

Bat Emergence and Re-Entry Surveys (BERS)

Survey site:

Lower Starring Farm, Starring Road Littleborough, Lancashire, OL15 8HN

Client:

Suzanne Gumbley

Report date:

26rd August 2024

Project:

This report is prepared to inform a planning application for the proposal described as:

The conversion of the attached barn into living accommodation.

This report is supplementary to the Preliminary Roost Assessment report completed by Arbtech Consulting Ltd (2023).

BERS survey methodology and legislation can be found in the Arbtech Supplement: [BERS Methodology and Legislation - 2024.](#)

This report is an addendum to and must be read in conjunction with the Preliminary Roost Assessment completed by Arbtech Consulting Limited (2023) for the same site address.

This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.

Executive Summary

Background

The PRA identified areas of lifted roof tiles on the roof of B1 creating opportunities for crevice-dwelling bat species to roost. No suitable roosting features were noted for void dwelling species. Nearby watercourses and woodland provide foraging habitats and commuting routes for local bat populations.

The PRA concluded the site has moderate habitat value for roosting bats.

BERS results

The surveys did not record any bat roosting activity, as such precautionary working methods are suggested.

The site surveys were designed and managed by Kayleigh Davies BSc MSc, Accredited Agent on Natural England Bat Licence – details on request).

See surveyor locations in the **BERS plan in Appendix 1.**

Limitations

No limitations were identified.

Field Survey**Dusk Emergence Survey 1****Building B1***Building inspection
prior to survey*

The building was inspected pre-BERS by Kayleigh Davies, Graduate Ecologist, accredited on Natural England Bat License – details on request, on the 31/07/2024. The inspection found no evidence of roosting bats and no material changes since the initial assessment by Arbtech in 2023. Interior temperature was recorded to be 22°C and the relative humidity was recorded to be 71%.



Figure 1 - the interior of the barn pre- BERS

<i>Surveyor and position</i>	Lead Surveyor 1 – Kayleigh Davies – Accredited Agent on Natural England Bat Licence– observing the north and east elevations Surveyor 2 – Katie Whitfield – 2 years bat survey experience – observing the south and west elevations Unmanned IR camera – placed inside B1 facing the southern section of the barn						
<i>Weather (start/end)</i>	Temperature (°C): 21 Relative humidity (%): 71 Cloud cover (%): 70 Wind (m/s): 1.3 Rain: None				Temperature (°C): 20 Relative humidity (%): 77 Cloud cover (%): 60 Wind (m/s): 0.9 Rain: None		
<i>Equipment used</i>	Echometer Touch 2 x 2, Magenta Bat4 x 2, Nightfox Whisker IR cameras x 3, Nightfox IR torches x3						
Results							
Date of survey	Sunset Start - End	Species and numbers	Roost type	Structure reference	Roost location	Access points (include # of them)	Dimensions and explanation of roost location
31/07/2024	Sunset 21:06 20:51 – 22:36	N/A	N/A	B1	N/A	N/A	N/A
Surveyor observations							

<i>Surveyor 1</i>	No bat roosting activity observed. First bat activity at 21:07, a common pipistrelle passing south to north in front of the western elevation. This was followed by frequent foraging passes by 1-2 common pipistrelles from north to south and east to west in the western garden until 21:48. A noctule was heard not seen at 21:46. Common pipistrelle activity was then heard not seen and infrequent (3 calls) with the last bat activity a common pipistrelle heard not seen at 22:32.	
<i>IR position</i>	No bat roosting activity recorded. IR footage reflected view of surveyor 1.	

<i>Surveyor 2</i>	No bat roosting activity observed. First bat activity at 21:13, a common pipistrelle passing north to the east of B1. Common pipistrelle passes from 1 individual at a time, were frequent from 21:13 to 22:03, passing through the field west of B1. Last activity was a common pipistrelle heard not seen at 22:34.	
<i>IR position</i>	No bat roosting activity recorded. IR footage reflected view of surveyor 2.	

<i>Unmanned IR – internal</i>	No bat activity recorded throughout survey.	
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Field Survey							
Dusk Emergence Survey 2							
Building B1							
<i>Surveyor and position</i>		Surveyor 1 – Liam James – 1 year bat survey experience – observing the north and east elevations Lead Surveyor 2 – Katie Whitfield – 2 years bat survey experience – observing the south and west elevations Unmanned IR camera – placed inside B1 facing to the southern section of the barn.					
<i>Weather (start/end)</i>		Temperature (°C): 17 Relative humidity (%): 78 Cloud cover (%): 100 Wind (m/s): 3 Rain: None			Temperature (°C): 15 Relative humidity (%): 82 Cloud cover (%): 100 Wind (m/s): 3 Rain: None		
<i>Equipment used</i>		Echometer Touch 2 x 2, Magenta Bat4 x 2, Nightfox Whisker IR cameras x 3, Nightfox IR torches x 3					
Results							
Date of survey	Sunset Start - End	Species and numbers	Roost type	Structure reference	Roost location	Access points (include # of them)	Dimensions and explanation of roost location
21/08/2024	Sunset 20:25 20:10 – 21:55	N/A	N/A	B1	N/A	N/A	N/A
Surveyor observations B1							

<i>Surveyor 1</i>	No bat roosting activity observed. First bat activity was a common pipistrelle seen flying from east to west in a wide arc at 20:20 above B1. Common pipistrelles were heard not seen at 20:50 and 21:18, this being the last bat activity of the survey.	
<i>IR position</i>	No bat roosting activity recorded. IR footage reflected view of surveyor 1.	

<i>Surveyor 2</i>	No bat roosting activity observed. First activity was a common pipistrelle foraging, heading northeast then southwest above surveyor at 20:37. A distant common pipistrelle was heard not seen at 20:43. Two further passes by common pipistrelles occurred at 20:52 heading northeast and 21:24 heading north. Last activity was a distant common pipistrelle heard not seen at 21:50.	
<i>IR position</i>	No bat roosting activity recorded. IR footage reflected view of surveyor 2.	

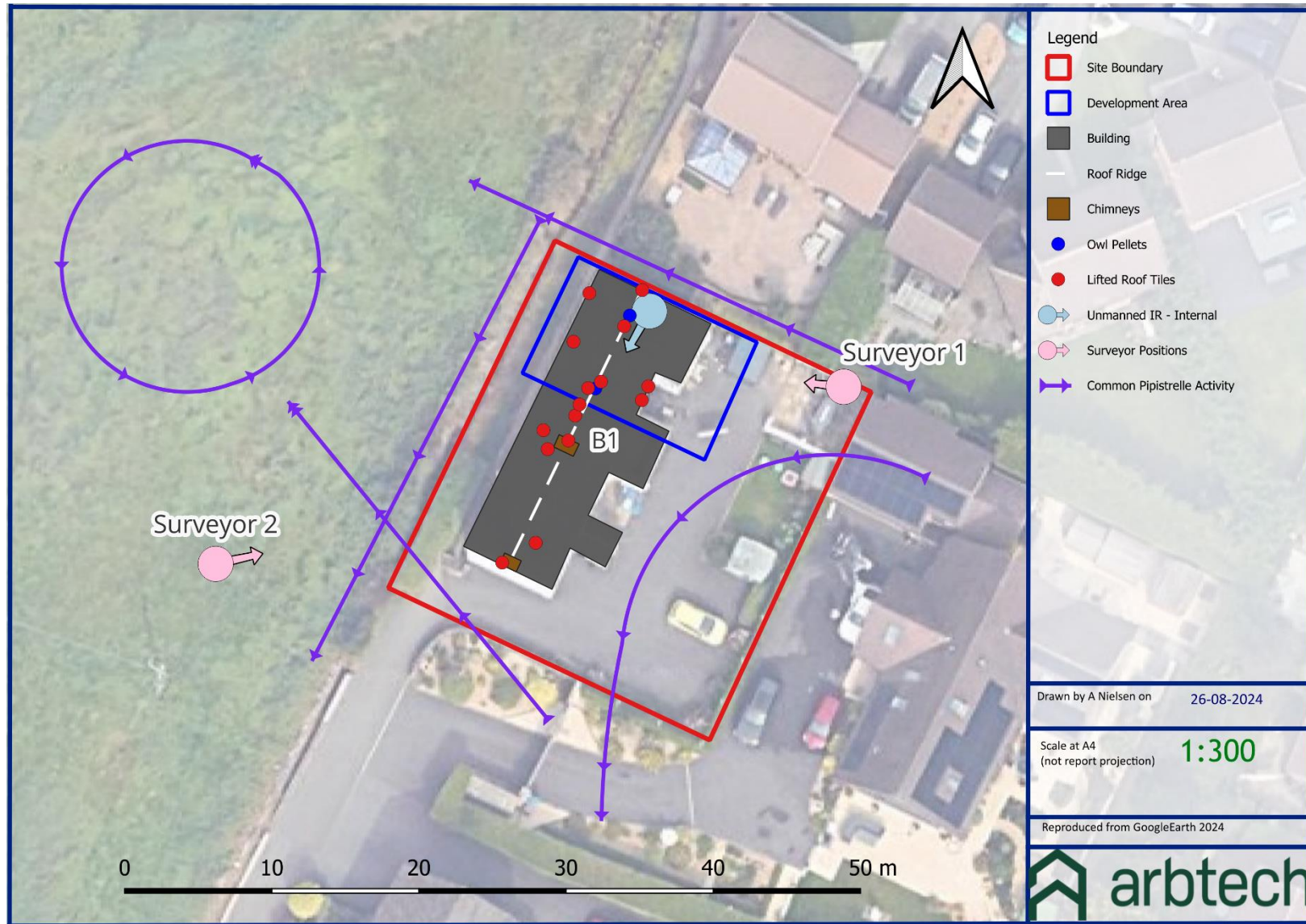
<i>Unmanned IR – internal</i>	No bat activity recorded throughout survey.	
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Conclusions, Impacts and Recommendations	
<i>Survey Results Summary</i>	No bat roosting activity was observed by surveyors or from a review of IR camera footage. As such, a likely absence of roosting bats is confirmed from B1. Common pipistrelles are regularly foraging in the field to the west of the site.
<i>Impact Assessment</i>	Bats are very unlikely to be roosting within this building and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development. However, bats are highly mobile creatures that switch roosts regularly and therefore the usage of a site by bats can change over a short period of time. Any bats that begin using the building during the intervening period between the surveys being undertaken and works commencing could be disturbed by the proposed development.
<i>Recommendations</i>	A precautionary working method will be implemented during and post-development. This will include the following measures: • In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal.

	• Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.
<i>Enhancements</i>	External bat box will be installed on dwelling. This will be placed high up at eaves level, face south/southwest if possible, and be unlit by artificial light.

Version control			
Status	Issue	Name	Date
Draft	0.1	Kayleigh Davies, BSc (Hons), MSc, Graduate Ecologist	02/09/2024
Final	1.0	Kayleigh Davies, BSc (Hons), MSc, Graduate Ecologist	02/09/2024

Appendix 1: BERS plan



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