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Barry Tabern
143 Pastureland Drive,
Billington,
Clitheroe,
Lancashire
BB7 9LJ

25 November 2021

Dear Mr Tabern,

Report of Preliminary Bat Roost Assessment at 143 Pastureland Drive, Billington, Clitheroe, Lancashire BB7 9LJ

You instructed us to undertake a preliminary bat roost assessment (also referred to as the; "PRA, survey, report") at the above-named property (also referred to as the; "site, building, structure"). The survey was undertaken on 24th November 2021. My qualifications and experience along with those of the reviewer of this report are summarised at the end of this report.

As I have already discussed with you on site, the probability that bats are roosting at your site and you might engage the legislation that protects them by progressing your development without the benefit of further investigation or mitigation is extremely low. Consequently, I have no further recommendations.

My full report follows.

Aims

In a manner that is proportionate to scale, nature and intensity of the proposed development and its probable interactions with ecological receptors, specifically bats:

Survey

To describe the physical evidence and to evaluate the significance of features that contribute to or detract from the 'roost suitability' of the site, in the context of the desk study, and the proximate and wider landscape.

Evaluation

To describe the constraints to the proposed development as a result of the risk of harm or disturbance to bats (if any).

To set out any recommendations for further survey effort, where this risk is unacceptable or a complete understanding of how bats are using the site cannot be defensibly argued.

To inform any subsequent mitigation proposals in order to achieve a planning or other statutory consent, and to comply with wildlife legislation.

Methods

Survey

For the desk study:

To objectively demonstrate the presence of roosting bats or evaluate the likelihood of presence of roosting bats and offer an assessment of how they could be using the site, I undertook a desk study. This included review of all statutory and non-statutory designated sites, Biodiversity Action Plan Priority Habitats and granted EPSML records for bats held on governmental databases (including MAGIC) within a 1km radius of the site. I also made an assessment of the surrounding landscape structure, using aerial images from Google Earth and Ordnance Survey maps.

Lancashire Environmental Records Network (LERN) was not commissioned to provide bat records for within 2km of the site. This was primarily due to the relatively small scale of the proposed development and lack of expected impact upon bats.

General:

I systematically assessed all features that will be impacted by the development proposals for bats, evidence of bat activity, and roosting or commuting habitat.

For all structures:

Externally, I made a non-intrusive, visual appraisal from the ground using binoculars, inspecting the external features of the structure(s) for potential access and egress points, and for signs of bat use.

For buildings:

Internally, I made an inspection of the building, including the living areas of derelict or abandoned buildings and the accessible roof spaces of all buildings, using an endoscope, torch and ladders. I paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of all accessible features within the roof space.

Birds:

I also made a note of any other ecological constraints observed during the survey. Commonly, this relates to the risk of harm to breeding birds, and the suitability of the site to support barn owls *Tyto alba*.

Evaluation

The evaluation that drives an assessment of likelihood is, by nature, probabilistic. The evaluation methodology I employed for the PRA is described by Colins (2016) and summarised in the table below:

Evidence, likelihood of presence and significance of habitat features	
Possible survey findings	**What this means for you**
⇒ Bats ⇒ Evidence of bat roosting or activity ⇒ Quantitatively significant or qualitatively important features for roosting ⇒ Connectivity to high quality habitat for roosting, foraging and commuting in the proximate and wider landscape	There are probable and foreseeable impacts to bats and their roosts in consequence of your development. These impacts present a real risk of harm or disturbance to bats. In order to prevent this outcome and any criminal liability, further survey effort is necessary to appropriately inform mitigation and enhancement. Thereafter, a planning decision can be defensibly made in favour of the proposed development.
⇒ No bats ⇒ No evidence of bat roosting or activity ⇒ A small number of qualitatively poor features for roosting (if any) ⇒ Limited connectivity to poor-quality habitat in the proximate and wider landscape (if any)	Any impact to bats and their roosts is extremely improbable or negligible. Bats and their roosts do not present any constraints to your development. A planning decision can be defensibly made in favour of the proposed development without delay.

Limitations

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site. This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study. 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. There were no specific limitations to the survey effort.

Findings

The findings collate the data of the desk study, the evidence of the physical survey and any other substantiation (such as the result of DNA tests of physical evidence collected on site).

Photographs with descriptions are only included where appropriate i.e., where they enhance the reader's comprehension of the relevance of salient features on site, or provide valuable context to the evaluation, foreseen impacts and recommendations.

Description of the site and proposed development

The survey building is double-storey, brick-built, semi-detached dwelling with a pitched roof clad in inter-locking concrete roof tiles. The brickwork around the building appears in an excellent condition with no gaps or cracks suitable for crevice-dwelling bats. The eastern gable-end of the building is clad in a pebbledash rendering which appears in a good condition with no gaps or cracks suitable for roosting bats. There is also some wooden cladding present on the gable-end and on the southern elevation wall, which appears tight-fitting with no suitable bat roosting sites. The windows and doors are either wooden or UPVC framed and are tight-fitting with no bat roosting sites. The roof structure appears in a good condition with tight-fitting inter-locking roof tiles, with no raised or missing tiles providing suitable roosting habitat for crevice-dwelling bats or providing access into the loft space for void-dwelling bats. There is a chimney located on the roof of the survey building which contains no suitable bat roosting features. There is lead flashing around the base of the chimney which appears tight-fitting. The roof verge along the gable-end is in a good condition with no missing mortar providing suitable roosting habitat. The building eaves are tight-fitting with no gaps suitable for roosting bats. There is a flat-roof dormer on the rear elevation roof structure. The roof

of the dormer is clad in bitumen felt which appears tight-fitting and therefore provides no suitable bat roosting features. There are hanging tiles present across the dormer which are tight-fitting providing no suitable bat roosting habitat. There is a UPVC bargeboard present around the dormer which appears tight-fitting with no suitable bat roosting sites. There is a single-storey conservatory-style extension on the rear elevation of the building. This has a brick-built base with UPVC glass walls and roof. It offers no suitable bat roosting habitat.

Internally there is one loft space located within the main roof void of the survey building, as well as a small crawl space located at the front of the building. The internal roof structure is constructed from modern timber beans with a bitumen felt lining. Woollen insulation is present across the loft space and crawl space. The loft space and crawl space both appear to be tight-fitting with no daylight entering through the roof structure or along the eaves or gable-end, indicating a lack of bat access points. Both spaces are unlikely to offer suitable habitat for void-dwelling bats due to the small height of the spaces resulting in a lack of space for bat warm-up flights.

There is a single-storey garage building to the rear of the building however this is not subject to any works and as such was not included within the scope of the survey. The construction and flat roof nature of the building means it is unlikely to offer any suitable bat roosting habitat.

The proposed plans are for the replacement of the existing rear dormer and for the addition of a new dormer to the front elevation roof structure. This will involve the front section of the roof being partially stripped. Further, the single-storey conservatory extension at the rear of the property will be demolished and replaced within the same footprint.

Site Photos

Figure 1: Front elevation

Figure 2: Rear elevation

Figure 3: Crawl space

Figure 4: Loft space

Site Plan

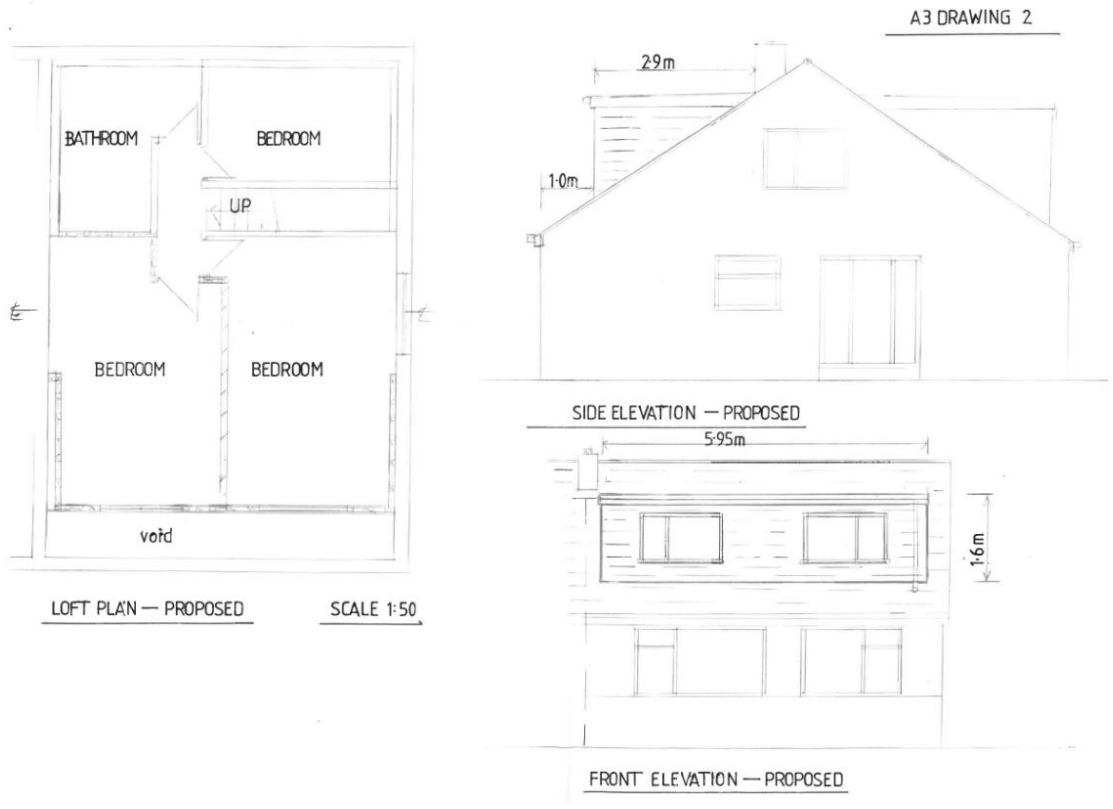

Figure 5: Proposed site plan

Summary of Desk Study

There are no statutory designated sites within a 2km radius of the site. Priority habitats within a 2km radius include deciduous woodland (closest 47m north-east), ancient woodland (closest 1420m south-east) and blanket bog (closest 1570m south). There have been no granted European Protected Species Licences for bats within a 2km radius of the site.

Summary of Physical Survey

The survey building is double-storey, brick-built semi-detached dwelling with a pitched roof clad in inter-locking concrete roof tiles. There is a flat-roof dormer present on the rear elevation of the building as well as a single-storey conservatory-style extension. There are no suitable external roosting features for crevice-dwelling bats and no suitable internal areas or access internally for void-dwelling bats.

Discussion

I have taken into account the findings of the desk study, the physical survey and made a qualitative evaluation of the habitat value at site and its utility to support roosting bats.

The building is considered to have negligible habitat value for supporting roosting bats due to the lack of roosting features present. As such it is consider unlikely that bats will be roosting within the survey building and therefore will not be impact by the proposed development.

Conclusion

My assessment is that bats should not present a constraint to development as the risk of harm or disturbance is highly improbable.

Foreseen Impacts and Recommendations (if any)

There are no foreseen impacts on roosting bats as a result of the proposed development. The site can improved for roosting bats by installing bat boxes on retained buildings on site. Suitable bat boxes include the Beaumaris Woodstone Bat Box, the Vivara Pro WoodStone Bat Box or the Improved Crevice Bat Box. These should be installed at a minimum height of 3m on a south or south-west facing elevation.

References

Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.

Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected?

Google Earth (2021) accessed on 25/11/2021.

Magic database (2021) http://www.magic.gov.uk/MagicMap.aspx accessed on 25/11/2021.

Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Report ends.

I trust this is sufficient for your assessment. However, if you have any further questions please do not hesitate to contact me via 07711591700 or melreid@arbtech.co.uk.

Author

Mel Reid BSc (Hons) MRes, Consultant

Natural England Bat Licence Number: 2019-43774-CLS-CLS

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