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PROTECTED SPECIES SURVEY

LAND OFF 21 HIGH STREET

JOHNSTOWN, WREXHAM

NORTH WALES

FOR

[REDACTED]

5th February 2024

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1. INTRODUCTION

A preliminary protected species survey (bats and nesting birds) was undertaken on the 31st January 2024. The survey was carried out by David Bennett, a licensed and experienced bat surveyor and ecologist (Natural Resource Wales S091412 & Natural England licenses) following a request by the current owner of the site. The survey was requested to satisfy planning requirements in respect of any protected species issues for land off 21 High Street, Johnstown, Wrexham, LL14 2SN. A planning consent is being sought to develop the site with the construction of a single dwelling following removal of a lean-to garage and a derelict toilet block.

2. BAT BIOLOGY

There are now 17 species of bat (breeding) in the UK, many of which can be found within this part of Wales. Each bat gives birth just once a year, early in summer, the females tending to gather together in a communal roost to give birth and bring up their young. This is the time when they are most likely to use buildings. By the end of the summer the roosts are often vacated for other more suitable hibernation sites such as caves, mines or trees. Hibernation sites are usually characterised by stable temperatures with a high level of humidity. When temperatures fall and food becomes scarce they hibernate and live off body fat stored during the autumn. During mild winters bats can still often be seen on an evening flying and looking for food. Bats use a variety of different structures for the purposes of roosting, these can include mature trees, caves, mines, buildings (old and new), bridges and tunnels.

Bats will generally cause no harm to buildings or the people that occupy the buildings. They can be very discreet and are often not noticed because of their preference to occupy tiny spaces, cracks and crevices in roof voids. Some species such as the brown long eared bat will utilise open loft areas for flying and moving around in. They will roost on bare exposed timber beams, typically beneath the ridge beam. The droppings produced are harmless (largely made up of insect fragments) and do not carry any disease although a very large roost can sometimes produce large quantities of droppings.

3. LEGISLATION

All of our species of domestic bat are protected under both UK and European legislation. In the UK they are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation (Natural Habitats &c.) Regulations 1994. The Habitats Directive has been superseded by The Conservation of Habitats and Species Regulations 2017.

To summarise it is illegal not only to intentionally kill, injure or take any bat but also too recklessly or intentionally damage, destroy or obstruct access to any place that a bat uses for shelter or protection, or to disturb a bat while it is occupying such a place. A roost is protected whether or not bats are present at the time. The reason for this is that bats tend to remain loyal to certain roost sites, often over a long period of time.

The presence of a species protected under European or UK legislation is a material consideration when a planning authority is considering a development proposal which, if carried out would be likely to result in disturbance or harm to the species or its habitat. The Environment (Wales) Act 2016 (Section 6) Biodiversity and resilience of ecosystems duty states that “A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions”.

4. AIMS

The aims of the survey were:

1. To describe any evidence of protected species in the study area.
2. To assess the impact of carrying out the proposed works.
3. To suggest mitigation measures as appropriate.

5. STUDY AREA

The site consists of the lean-to garage and a row of small derelict toilets to the rear of the garage. The property is situated in an urban location with a road frontage and street lighting.

The lean-to garage has been constructed from a wooden frame covered with sheets of corrugated iron, the structure leans against a brick wall. The toilets are constructed from brick with corrugated sheet roof sections, most have collapsed.

The site plan is shown in Appendix 1 and the photos are shown in Appendix 2.

6. METHODOLOGY

The building was subjected to an internal and external survey on the 31st January 2024, the weather conditions were dry and clear. As much of the building as possible was searched (health and safety and access permitting) using an LED rechargeable lamp, a Seesnake endoscope (paying particular attention to the roof sections, ledges and any gaps or cavities). A search was made for bat droppings, staining, odour, old skeletons and feeding signs (such as wing casings etc). Other evidence such as bird's nests and other signs of nesting birds was also looked for both internally and externally.

7. RESULTS

No visible evidence of bats was found, no droppings were apparent and there were no signs of feeding, staining, marking etc. The internal space of the garage is open, all areas can be inspected.

The corrugated sheet roof of the garage appears to be intact, the interior space is relatively dry. The timbers are softwood and fairly modern, they do not support any mortice holes or crevices.

The brick wall that the garage leans onto is intact and there are no deep cavities or holes which could be used by bats. The small open lean to at the rear of the garage is of a similar construction.

The row of single toilets at the rear were inspected and nothing was found, they are mostly derelict. Two of them still have a roof covering with an intact cistern but all areas are open and exposed to the wind and rain.

Overall, there does not appear to be any evidence of use by bats and nothing that would appear to cause any issues with the current proposals. The overall potential for the buildings to support roosting bats is negligible due to a lack of roof voids or any other suitable roost space/dark area.

8. CONCLUSIONS, IMPACTS AND MITIGATION FOR BATS

No evidence suggesting bat use has been found during this survey and for the reasons suggested is thought unlikely and no further survey work is required. It therefore appears that there are no apparent issues relating to the proposed works in respect of bats at the present time. As outlined above it is often difficult to inspect every crevice or hidden section in a building (due to access or health and safety issues). In addition bats tend to be nomadic, which reduces the chances of finding bats on one or even several visits. This situation arises frequently when carrying out this type of survey. However, the survey has been completed to a good standard and it is not anticipated that any problems will occur. Carrying out the survey also puts in place demonstrable safeguards regarding the avoidance of illegal activities.

As a general note, most buildings offer potential for over-wintering and seasonal occupancy for individual bats. This use can be sporadic during the season and actual presence through emergence surveys cannot be fully confirmed. It is therefore recommended that the following precautionary recommendations should be undertaken as good working practice during the demolition phase.

- **All roof coverings should be carefully removed by hand to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.**
- **Door and window frames should be removed with care to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.**

- Structural members, lintel bearings, purlins or wall plates should be removed with care to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.
- In the unlikely event that bats were found during the demolition process then all work should cease and Natural Resource Wales Species Officer 0300 065 3000 and/or a licensed bat worker should be contacted for further advice.

The construction of a new dwelling offers the opportunity to create some bat friendly features. *Pipistrelle sp.* and other crevice dwellers such as *Myotis* bats will readily take to new and/or converted buildings as long as suitable access points and features are retained or created. The following features should be included to improve and try to encourage bats to use any suitable areas of the building post construction.

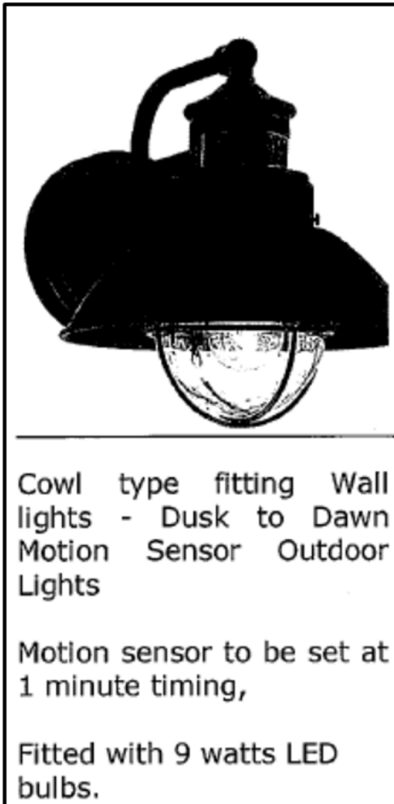
Pictures of the examples are shown in Appendix 3.

- A Vivara Pro build in woodstone bat tube will be built into the brickwork/render on the new, south facing elevation wall as shown below.



- All external lighting for the building will be of a low luminance and directional towards the ground (lighting type example shown below). There will be no high-level illumination or halogen lighting which will discourage bats and there will be no external lighting on the south elevation near where the bat box will be located. All external lighting will include a motion sensor and a one-minute timer to avoid them being left on continually.

- A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component. Lights should feature peak wave lengths higher than 550nm to avoid the component of light most disturbing to bats. This will be achieved by using LED light bulbs.
- Any external lighting should be on a short timer with a cowling to prevent any up-lighting or light spread.



9. NESTING BIRDS

At the time of the survey there was no evidence of nesting birds anywhere in or around the structure of the garage. It is open access from the rear and there are holes on the front gable so it may be used by certain species during the main breeding season.

There was no obvious evidence of nesting birds in the toilets but there are areas that are likely to be used, some of which may be hidden such as the space at the rear of the cisterns or behind remnant roof panels.

The front and side of the brick wall supporting the garage has a large and dense growth of ivy. This is highly likely to be used by nesting birds during the breeding season.

Three Schwegler Type 24 swift/multi-species boxes will be built into the brickwork/render on the east facing elevation as shown below.



Two Woodstone Madrid swift nest boxes (bottom entry) will be installed on the north facing elevation as shown below.



All removal of ivy/vegetation, demolition of the garage/lean-to and the toilets will only be undertaken between October and February inclusive. The reason for this is to avoid any potential nest disturbance to nesting birds during the breeding season.

All breeding birds are protected under Section 1(1) and 1(2) of the Wildlife and Countryside Act 1981, as amended. This makes it an offence to damage, disturb, or obstruct access to nests during the bird breeding season (generally March to September).

10. GREEN INFRASTRUCTURE STATEMENT

The existing buildings will be demolished with a new dwelling built on the site as shown on the submitted plans. The preliminary bat/bird survey has been undertaken and no further works are thought to be required.

No other ecological receptors have been identified and the site does not appear to support any non-native species or plants. The site has been partially cleared and it has very little ecological value.

Impacts to the site will be temporary during the construction stage and any vegetation removal to facilitate the works will be minimal (mainly the dense ivy growth). Any impacts to nesting birds (in the vegetation or elsewhere within the buildings) will be mitigated by carrying out any clearance works during the winter months October to February inclusive to avoid any disturbance.

Best practice methodology will be followed when carrying out works to the site, for example carefully removing roof coverings/timbers by hand, careful removal of windows or doors when there are gaps or cavities etc and also carrying out all vegetation removal at the correct time of year as described above.

Enhancements towards biodiversity have been included within the scheme to include one bat and five bird boxes. These should help to attract various species to use the site where there is currently a lack of roost/nest opportunities, this should help to enhance the biodiversity of the area.

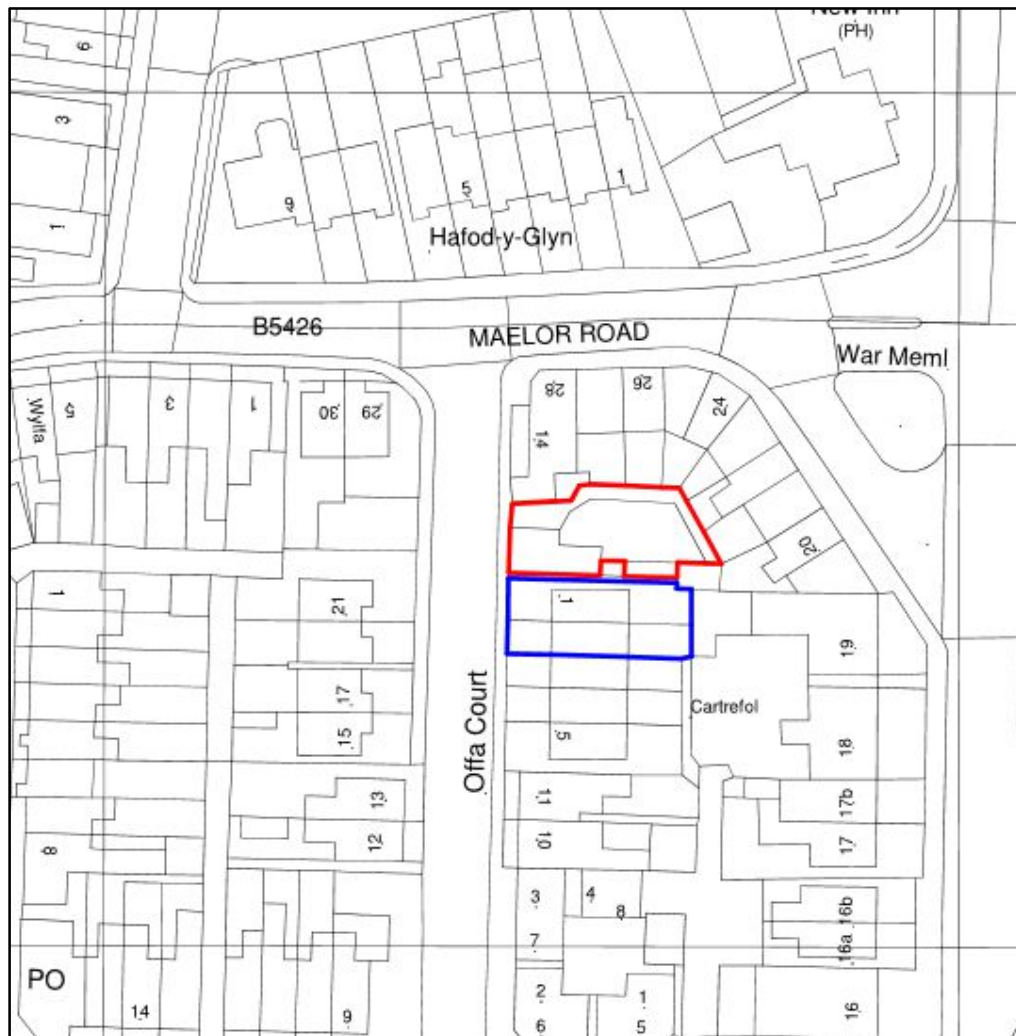
11. REFERENCES

BCT 2016 Good Practice Guidelines 2nd Edition 2016 BCT

Joint Nature Conservation Committee 2004 *Bat Workers Manual* JNCC Peterborough

Mitchell-Jones A J 2004 *Bat Mitigation Guidelines* English Nature Peterborough UK

Appendix 1 – Site location



Appendix 2 – Site Photos

View from the road



View from the road to the front and side of the garage



The main site behind the garage



Old derelict toilet block



From the rear of the site looking to the rear of the garage



This section belongs to the adjacent property



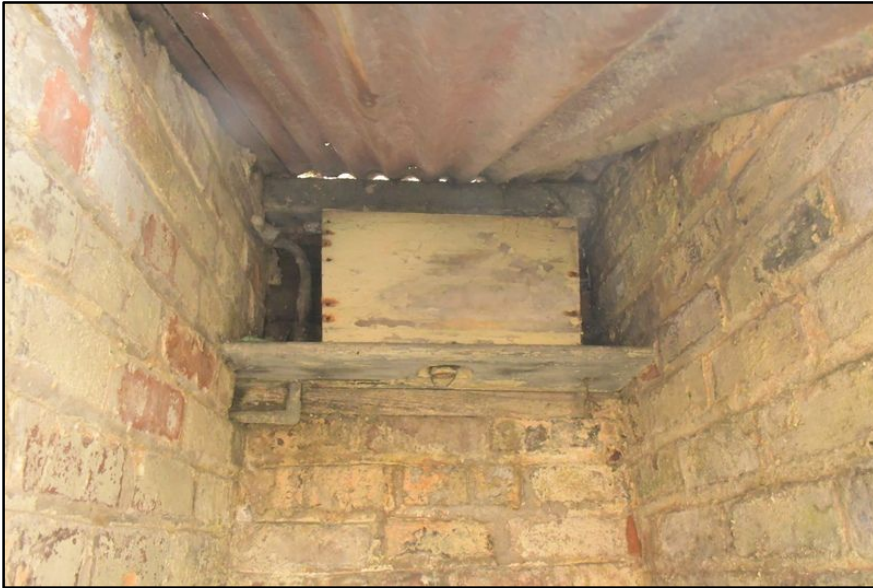
The roofs of the toilets have mostly collapsed



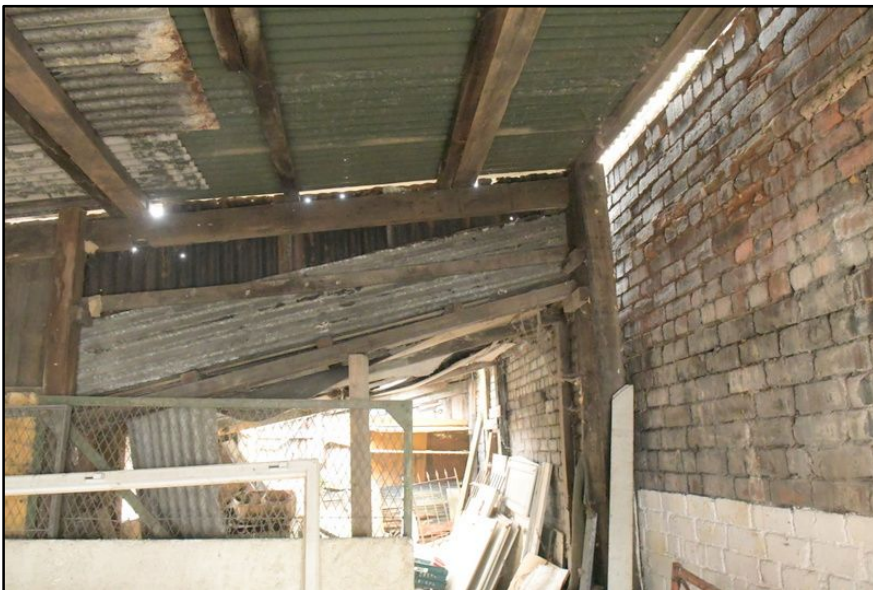
Potential nest site around the cistern



As above, another of two partly intact toilets



Inside the lean-to garage



Wooden frame garage with tin sheet wall and roof



Garage door facing the road



Appendix 3 – Mitigation

Vivara Pro build in bat box



Woodstone Madrid swift nest box



Schwegler type 24 swift/multi-species boxes

