

Mr Phil Corke
Murphy Corke Developments Ltd
6 Celyn Court
Ynysfach
Merthyr Tydfil
Merthyr Tydfil CF48 1AD

Wildwood Ecology Limited
Suite 1, The Mill Building
Brimscombe Port Business Park
Brimscombe
Stroud
GL5 2QG
Tel: 01453 367450

info@wildwoodecology.com
www.wildwoodecology.com

Thursday, 04 August 2022
Our ref: WWE20160/L01/A

Dear Mr Corke

SUBJECT: P/21/0061 - CHANGE OF USE OF PART OF BUILDING TO PROVIDE TWO INDUSTRIAL UNITS AT GROUND FLOOR AND OFFICES AT FIRST FLOOR. CONSTRUCTION OF NEW INTERNAL ACCESS ROAD AND ASSOCIATED RETAINING STRUCTURES AND OTHER ASSOCIATED WORKS TO BUILDING AND SITE | OLD DRILL HALL PONTMORLAIS WEST MERTHYR TYDFIL CF47 8UT

BACKGROUND INFORMATION

An ecological assessment was preliminary undertaken between May and July 2020 which comprised of a preliminary roost assessment and subsequent bat emergence surveys. A detailed report was written by Wildwood Ecology (ref: WWE20160_EcIA_Rev_C) and submitted to Merthyr Tydfil County Borough Council, which was received on 05 May 2021.

The 2020 report confirmed the following:

- A single bat dropping characteristic of a brown long-eared bat was found in the workshop during the preliminary roost assessment.
- Common pipistrelle (x7) and brown long-eared bat (x1) were recorded emerging/re-entering the building during the bat activity surveys.
- Bats were also recorded foraging and commuting along the river located immediately south of the site.

In Section 6 of the 2020 report, it was acknowledged that works had commenced prior to receiving the report (Rev A), and that it was not possible for a bat mitigation licence to be obtained to lawfully

Company Registration No. 6646654. Registered in England & Wales
Registered Office: Suite 1, The Mill Building, Brimscombe Port Business Park, Stroud, GL5 2QG



NET ZERO | 2030



derogate the loss of resting places used by a small number of commoner species of bat. Alternative mitigation and compensation measures were therefore proposed.

Following an investigation by PC1154 Mark Powell (NRW's seconded Police Officer) on 20 January 2022 a fine and sentence was given to Mr Phil Corke (of Murphy Corke Developments) for the unlawful destruction of a bat roost. It was acknowledged that mitigation and compensation (see Appendix V of Wildwood Ecology report: WWE20160_EcIA_Rev_C) have been implemented to the satisfaction of Wildwood Ecology, their ecological advisers.

An internal memorandum issued by MTCBC dated 17/03/2022 stated that:

Following the works at the site without planning permission or a derogation licence from Natural Resources Wales (NRW), and the halting of all works the following is required:

A single 'bat activity/roost characterisation' survey to be undertaken in late-May/early-June. A total of 4 surveyors is likely to be required to adequately cover the building. Static detector(s) will be deployed within the structure preferably for 10 consecutive nights, again in late-May/early-June.

The results of the survey work will inform whether the remaining works are licensable in terms of bats.

ADDITIONAL SURVEYS UNDERTAKEN IN 2022

Methodology

Additional surveys were undertaken at the Site between June and August 2022 and comprised initially of a daytime internal and external inspection. This survey was undertaken on 22 June 2022 by a NRW licensed bat ecologist (Mr Richard Dodd: S090880/1) assisted by Madeleine Anderson. The building was externally and internally inspected for bats and their signs with the aid of high-powered lamps and close-focussing binoculars in accordance with the bat survey guidelines (Bat Conservation Trust, 2016).

A single bat emergence survey was undertaken on 20 July 2022 (sunset time 21.21hrs) by 3 surveyors which adequately covered the elevations and roof areas of the building. The surveys were undertaken by Jenny O'Neill (lead surveyor), Madeleine Anderson and Jack McCormack and co-ordinated by Richard Dodd. The dusk emergence surveys commenced approximately 15 minutes before the time of local sunset (source www.sunrisesunsetmap.com) and continued for approximately 1.5 hours after sunset. Surveyors were equipped with full-spectrum bat detectors (3 x Elekon BatloggerM). Elekon Batloggers were also used to record bat activity across the site. Note was made of all bat activity recorded including (where appropriate) roost access points, species, time of re-entry, direction of flight, behaviour (foraging or commuting) and use of landscape features. Minimal lighting was used during the surveys as this can alter the behaviour of the bats emerging from or entering a roost or foraging or commuting over a site.

A static bat detector (Elekon BatloggerM) was also placed within the building, mounted on a tripod prior to the commencement of the emergence survey on 20 July 2022 and was positioned in the upper floor area of the building. The static bat detector was programmed to record for 11 consecutive nights of activity and retrieved on 01 August 2022. The results of the recordings were analysed using the BTO Acoustic Pipeline¹ that carries out data extraction and analysis using full spectrum data processing, which extracts the maximum information possible from recordings to inform species identification. The analysis considers the identification of multiple species where present in a recording, not only the species with the strongest signal, resulting in a greater ability to detect quieter species, such as Barbastelle, Plecotus and Myotis species. It is currently the only system that considers the sound identification of bat social calls, reducing the chance of social calls being mis-identified as the wrong bat

¹ <https://www.bto.org/our-science/projects/bto-acoustic-pipeline>

species. Any low confidence rating calls (e.g., unusual species for the area or rare and rarest species of bat) would be additionally analysed manually by an ecologist experienced in sonogram analysis using either Elekon's *BatExplorer 2.1.10 Analysis Software for Windows* or Wildlife Acoustics *Kaleidoscope Pro Analysis Software*.

Results

Preliminary Roost Assessment (PRA)

No evidence of use by bats was observed internally (upper ground floor, lower ground floor and basement areas all surveyed with no limitations to access) or externally during the daytime inspection on 22 June 2022 (see Appendix I). Weather was sunny, warm day with no wind and no precipitation. Mitigation and compensation measures installed in 2021 still in-situ and suitable locations for use by bats with no additional lighting installed.

Street lighting present along Pontmorlais West Road (to the north of the Site) and also to the south of the site emanating from the car park off Old Mill Lane. No illumination across the south elevation and Nant Morlais from the building, but some light spill from adjacent car park off Old Mill Lane across the upper section of the building but not the stream itself. Existing levels are still considered to be high and will have an impact on the presence or abundance of more light sensitive species such as brown long-eared, *Myotis* and horseshoe bats.

The vegetation that lies adjacent to Nant Morlais continue to provide sufficient cover for foraging and commuting bats, as demonstrated by the results of the emergence and activity survey in July 2022.

Dusk emergence survey

No bats were observed to emerge or enter the building during the at emergence survey.

Foraging and commuting activity was observed by frequent passes throughout the evening by common pipistrelle and soprano pipistrelle and a single recording and pass by a possible *Myotis* bat (heard, but not seen). On analysis of the recordings using Elekon's *BatExplorer* software the possible *Myotis* call was confirmed as Whiskered/Brandt's, with a confidence value of 60-80%.

First bat heard and seen was a common pipistrelle bat at 21.39 (sunset + 17mins); soprano pipistrelle at 21.40 (sunset + 18mins); *Myotis* at 22.00 (sunset + 39mins).

Static monitoring

The Elekon BatloggerM was retrieved on 01 August 2022 and data obtained was checked for any errors. No errors were detected after viewing the metadata file and all results were considered valid.

Out of the 11 nights of static monitoring internally within the building only 5 recordings were made within this period. The results for the static detector recording were not therefore submitted to the BTO Acoustic Pipeline and were analysed individually using Elekon's *BatExplorer* software.

Out of the 5 recordings made, none were assessed as calls made by bats and were likely triggered by rodents.

ANALYSIS AND DISCUSSION OF RESULTS AND IMPACTS ON BATS AND THEIR ROOSTS

No evidence of use by bats was observed during the preliminary roost assessment and furthermore, no emergencies or re-entries by any bat species was observed or recorded.

The activity levels around the building in 2022 were similar to those in 2020, although long-eared bat and lesser horseshoe were not recorded in 2022, as they were in 2020.

Given the results above and the null result of any bat related calls on the static bat detector positioned within the building it is considered highly unlikely that bats use the building as either a resting place or breeding site.

As mentioned earlier on within this addendum, following an investigation by PC1154 Mark Powell (NRW's seconded Police Officer) on 20 January 2022 a fine and sentence was given to Mr Phil Corke (of Murphy Corke Developments) for the unlawful destruction of a bat roost. Following the results of the previous survey in 2020 and the results in 2022 the installed mitigation and compensation measures in-situ are still considered to be appropriate for a range of bat species.

The wooden cedar cladding located on the northeast elevation (see Appendix I, Figures 1 and 5) are suitable for use by brown long-eared bat and are situated in a location near to where a possible emergence was identified in 2020.

The three installed bat boxes on the northeast (see Appendix I, Figures 1 and 5) and southwest (see Appendix I, Figure 3) elevations are suitable for use by a range of crevice dwelling species of bats, including common and soprano pipistrelles and Myotis.

No bat mitigation licence will be required going forward as no roosts identified in 2022 after adequate survey effort. However, the measures outlined above and contained within the previous report will ensure that the continued ecological functionality of the confirmed roosts in 2020 will be maintained.

Regarding illumination and vegetation: the installation of artificial illumination is not anticipated across to the east elevation of the building that lies adjacent to Nant Morlais. Any proposed additional lighting on the northeast elevation will fully take into consideration light spill/pollution on Nant Morlais and streamside vegetation. As such, the planting of native species as recommended in the revised mitigation and enhancement plan will be implemented (see Appendix V of the Wildwood Ecology 2020 report).

CONCLUSION

In conclusion, the unlawful damage and destruction of roosts in 2021 has been dealt with under a prosecution. Prior to prosecution, remedial mitigation and compensation measures have been successfully installed and will be maintained for a minimum of 10 years. No further mitigation or compensation measures are considered proportionate or necessary and a Natural Resources Wales European Protected Species licence for bats is not required to be applied for given the current results obtained in 2022. However, should bats be found during works then those works must immediately cease and a licensed ecologist consulted before continuing.

Any proposed additional lighting on the northeast elevation of the building will fully take into consideration light spill/pollution on Nant Morlais and streamside vegetation.

Additional planting will be created across the southwest of the Site to ensure that connectivity is maintained. This will enhance the Site for either shelter, protection or as a foraging source for known species of bat, bird and otter.

Bird boxes for dipper, blue tit and swift will also be provided to enhance the building's biodiversity and provide artificial nesting sites suitable for these local species of bird.

--END--

This report has been prepared by:

A handwritten signature in black ink, appearing to read 'Richard Dodd', with a stylized, cursive script.

Richard Dodd, BSc (Hons) MCIEEM CECol

Director

E: rdodd@wildwoodecology.com

T: 01453 367450

APPENDIX I – SITE PHOTOGRAPHS TAKEN 22 JUNE 2022



Figure 1 – northeast elevation and gable end with timber cladding provided as bat roost mitigation for long-eared bat and a single bat box for pipistrelle bat



Figure 2 – west elevation showing new roof layout



Figure 3 – southwest elevation and gable end with 2 x bat boxes as bat roost mitigation for pipistrelle bat



Figure 4 – east elevation adjacent to Nant Morlais and basement door



Figure 5 – cladding mitigation in closer detail and bat box on northeast elevation



Figure 6 – internal view of upper ground floor showing open nature of internal space, timber work and breathable membrane installed



Figure 7 – internal view of upper ground floor showing open nature of internal space, timber work and breathable membrane installed



Figure 8 – internal view of lower ground floor



Figure 9 – internal view of lower ground floor



Figure 9 – basement area