



Report Type: Clearance of Environmental Conditions

Client Name: Plant and Robinson

Site Address: Lower Farm Barns
Lower Farm Road
Bowling Bank
Wrexham
LL13 9RY

Report Reference: DoC 22-04 104.1

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Author: Ben Jones BSc (hons) MSc
ben@greenscape.pm 07525 809943





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Reviewed by:	L. Maggs BSc(hons) Senior Consultant	29 th September 2022

Greenscape Environmental Ltd.
Registered Office: Long Acres, Lyth Bank, Shrewsbury, Shropshire, SY3 0BW
Company Reg number: 5364283

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The report should be read in its entirety.

Questions arising from the survey report should be directed to the author of the report who will be pleased to clarify any technical issues raised.

Whilst the surveyors make every reasonable effort, Greenscape Environmental Ltd cannot guarantee that all protected species have been identified and survey results are definitive. Many species are cryptic and transitional in habit.

Reports are considered valid for one year for planning purposes, after which time further survey information may be required.

Greenscape Environmental Ltd can provide advice and support for recommendations and planning conditions.

The use of this report or survey data for any form of formal submission to an NGO or other authority implicitly implies acceptance of the terms and conditions.



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1 Executive Summary

1.1 Purpose of the Report

This report is prepared on behalf of Plant & Robinson Construction Ltd as part of planning permission for the conversion of the barns to form 6no. dwellings. This document seeks to address conditions 18, 22 and 24 of the planning permission P/2019/0647, granted in January 2020.

1.2 Background

The planning application is for the conversion of farm building into dwellings.

Bat surveys were conducted in 2019 by Leigh Ecology Ltd (report Rig-001), who identified day roosts of common pipistrelles. Greenscape Environmental were then commissioned in 2022 to assist with this discharge of conditions. As the 2019 bat surveys were out of date it was deemed necessary to update them to ensure the most appropriate mitigation was being included.

1.3 Observations

The site was revisited on 9th June 2022 by Ben Jones to conduct a site walkover ahead of the first update bat activity survey.

The buildings appeared to be in a similar state as the 2019 assessment by Leigh Ecology Ltd. Work had already started on the eastern of the two buildings, so the 2022 update focussed on the L-shaped barn to the west.

The bat activity surveys conducted throughout summer 2022 identified the following roosts:

- 2x day roosts of brown long-eared bats (one each with 3 and 2 bats),
- 1x large day roost of common pipistrelle (peak 5)
- 1x day roost of Natterer's bat (peak 1).



2 Conditions

2.1 Condition 18

Condition 18 states:

18. No part of the development shall commence until details of the proposed Reasonable Avoidance Measures (RAMs) have been submitted to and approved in writing by the Local Planning Authority. The details shall include the following:

- a) Details of a toolbox talk on the identification and ecology of great crested newts to be made available to all construction staff employed on the project;*
 - b) Details of an artificial amphibian hibernacula to be constructed adjacent to the site (Details of the design can be found in great crested newt mitigation guidelines – August 2001);*
 - c) Details of a walk over survey of the site prior to commencement of development, and a destructive search (under the supervision of a licensed great crested newt handler) made of any potential great crested newt habitat (such as rubble piles or sheet materials that are on the site) on the site. Any amphibians found should be relocated to the artificial hibernacula;*
 - d) Details of storage of material on pallets off the ground and bulk materials which are to be delivered on site and used within the day of delivery;*
 - e) Confirmation that excavated trenches will be covered over at the end of each working day with plywood and the edges sealed with sand or soil. Trenches are to be checked each morning for amphibians. Any amphibians located are to be moved to the artificial hibernacula.*
- The development shall be carried out in strict accordance with the RAMs as approved.*

Reason: To protect names species / habitats / biodiversity which would otherwise be damaged / lost by the development hereby permitted in accordance with policies GDP1 and EC6 of the Wrexham Unitary Development Plan.

2.1.1 Hibernacula Design

1. A hibernaculum will be constructed near a site boundary adjacent to land of terrestrial value for amphibians. The northern or western boundaries border fields so this is a suitable location. Hibernacula is a generic term describing a place specifically designed to provide refuge for local fauna, in this case amphibians.

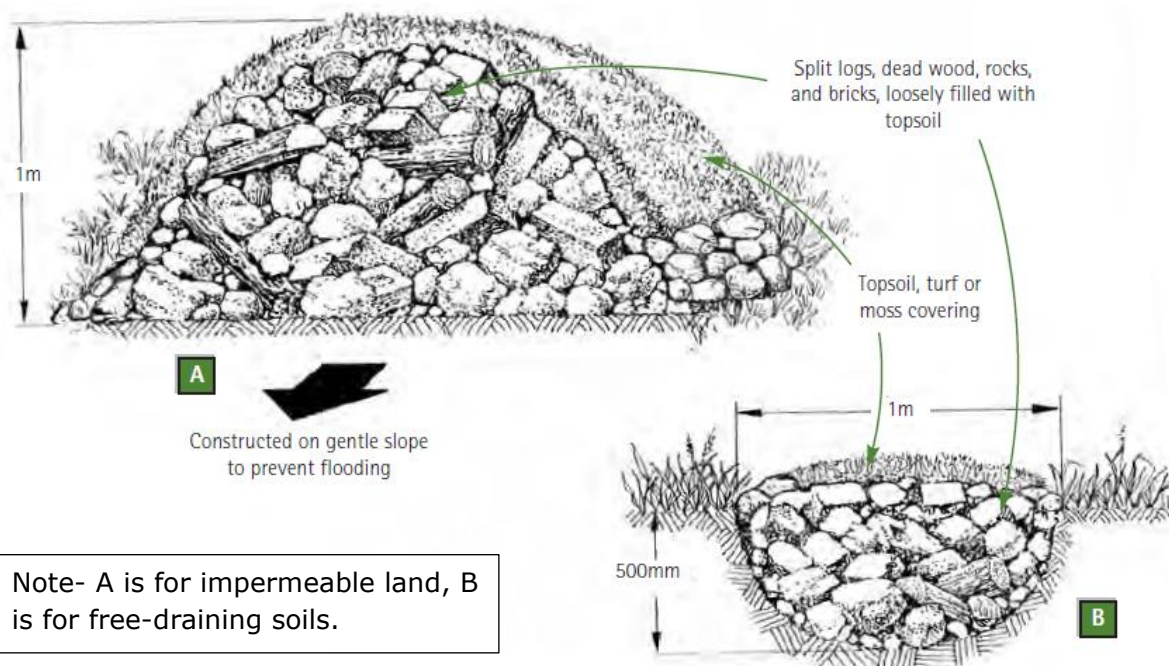


Figure 2.1. Hibernacula design from Froglife ©



2.1.2 Reasonable Avoidance Measures Method Statement

Pre-Construction

1. The site will be kept under current management prior to construction. As the area of site to be development is exclusively hardstanding, this will involve the prevention of successional growth over stone and concrete. This will ensure there is no shelter for great crested newts on the site

Site Setup

2. A consultant will be employed as the ECoW to oversee the work in areas sensitive to great crested newts on site. This person will need to be licensed and an experienced surveyor for great crested newts.
3. The ECoW will provide contractors with a toolbox talk prior to work commencing. This will include information about the legal status of newts and responsibilities of the construction company to ensure no offence is committed. A document to assist with the identification of newts will be left on site.
4. The site will be checked thoroughly by the ECoW prior to construction commencing. This will confirm there are no newts present and that there are no potential places of shelter.
5. All cabins and equipment will be located on firm compacted ground, preferably a stone or concrete base.
6. Contractors are advised not to handle newts at any time.

Construction Phase

7. The site foreman will be responsible for ensuring all contractors are aware of the potential to find newts, and that they are familiar with the appearance of newts. If in doubt the ECoW will be contacted.
8. Contractors are advised to avoid handling newts at any time.
9. Any plants around the site will be kept short to stop the development of an area of terrestrial habitat more suitable for newts.
10. All groundwork will be conducted during daylight hours as newts are least likely to move during this time.
11. Trenches will be dug and filled in on the day created or will be covered over with close-fitting boards at the end of each working day.
12. If it is not possible to cover the trench, a ramp will be placed from the edge of the trench to the base to allow newts and small mammals to escape.
13. Open or covered trenches will be checked the following morning. This is particularly important when newts are most active, between March and November.
14. If a newt is found, then work will stop immediately and the ECoW contacted for advice.



15. Any heavy machinery will be stored on an area of hardstanding to avoid refugia being created.
16. Stored material will be raised on pallets to reduce the potential they might act as a temporary resting place. This reduces the potential for damage or destruction of individual newts.
17. All waste will be placed straight into skips to reduce the potential of creating refugia.
18. Great crested newts will not be handled or moved without express permission from Natural Resources Wales as this would constitute an offence.
19. It is recommended that regular site visits are carried out by the ECoW to ensure compliance with the legislation and the Method Statement. A record of these visits will be made as part of the audit trail.



2.2 Condition 22

Condition 22 states:

22. The development shall be carried out in strict accordance with the recommendations and bat mitigation measures as detailed within the Bat Surveys Report carried out b-y Leigh Ecology, references Rig-001 and dated 25 July 2019 approved as part of this application.

Reason: To protect names species / habitats / biodiversity which would otherwise be damaged / lost by the development hereby permitted in accordance with policies GDP1 and EC6 of the Wrexham Unitary Development Plan.

2.2.1 Updated bat surveys

The bat activity surveys conducted by Leigh Ecology, referenced in condition 22 were out of date. Given there were bats found roosting it is unusual that permission was granted without the need for a mitigation licence from Natural Resources Wales, as development work would see the destruction of a legally protected roost.

Updated surveys in 2022 identified significantly more roosting that was recorded in 2019, and so a mitigation licence from Natural Resources Wales is unavoidable should this development wish to proceed without committing a legal offence.

Table 2.1. Survey conditions

Date	Time Start – End (Sunrise/set Time)	Equipment Used	Weather
09/06/2022	21:15-23:15 (21:36)	Camera, Anabat Scout, Wildlife Acoustics Echometer Touch 2 Pro, Skywatch Meteos anemometer, Sony FDR-AX33 nightshot camera with 2x IRLamp6 illuminators, Binatone two-way radio, red LED torch	15-14°C, <10% cloud cover, F1-2 wind (peak F3.6 gust), no rain
Comments	Two surveyors used: Ben Jones and Demi Cook		
05/08/2022	03:50-05:45 (05:35)	Anabat Scout, Wildlife Acoustics Echometer Touch 2 Pro, Skywatch Meteos anemometer, Sony FDR-AX33 nightshot camera with 2x IRLamp6 illuminators, Binatone two-way radio, red LED torch	12-11°C, 25% cloud cover, F1-2 wind (peak F2.5 gust), no rain
Comments	Four surveyors used: Ben Jones, Logan Maggs, Chloe Sheil and Niamh Hurley		
22/08/2022	20:10-22:15 (20:24)	Anabat Scout, Wildlife Acoustics Echometer Touch 2 Pro, Skywatch Meteos anemometer, Sony FDR-AX33 nightshot camera with 2x IRLamp6 illuminators, Binatone two-way radio, red LED torch	21-18°C, 75% cloud cover, F0-1 wind (peak F0.5), no rain
Comments	Three surveyors used: Ben Jones, Logan Maggs and Chloe Sheil		


Table 2.2. Survey results table

Date	Time Start – End	Species and Numbers	Roost Type	Structure	Roost Location	Access Points
09/06/2022	21:15-23:15	C-Pip - 5	Day	Barn	Northern lean-to and rooms	Open windows on west side
Notes:	Based on the findings of the Leigh Ecology report, two surveyors supported by cameras were considered appropriate for covering the building and previously identified roosts. On subsequent surveys more surveyors were utilised to provide better coverage increasing the accuracy of the results.					
	The first bat seen was a common pipistrelle at 21:14. This flew north to south along the eastern side of the building but was not seen to emerged.					
	At 21:15 three common pipistrelles emerged from the northern lean-to and flew under the shelter attached to the west of the barn. At 22:27 another common pipistrelle emerged from the first-floor doorway on the western side of the northern wing. At 22:35 two common pipistrelles were seen flying in and out of the open window on the eastern side of the southern arm of the building.					
	Radio contact between surveyors determined a peak count of 5 bats.					
05/08/2022	03:50-05:45	BLE – 3	Day	Barn	Northern lean-to	Open doorway on west side
		BLE - 2	Day	Barn	Upper floor southern arm	Open windows on east side
		C-Pip - 1	Day	Barn	Brick gap on western side	Same as roost
Notes:	Brown long-eared bats were seen to be foraging throughout the entire barn, and bat access throughout the entire building was possible. Two brown long-eared bats were seen to be flying inside the southern arm of the building and proceeded to enter a roost on the interior southern gable end of the building at 03:55. Three other brown long-eared bats were seen to enter a roost above the interior eastern wall of the northern lean-to at 04:21.					
	One common pipistrelle entered a roost in a brick gap on the western face of the barn at 05:05.					
22/08/2022	20:10-22:15	BLE – 2	Day	Barn	Upper floor southern arm	Open windows on east side
		C-Pip – 5	Day	Barn	Unknown	Open windows and doors on all sides
		Natterer's - 1	Day	Barn	Upper floor northern arm, alongside timber near first-floor window	Open window inside L-shape
Notes:	Bats were seen flying throughout the barn, and using all doors and windows consistently to forage, emerge and re-enter. Radio contact between surveyors determined peak counts as seen above. The coordinated count was conducted at a time when any bats recorded would certainly have been roosting inside the building, and not foraging after emerging from roosts elsewhere.					
	Confirmed emergences include common pipistrelles from the upper floor doorway on the western side of the northern arm and from the open eastern window.					
	One myotis bat was seen foraging the upper floor where the northern and southern arms of the building join, and was seen to swarm to and from a roost point near the first-floor window on the western side. Droppings beneath this roost point suggest a small day roost, commensurate with the bats seen.					

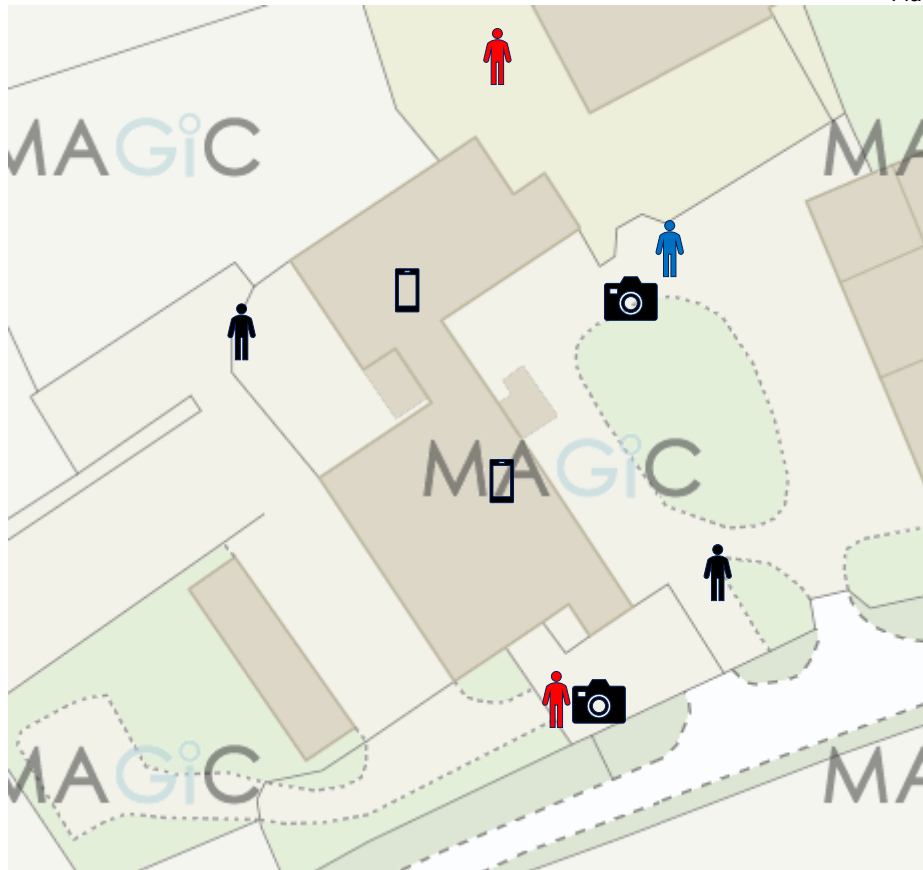


Figure 2.2. Survey area

Icon	Description
	Sony FDR-AX33
	Static Detector
	Stationary Surveyor
	Stationary surveyor on second survey only
	Stationary surveyor on second and third survey

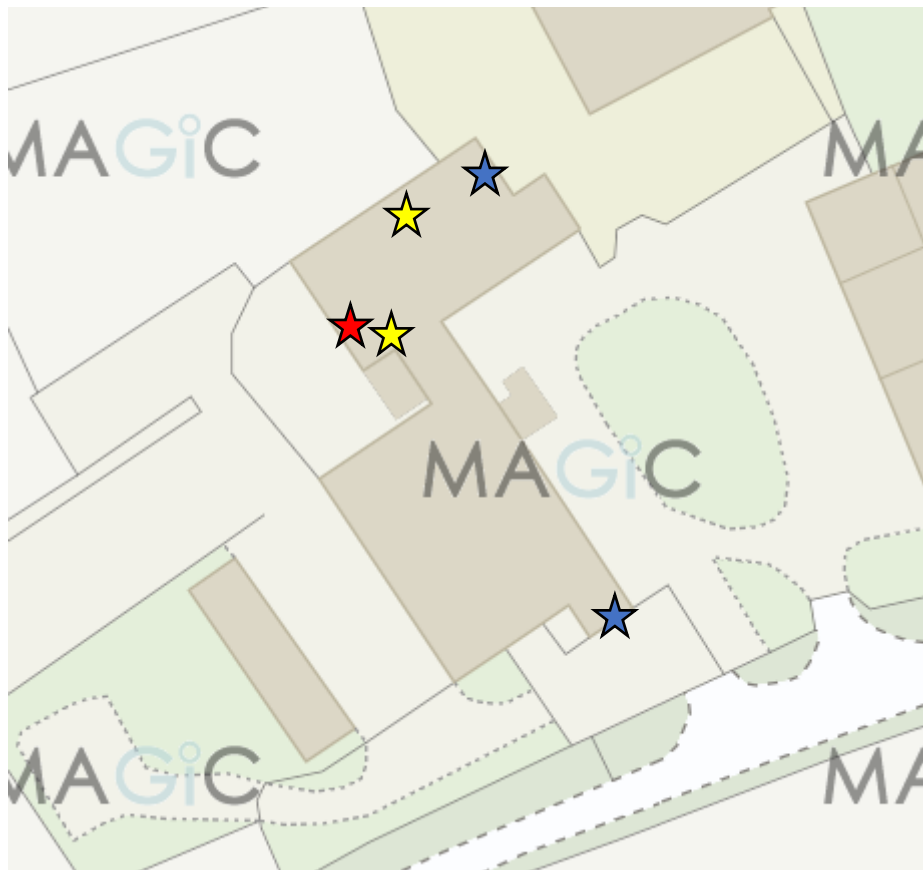


Figure 2.3. Survey results

Icon	Description
	BLE roost locations
	C-Pip roost locations
	Natterer's bat roost location



Figure 2.4. BLE roost location in northern lean-to



Figure 2.5. BLE roost against far gable wall



Figure 2.6. Droppings beneath Natterer's roost



Figure 2.7. C-Pip roost location



2.2.2 Mitigation

Given the drastically increased level of bat activity on this site, a licence from Natural Resources Wales must be obtained, this will include working to a strict method statement such as the one below.

EPSL Working Method Statement

1. Construction will need to follow a rigid method statement. It will need to be conducted under a European Protected Species Licence (EPSL)
2. A suitably licensed ecologist will be employed as an Ecological Clerk of Works (ECoW) to oversee works in areas sensitive to bats and provide expert advice.
3. A toolbox talk will be provided by the ECoW. The developer and the contractors will be made aware that there is a possibility that bats may be found during works, and will be advised to work in a way to ensure bats are not harmed during work in areas sensitive to bats; particularly around the known roost locations. They will be provided with a simple emergency procedure to follow if bats are found at any stage of the work on site. It will be ensured that the method statement is retained on site at all times.
4. A pre-commencement check will be conducted by the ECoW using a strong torch and borescope where appropriate.
5. The work around the bat roost areas will occur when bats are least likely to be present, from October to March if possible. The site only supports day roosts, however, so timing can be more lenient if necessary.
6. Bats will always be allowed access to an undisturbed area during works – boxes will be erected on neighbouring buildings prior to work commencement to provide ongoing and undisturbed roost potential, but also to act as a translocation site for any bats found during work.
7. The ECoW will be present on site when work is being conducted in the area of the bat roost, particularly around the ridges, gables, hips, valleys and edges.
8. Bats will be excluded using one-way gates where appropriate. This will be erected with the assistance of the ECoW.
 - a. The one-way exclusion will be left in place for five days before being checked by the ECoW.
9. If a bat is found when the ECoW is not present, work will stop immediately and the ECoW contacted for advice.
10. The bat can only be handled by the ECoW or authorised person unless it is in immediate danger. The bat must be carefully placed in a well-ventilated lidded box with a small container (i.e. a plastic bottle lid) with water in it. The container must be kept in a quiet and safe place.
11. Care should be taken to avoid rousing the bat whilst transferring to a suitable location, such as a suitable roost box or alternative roost space that provides a safe, quiet environment with a stable cool temperature and relatively high humidity.



12. If the bat is underweight or injured it will be cared for by an experienced bat carer until such time that it is strong enough to be released into a suitable alternative replacement roost on site.
13. The bat compensation will be created following the instructions in the EPS method statement and the client will agree that any bat box erected must stay in place for a minimum of five years post-development.
14. The removal of the roof will not take place if the temperature has been below 6°C for four consecutive days and nights.
15. Once the building has been reroofed, bat access will be limited by sealing all doors and windows, thus reducing the potential for bats to re-enter where they are not expected.

2.3 Condition 24

Condition 24 states:

24. No part of the development shall commence until a site wide Biosecurity Risk Assessment has been submitted to and approved in writing by the Local Planning Authority. The risk assessment shall include measures to control or remove invasive species both during construction and operation.

Reason: To ensure that an approved Biosecurity Risk Assessment is implemented to secure measures to control the spread and effective management of any invasive non-native species at the site.

2.3.1 Biosecurity Risk Assessment

The site was not found to contain any invasive species of flora listed within schedule 9 of the Wildlife and Countryside Act 1981.

In order to prevent the spread of any pathogens/bacteria and invasive plants between sites, the development site will be protected with biosecurity disinfectant mats on all site entrances.

The ECoW will provide a toolbox talk to site contractors ensuring their understanding of the importance of biosecurity. These biosecurity measures will be installed before any other work takes place on the site, to ensure protection from biological contamination throughout all stages of development.

A suitable risk assessment will be completed by site contractors prior to any works commencing. This will incorporate consideration of cleaning tools, equipment and vehicles, contractor knowledge and understanding of biosecurity issues, access to water fronts and spill kit understanding. Note that this is not an exhaustive list and any more site-specific factors that become apparent throughout the development must be addressed.



3 Legislation

Bats

All bat species are protected under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which implements the EC Directive 92/43/EEC in the United Kingdom. It is an offence, with certain exceptions, to:

- Deliberately capture or kill any wild animal of a European Protected Species.
- Deliberately disturb any such animal.
- Damage or destroy a breeding site or resting place of such a wild animal.
- Keep (possess), transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal or plant of a European Protected Species, or any part of, or anything derived from such a wild animal or plant.

A person found guilty of an offence is liable on summary conviction to imprisonment for a term not exceeding six months or to an unlimited fine or to both.

Seven bat species are on the UK Biodiversity Action Plan and are listed as Species of Principal Importance under the provisions of the Natural Environment and Rural Communities (NERC) Act 2006. The National Planning Policy Framework (NPPF) states that to minimise impacts on biodiversity and geodiversity, *"planning policies should... promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations"*.

To allow a development that might result in an offence, a derogation licence can be sought via the implementation of a European Protected Species Licence. This is provided by Natural England.

Work can be conducted under a derogation licence from Natural England providing suitable compensation and mitigation is provided and the "three tests" can be met. These are:

Regulation 55(2)(e) states: a licence can be granted for the purposes of "preserving public health or public safety" or other imperative reason of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.

Regulation 55(9)(a) States: the appropriate authority (Natural England) shall not grant a licence unless they are satisfied "that there is no satisfactory alternative"

Regulation 55(9)(b) states that the appropriate authority shall not grant a licence unless they are satisfied "that the action licensed will not be detrimental to the maintenance of the population of the species concerned at favourable conservation status in its natural range."

The method statement in the EPS licence is a legally binding document which outlines the species, context of the colony, method of mitigating and compensating and ongoing habitat management for ensuring favourable conservation status.



Appendix A – Surveyor Details

Table A.1. Details of surveyors' experience and licences held

Name	Membership of associations/ experience	Licenses
Ben Jones BSc(hons) MSc	Senior Consultant Ben has a degree in Marine and Freshwater biology and a Master's degree in "Managing the Environment". He has 7 years' experience conducting environmental appraisals and phase 2 surveys for bats and newts in England and Wales.	Holder of survey licenses for bats and newts in England and Wales. <u>England:</u> Bats - 2017-29112-CLS-CLS GCN - 2016-25209-CLS-CLS <u>Wales:</u> Bats – S088669-2 GCN – S091242-1
Logan Maggs BSc(hons)	Senior Consultant Logan has a degree in Conservation and Land Management. He has over 10 years' experience conducting environmental appraisals and phase 2 surveys for bats and newts in England and Wales.	Holder of survey licenses for bats and newts in England and Wales. <u>England:</u> Bats - 2016-24901-CLS-CLS GCN - 2017-29218-CLS-CLS <u>Wales:</u> Bats – S091096/1
Chloe Sheil MZool (Conservation)	Chloe has a master's degree in Zoology with Conservation from Bangor University. She has 4 years' experience assisting with surveys.	Holder of survey licence for newts in England; GCN: 2022-10485-CL08-GCN Listed as an accredited agent on Ben Jones' licence: NRW bat licence – S088669-2 NRW newt licence – S087992-2
Demi Cook BSc(hons) QCIEEM	Demi has a degree in Zoology with Herpetology from Bangor University. She has been assisting with bat activity surveys for 7 years, and has experience working with bats in England and Wales. Bound by professional conduct as a member of the CIEEM	Holder of survey licence for bats in England – 2022-10571-CL17-BAT
Niamh Hurley	Niamh has been assisting with surveys and appraisals throughout 2021 and 2022	



Appendix B Bibliography

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