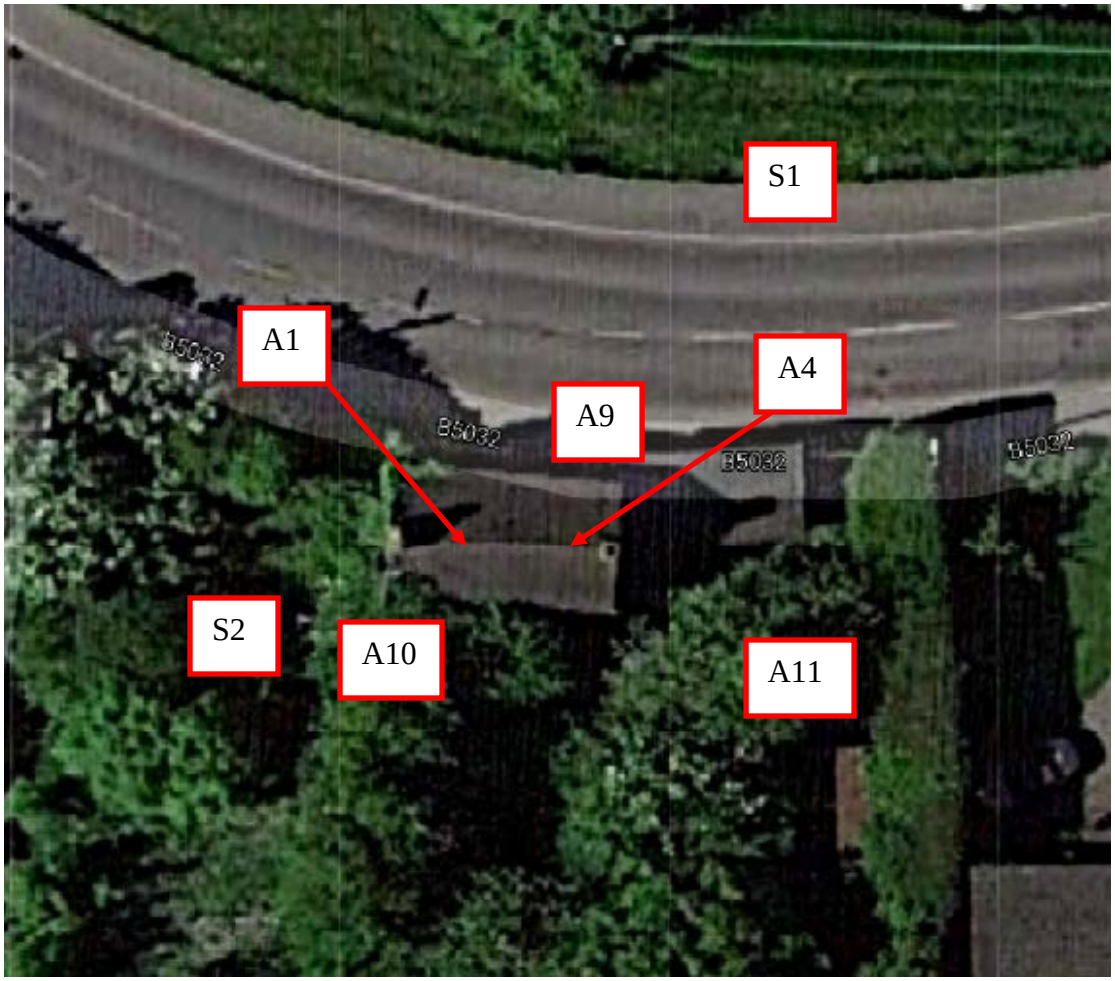
3.4.1. Two surveyors carried out a dusk emergence survey on the night of 20th September 2016. Both surveyors hold Natural England class licences for surveying bats.

3.4.2. Both surveyors were equipped with a Batbox Duet detector and a two way radio, In addition, five static Anabat recorders were deployed around the site to record bat activity for subsequent computer analysis using Analook software.

3.4.3. There was 50% cloud cover at the start of the survey clearing during the survey. There was minimal wind blowing from the west at 1mph and a temperature of 14°C at 19:00.

3.4.4. The surveyors were deployed to view all sides of the property simultaneously and the Anabat recorded were similarly deployed to record bat activity inside and

outside the buildings. The aerial photograph below shows the positions of the surveyors (S) and Anabats (A). Anabats 1 and 4 were placed inside the upper floor of the building to record bat activity in the loft space.



3.4.5. The following are the observations of the surveyors.

3.4.5.1. Surveyor 1.

19:33. Common Pipistrelle from the north, south over Building B.
19:41. Common Pipistrelle heard not seen.
19:45. Common Pipistrelle from the south over Building B and away north.
19:45. Common Pipistrelle from the north, south over Building B.
19:49. Common Pipistrelle from the south to the west of Building A and away north.
19:50. Common Pipistrelle from the north, foraged over road and returned north.
19:52. Common Pipistrelle briefly heard not seen.

19:53. Common Pipistrelle from the north and south down east side of Building B.
19:55. Common Pipistrelle heard not seen.
19:56. Common Pipistrelle heard not seen overhead.
19:57. Common Pipistrelle heard not seen.
19:59. Common Pipistrelle heard not seen.
20:00. Common Pipistrelle heard not seen.

3.4.5.2. Surveyor 2.

19:34. Common Pipistrelle north to south over road.
19:41. Common Pipistrelle passed east to west over garden.
19:43. Common Pipistrelle emerged from under ridge tile of Building A and flew south.
19:45. Common Pipistrelle passed south to north over the site.
19:48. Common Pipistrelle passed south to north over the site.
19:49. Common Pipistrelle passed south to north over the site.
19:53. Common Pipistrelle passed south to north over the site.
19:56. Common Pipistrelle foraging around the buildings.
19:59. Common Pipistrelle foraging around the buildings.

3.4.6. The following are the recordings on the Anabat recorders:-

3.4.6.1. Anabat 1 inside the house recorded no bat activity.

3.4.6.2. Anabat 4 inside the house recorded no bat activity.

3.4.6.3. Anabat 9 on the north side of the buildings recorded eleven Common Pipistrelle calls between 19:31 and 19:56, three Myotis calls at 19:55, 19:58 and 20:01 and one Noctule at 20:01.

3.4.6.4. Anabat 10 to the southwest of the buildings recorded seven Common Pipistrelle calls between 19:41 and 19:56 with one Myotis call at 19:54.

3.4.6.5. Anabat 11 at the southeast corner of the buildings recorded eight Common Pipistrelle calls between 19:30 and 19:53, one Soprano Pipistrelle call at 19:49, three Myotis calls at 19:52, 19:57 and 20:00 and one Noctule at 20:00.

3.4.7. Summary.

3.4.7.1. A low level of bat activity was recorded around the site and this was initially Common Pipistrelle activity with one Soprano Pipistrelle call. No bat activity was recorded inside the building but one bat was seen to emerge from under the ridge tiles at 19:43 by Surveyor 2. At that time, Anabat 10 recorded a Common Pipistrelle confirming the species.

3.4.7.2. Towards the end of the survey, a Myotis bat was recorded on all three external Anabat recorders but first of all on the Anabat to the southwest of the buildings suggesting it came from that direction. This bat foraged around the site.

3.4.7.3. One Noctule bat was briefly recorded on Anabats 9 and 11 passing over the site at 20:00.

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4. EVALUATION OF FINDINGS.

4.1. One day time inspection survey and two dusk emergence surveys were carried out by others during May 2015. These identified potential for the presence of bat roosts but no direct evidence of a roost and no bats emerging from the buildings on site. A low level of bat activity was identified, predominantly Common Pipistrelles and predominantly foraging south of the buildings.

4.2. A further day time inspection survey and dusk emergence survey was carried out by Whitcher Wildlife Ltd in September 2016. This is quite late in the survey season but is acceptable under the Bat Conservation Trust Good Practice Guidelines Third Edition.

4.3. The day time inspection identified a small number, approximately twenty, of small bat droppings on the carpet beneath the ridge in the western of the two bedrooms. These were of varying age although none were very old so it is assessed these are from this current 2016 season.

4.4. The dusk emergence survey identified a Common Pipistrelle emerge from the ridge tiles in the position above where the droppings were identified. No other bats emerged from the building.

4.5. The building is therefore assessed to contain a small Common Pipistrelle Day Roost and the fact that no bats were seen during the 2015 surveys but were during the 2016 survey is not untypical bat activity for this type of roost. The loss of a Common Pipistrelle Day Roost is a very low impact because it represents the smallest roost of the most common species of bat in the country.

4.6. The buildings do not provide sufficient roost opportunity for the presence of a maternity roost and the open nature of the building provides no opportunities for hibernating bats.

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5. RECOMMENDATIONS.

5.1. Three surveys have been carried out to date on the buildings present on the site. Although these show a variation in bat activity, this is not unusual but is typical of a Common Pipistrelle Day Roost. Therefore, no further surveys are recommended.

5.2. Because there is a roost in the building it will be necessary to prepare a mitigation strategy to accompany this report when submitted to the Local Authority. This will be a simple statement and will cover timing of works that will impact on the existing roost, generally between October and March when bats are in hibernation and will cover the provision of mitigation and compensation measures. This would generally be to provide a number of bat bricks in the new buildings to be constructed on the site.

5.3. Once planning consent is granted, it will be necessary to cover the works under a Natural England but with such a low impact roost this will be done under the Low Impact Licence scheme.

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Prepared by:	
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Checked by:	
Jenny Whitcher Roebuck MCIEEM.	Date: 22nd September 2016.

6. REFERENCES.

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Appendix I. BAT INFORMATION.

It is necessary to understand a little about bats, their basic nature, ecology and legal protection in order to evaluate the findings of this report.

18 species of bat currently reside in Britain, 17 of which are known to breed here. They are extremely difficult to identify in the hand and even more so in flight.

All appear to be diminishing in numbers, probably due to shortage of food, caused by pesticides, as insects are their sole diet, and habitat change.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and the roofs of buildings.

Certain species, particularly the pipistrelle (the commonest and most widespread British bat) can quickly adapt to manmade structures and will readily use these to roost and to rear their young.

Bats are protected under the Wildlife and Countryside Act 1981, Regulation 41 of The Conservation of Habitats and Species Regulations 2010, and the Countryside & Rights of Way Act 2000.

It is an offence to intentionally or recklessly kill, injure or capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

A breeding or resting site of any bat is known as a bat roost. A bat roost is therefore any structure a bat uses for shelter or protection. Because bats tend to use the same roosts each year, legal opinion is that the roost site is protected whether or not the bats are present at that time.

Bat roosts can be identified by looking for:-

- Suitable holes, cracks and crevices.
- Bat droppings.
- Prey remains.
- By carrying out night observations using a bat detector.

Where development proposals are likely to affect a bat roost site, a licence is required from Natural England.

The person applying for that licence has to be suitably qualified and experienced in bat matters. That person is then responsible for ensuring that the measures contained in the licence are carried out.