



Ben Jones

ECOLOGY

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Quality Assurance		
	Name	Date
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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 surveyors make every reasonable effort, Ben Jones Ecology 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 two years for planning purposes, after which time further survey information may be required.

Ben Jones Ecology 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 Summary

1.1 Purpose of the Plan

Ben Jones Ecology was commissioned by the client, Mr Daniel Jones, to produce a Conservation Plan as part of planning reference P/2023/0277. This need was raised after liaison with NRW was formalised in their letter dated 7th August 2023.

1.2 Background

The site was subject to bat activity surveys by Stephen Cutmore Arboricultural & Ecological Services in May, June and July 2022. These surveys identified roosts of lesser horseshoe (peak count: 1), soprano pipistrelle (peak count: 7), common pipistrelle (peak count: 1) and a whiskered/Brandt's bat (peak count: 1) roosting in the building. A licence from NRW was therefore deemed necessary with appropriate compensation and mitigation in place.

2 Bat Conservation Plan

This plan has been compiled by Ben Jones BSc (hons) MSc who has 8 years' experience conducting ecological appraisals.

For full details of surveyors and licences please see Appendix A.

2.1 Timing of Activities

The most appropriate time to conduct the work is typically over winter months when the bats are least likely to be present on site, between September and the end of April. The report produced by Stephen Cutmore Arboricultural & Ecological Services in 2022 identified all roosts are day roosts which typically do not have timing restrictions, but as four species are present on site the value of the building is clearly higher, and so a more robust approach will be taken regarding timing.

Table 2.1. Timing of works as recommended by the UK Bat Mitigation Guidelines (2023)

Roost type	Months to avoid	Optimum period for carrying out works (some variation between species and weather-dependent)
Maternity	May-August (potentially September)	September to end April
Hibernation (not used for swarming)	November to March	April to end October
Hibernation and swarming site	August to March (key); potentially July until April	April to July
Mating/swarming; not used for hibernation	August to October (key); potentially July until mid-November Also April-early May in at least some species	Mid-November – end March (potentially later, maybe species-specific) Broader restrictions if site also used for hibernation
Non-breeding summer roost	None	No restrictions – assuming bats can be excluded if present in small numbers or otherwise safely managed

The initial work on site will be the preparation of the garage and the included bat loft (Drawing PL09). This will be conducted as soon as the licence is granted, between the months of September and April inclusive. The work will be conducted under a watching brief by a suitably licenced ecologist.

Once the loft is complete, work will begin on the removal of the roof over the remaining buildings after a check from a suitably licenced ecologist has confirmed no bats are roosting internally.

This timing and phasing of works will ensure bats always have access to an appropriate roost location and can continue to use the site in perpetuity.

2.2 Post-work Reporting

As the initial development of the bat loft, and the subsequent removal of the roof over the remaining buildings will be conducted under watching brief from a licenced ecologist, this ecologist will produce a report at the end of those works confirming that the work was conducted appropriately and following the correct phasing and methodology. This will be a stipulation of the mitigation licence from NRW and can be provided to the LPA also should a condition require it.

2.3 Mitigation Contingency

Should a previously unidentified species be found on site, bats in expected locations or the same species but in higher numbers than anticipated be found, work will stop and NRW contacted for advice and to amend the licence.

Depending on the stage of works at which the unexpected bats are found, it will likely be necessary to continue work with minimal delay. This will only be condoned after discussion with NRW. The amended licence will be printed and retained on site.

2.4 Control of Works

To ensure that the works are undertaken in accordance with the Conservation Plan, a series of control measures will be utilised. The measures include:

1. Appointment of an ecological management team
2. Identification of ecologically sensitive areas and tasks using a risk zone

The ecological management team will consist of the following posts:

- Ecological Clerk of Works (ECoW)
- Site Manager

The ecological management team will ensure that all site personnel are appropriately briefed on the ecological issues within the site. This will be undertaken through inclusion of ecological briefings within the toolbox talks given to all staff as part of the site induction process. The roles are detailed as follows:

Ecological Clerk of Works (ECoW)

- Develop method statements and site protocols.
- Provide guidance for the site team including legal and statutory requirements affecting works.
- Undertake toolbox talks and advise the site manager.
- Ensure site managers are aware of any changes.
- Monitor and report on the protective measures and habitats.
- Carry out audits to check for non-compliance with environmental legislation, consents, and objectives.
- Complete ECoW visit record sheet.

Site Manager

- Ensure the Conservation Plan is developed and held on site and that it is implemented throughout all phases of the project.
- Ensure the site team and subcontractors comply with site protocols.
- Ensure all emergency protocols are up to date.
- Ensure all those that work on site have a site induction including briefing on environmental issues pertinent to the project and relevant toolbox talks.
- Ensure activities are carried out in accordance with the requirements of any associated method statements.

2.5 Post-Construction Monitoring

A site survey will be conducted in the autumn following completion (i.e. year 1 following completion) of the project to check inside the bat loft for signs of bat inhabitation.

One activity survey will be conducted in year 2 and another in year 5 to further understand the success of the mitigation. The monitoring surveys will watch all bat access features on the loft, including the fly-in accesses for lesser horseshoe bats, as well as 'Slate-line' bat tiles included in the field tiles of the roof. These findings will be reported to Natural Resources Wales as part of the licence report process. Should bats be recorded roosting, the details will also be submitted to the local environmental record centre.

The client will be expected to maintain any external hanging boxes for a minimum of 5 years. The loft itself should be conserved in perpetuity with the details being provided in sales documents should the site change hands.

Failing boxes or enhancements will be replaced at the cost of the developer if deterioration or damage is noted within five years post-development.

2.6 Lighting

Lighting needs to be designed to have minimal impact on bats and their commuting and foraging areas.

Details of lighting to be used during and post construction

No work will be conducted at night during construction, so external lighting will not be required

All proposed post-construction external lighting will be directed away from any vegetated boundary features to retain dark corridors for commuting bats.

Plans illustrating projected or retained bat emergence points; together with retained or proposed features planned to be functionally used by bats for foraging/dispersal purposes

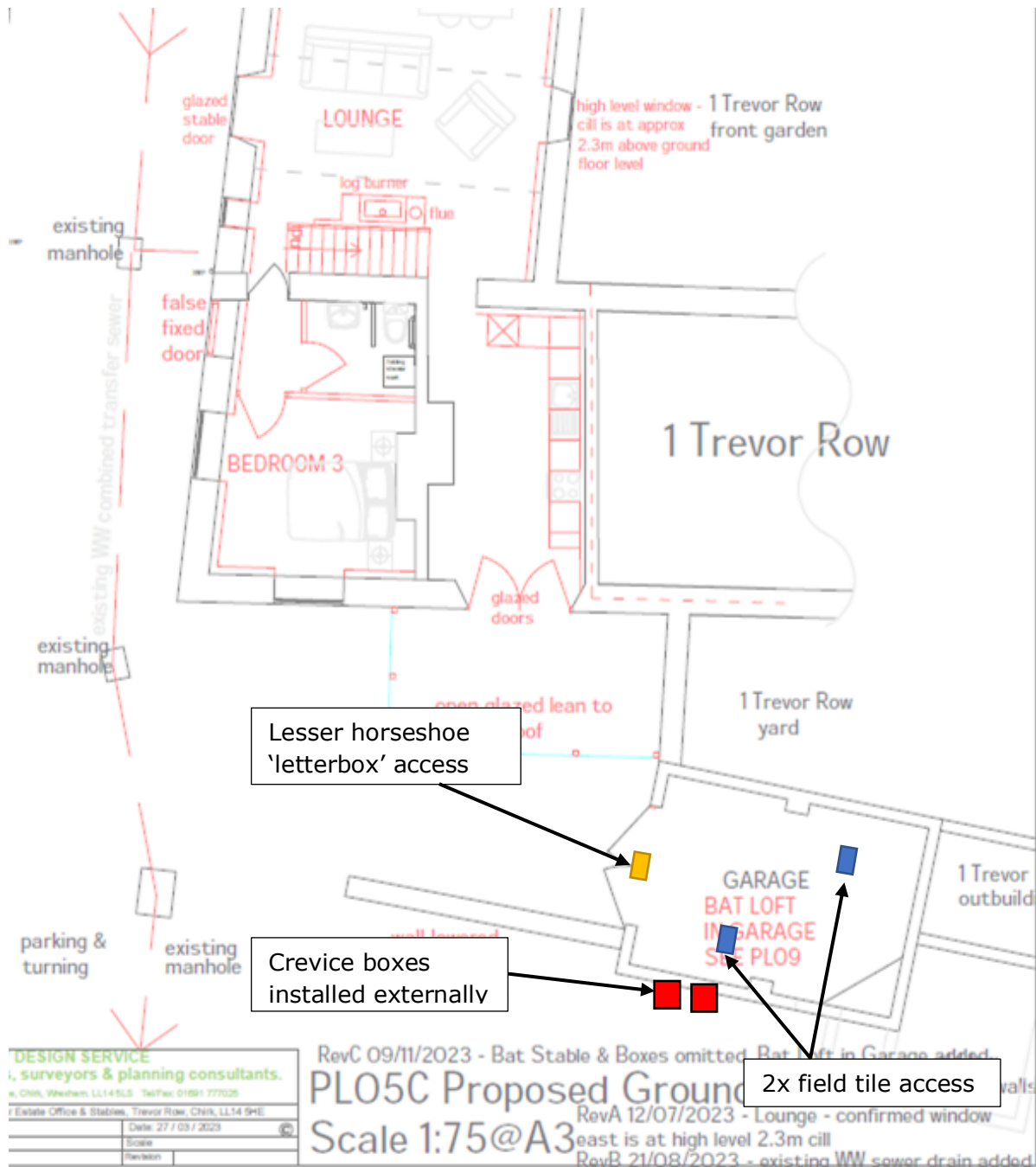


Figure 2.1. Proposed Site layout plan, annotated with exterior box locations

All features shown on the plan above will be kept dark with no light spill from any nearby external lights.

Land immediately to the south of site is open countryside with trees and hedges which will be significant foraging and commuting routes to and from site.

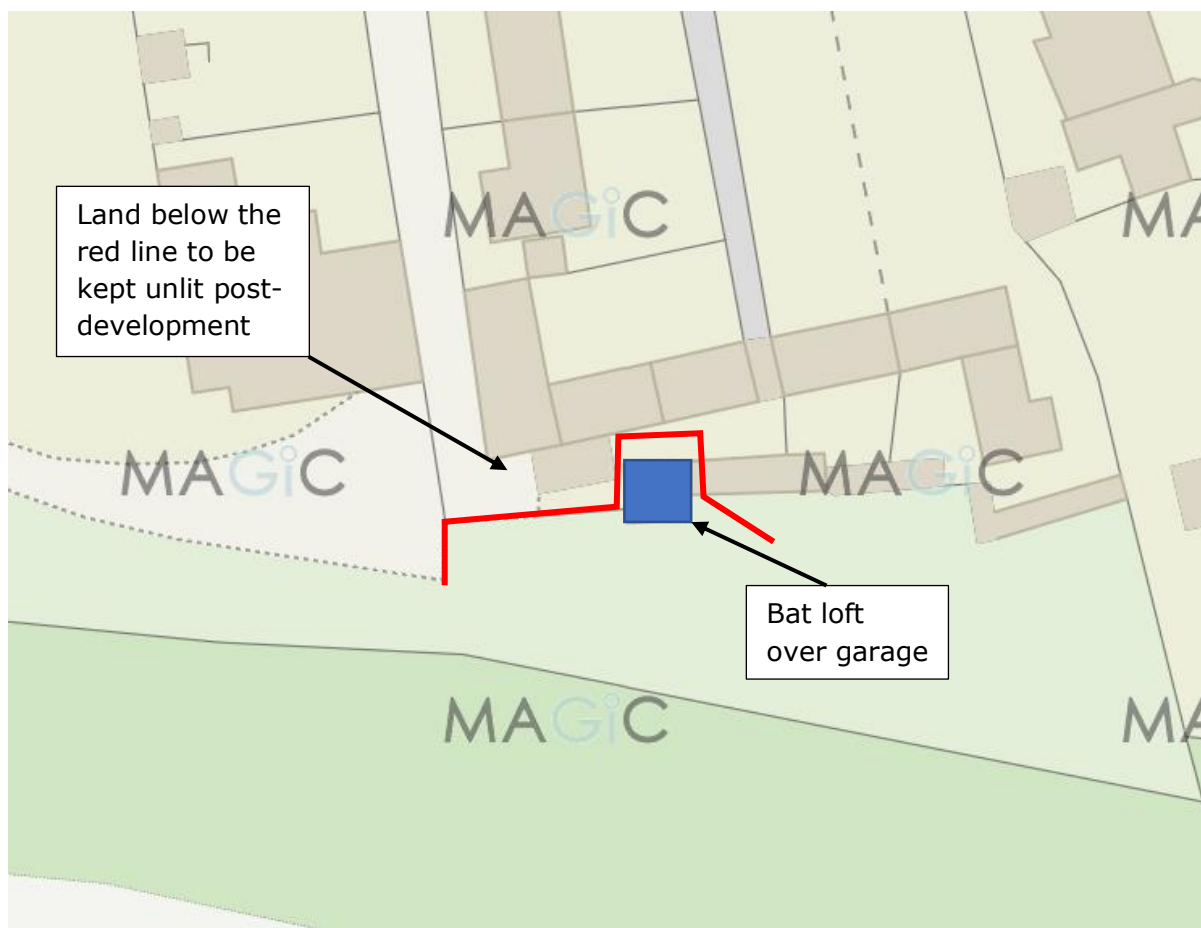


Figure 2.2. Areas to be kept dark

Compliance audit and post-construction light monitoring

During post-development site monitoring surveys (section 2.5 of this report) The lighting will be checked and advice given to alter the spillage if necessary.

This results in the recommended use of downlights and the horizontal spread of lighting to be kept to a minimum.

ILP

Where it is not possible to reduce the horizontal spread of light, a 2700°K to 3000°K LED light bulb is recommended, which will provide a warm white light. This range has the least impact on bats and invertebrates.

1. A lighting scheme will be drawn up in line with best guidance (ILP, 2023).
2. There will be no direct illumination of any compensation features erected for bats.
3. All domestic lighting will be orientated towards the ground and controlled by PIR (Passive Infra-red), set on a short timer.

Lighting and light spillage will be advised upon throughout development and checked during the bat activity monitoring surveys post-development. If spillage is unacceptable, remedial measures will be outlined in writing to ensure bat features are kept dark.



Figure 2.3. Appropriate external down light design

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 MCIEEM Ben has a degree in Marine and Freshwater biology and a Master's degree in "Managing the Environment". He has 8 years' experience conducting environmental appraisals and phase 2 surveys for bats and newts in England and Wales. As a member of the CIEEM he is bound by professional conduct.	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 – S091847/1 GCN – S091242/1
Logan Maggs BSc(hons) Of Barns Ecology	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