BAT SURVEY AND MITIGATION PLAN FOR PROPOSED DEVELOPMENT AT MOUNTMELLICK .

APPLICANT: TOURIST ACCOMMODATION LTD THE FORUM

PLANNING REFERENCE-2460163

SCIENTIFIC AGENT: MINOGUE ENVIRONMENTAL CONSULTING (MEC) LTD

29TH JUNE 2024

Contents

1 Bat Survey Report and Mitigation 3
1.1 Introduction 3
1.2 Purpose of survey 3
1.3 Competences 4
1.4 Limitations and assumptions 4
1.5 Derogation License justification 5
2 Methodology 6
2.1 Equipment 6
2.2 Potential Roost Features of trees 7
3 Results 9
3.1 Desktop results 9
3.1.1 Designated Sites 9
3.1.2 Bat Records 9
3.1.3 Visual inspection exterior and interior- roost suitability potential 11
3.1.4 Tree roost potential and survey 14
3.1.5 Emergence survey 14
3.2 Static Detectors 15
3.2.1 Building B1:Kitchen Extension: 15
3.2.2 Building B2Coachhouse 16
3.3 Evaluation 17
4 Bat Mitigation Strategy 18
4.1 Pre Construction Timing 18
4.2 Scaffolding and inspections 18
4.3 Disturbance/discovery of bat during construction 18
4.4 Bat roosts 18
4.5 Roost requirements 19
4.6 Landscape measures 19
4.7 Lighting 20
4.8 Post construction and Operation Phase monitoring 20
4.9 Conclusion 20
References 22
Appendix a: Photographic Record 0
Appendix B: Bat tile specifications 4

1 Bat Survey Report and Mitigation

1.1 Introduction

MEC Ltd were commissioned by Mountmellick Tourist Accommodation Ltd The Forum to undertake a bat survey in No. 3 O Connell Square, Mountmellick Co. Laois R32YK30 relating to planning application reference-2460163. Summary of development is as follows

Proposed Development: *Change use from an existing, 3-storey over basement dwelling house and 3-storey return to a (6-bedroom) guesthouse; the conversion of the connecting, rear 2-storey outbuilding to a restaurant on two floors with a ground floor extended kitchen and an administration office at first floor level all connected to the proposed guesthouse; the conversion of the existing, 2-storey coach house to a ground floor accessible guest bedroom and storage and a first floor, one-bedroom apartment served by a new, private stairwell. The works include the demolition of an existing kitchen entrance porch, general conservation and repair works/alterations to the existing buildings, extensions consisting of a ground floor extension to the kitchen, a glazed orangery link between guesthouse accommodation, a new stairwell for the restaurant, bicycle and car parking, bin store and all associated site-works and services at No. 3, O Connell Square, Mountmellick, Co. Laois. The premises is a protected structure under ref. RPS 014 at No. 3 O Connell Square, Mountmellick, County Laois, R32YK30.*

The submission from The Department of Housing, Local Government and Heritage notes that bats may be present in the building.

" *All bat species are protected by the Wildlife Acts of 1976-2010 and are listed on Annex IV of the Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora). Therefore, a bat survey should be carried out by a suitably qualified ecologist prior to a decision being made on planning. A copy of the survey report must be forwarded by the Council to this Department for comment before any decision is made on planning. If bat species are found to be roosting in the buildings/trees a derogation licence will need to be applied for from the National Parks and Wildlife Service of this Department. Bats may be present in the trees. All bat species are protected by the Wildlife Acts of 1976- 2010 and are listed on Annex IV of the Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora). Therefore, a bat survey should be carried out by a suitably qualified ecologist prior to a decision being made on planning. A copy of the survey report must be forwarded by the Council to this Department for comment before any decision is made on planning. If bat species are found to be roosting in the trees a derogation licence will need to be applied for from the National Parks and Wildlife Service of this Department"*

1.2 Purpose of survey

To identify present or absence of bats in the proposed development including building and trees in No. 3, O Connell Square, Mountmellick, Co. Laois (53.116973,-7.327742). See location below.

Figure 1-1 Project location

1.3 Competences

Ruth Minogue MCIEEM undertook the survey work, Ruth has been undertaking bat surveys since 2013 and has attended bat training and conferences as part of Continued Professional Development. She has 11 year's experience in undertaking bat survey work primarily during the activity season and including emergent, re-entry surveys, preliminary roost surveys of trees and buildings. Ruth undertakes bat surveys over the active bat season from May to early September for planning applications, master planning and the Acres Traditional Farm Building Schemes and is a licensed ecologist (Bat License Der -Bat 23-96). She has prepared previously undertaken full season activity survey work on Newhall and Edenvale SAC (Newhall Stables) over 2013 and more recently bat surveys over 2021 at Ballaghfadda for Clare County Council.

1.4 Limitations and assumptions

Access was provided to assess the buildings for bat roost potential and undertaking the emergent survey. However the upper floor of the coach house and kitchen extension are in poor condition especially the coach house and a visual inspection from ladders and from a door off the main house was only possible for these buildings.

Limitations: the surveys were undertaken during the bat activity season. Most of the space in the buildings were accessible safely and access via ladders was used to assess the upper floors in the two outbuildings given the poor condition of the floorboards, it was not safe to walk on these. Static detectors were deployed to gather more information about potential bat activity to support the emergent survey. Therefore, the survey results are not significantly limited and are considered to

represent a valid assessment of roosting within the site. On the assumption that site conditions and habitats remain unchanged, the survey will remain valid for one year i.e. until June, 2025 and should be updated if works have not yet commenced within this timeframe or a planning application has not been submitted

1.5 Derogation License justification

This Section addresses the requirement for the derogation to be issued only under specific qualifying circumstances as set out in Regulation 54(2). The existing structures proposed for renovation as part of the Guesthouse to provide restaurant, office and an accessible bedroom from the ground floor. These are in poor condition currently with loose tiles, the upper floor in both are precarious and in the absence of works will continue to decline.

Alternatives considered as part of the derogation application relate to no works being done to the stable building; this is not a satisfactory alternative as this complex forms part of the protected structure under ref. RPS 014 and the owner is obliged to maintain and keep the structure in good condition. By not undertaking works to the building which is in poor structural condition, the buildings fabric including roof will continue to decline. In addition to failing to maintain and upkeep the building, the continued deterioration of this structure, will result in the ongoing decline of ambient conditions suitable for roosting bats. This includes the increasing light levels associated with loose and missing roof slates, increased draughts associated with the gaps and holes in the roof in particular and increasing water ingress which affects timber structures internally.

This derogation is being sought on the basis that there are no satisfactory alternatives and the derogation is not detrimental to the maintenance of the populations of the species to which the Habitats Directive relates at a favourable conservation status in their natural range.

2 Methodology

Methodology included desktop and data search, preliminary roost assessment of the buildings, tree roost potential survey of mature trees and emergent survey. Dates as follows:

The following surveys were undertaken:

- Emergence bat survey 9th of June 2024
- Static Detectors deployed from the 9th-14th of June (5 nights), see Figure 2.1 for location of static detectors and surveyors position for emergent survey.
- Internal inspection of buildings on 9th of June 2024
- Tree roost potential survey 9th of June 2024

Table 2.1 presents details on the surveys.

TABLE 2-1 BAT SURVEY DATES CONDITIONS AND SUNSET

Date	Sunset/sunrise duration of survey	Weather conditions
9th of June 2024	Sunset:21:54 21:54 to 23.30	Temperature at sunset: 12C, calm Relative humidity 77% 8/8 cloud cover Drizzle to heavy rain throughout survey
9th June to 14th June 2024 (5 nights	5 nights	Weather conditions varied but over the 5 nights ranged from !6C to 9C with the Tuesday 10th June a low of 5C at night.

2.1 Equipment

Ruth Minogue led the survey effort. One other surveyor assisted the survey. The team used the following survey equipment:

- Elekon Batlogger M2 x 2
- Torches
- Thermal imaging camera PixFrd ARC series.
- Elekon S2 x 2

Results were analysed using Elekon Batexplorer software. The surveyors were located to the rear of the coach house and garden, whilst the second surveyor the connecting building proposed for restaurant use and the yard.

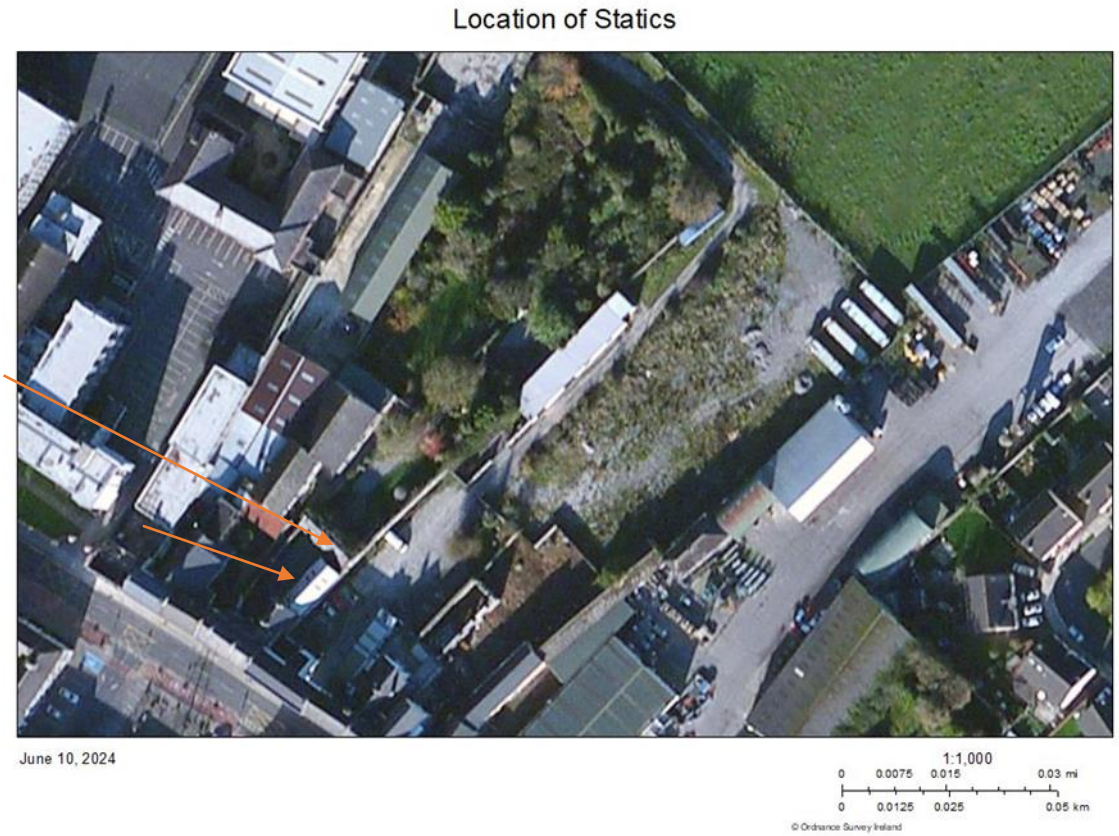
Bats were identified in the field to species level, *Myotis* sp. were identified to family level. During hand-held bat surveys species were identified in real time by recording peak frequency. Notes were also made on the time of recording and type of behaviour of each bat encountered during the activity surveys. The surveyors stayed in these locations for the duration of the survey.

An internal and external daylight survey of the main house and above outbuildings was undertaken on the 9th of June 2024 to identify any potential roost features and to look for signs of roost activity such as presence of bats, dropping and evidence of staining as well as insect remains.. Internally and externally inspections of potential roost features were carried out to survey any potential roosting spaces or entrances. The thermal camera was deployed to assess for any temperature changes within the buildings which could indicate roosting bats. The inspection survey was conducted in accordance with the Bat Conservation Trust (BCT) methodology (Collins, 2016). Both buildings were investigated

and allocated a potential roost classification using criteria in Collins et al (2023). Each building was then assigned a level of suitability for roosting bats as outlined in Table 2.2 below.

Table 2-2 Roost Suitability Potential Buildings (Collins, 2023)

No roosting suitability	No features likely to be used by any roosting bats at any time of yea
Negligible roosting suitability	Buildings with few, if any, features suitable for roosting, however a small amount of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low roosting suitability	One or more potential roost sites that could be used by individual bats opportunistically at any time of year. The features do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
Moderate roosting suitability	One or more potential roost sites that could be used by bats due to their space, shelter, protection, appropriate conditions and/or suitable surrounding habitat but are unlikely to support a roost of high conservation status (e.g. maternity or hibernation).
High roosting suitability	One or more potential roost sites that could be used by larger numbers of bats on a more regular basis/ longer periods of time, due to their space, shelter, protection, appropriate conditions and/or suitable surrounding habitat. These structures could support roosts of high conservation status (e.g. maternity or hibernation).
Confirmed roost	Evidence of bat occupation found



2.2 Potential Roost Features of trees

The classification system used for Potential Roost Features is based on Collins (2016). The assessment consisted of an initial inspection of trees from ground level to identify potential roosting features for

bats. Features considered to provide suitable roost sites for bats which are named in Bat Roosts in Trees (Andrews, 2018) are:

- ▪ Disease and Decay, which encompasses; woodpecker–holes, squirrel-holes, knot-holes, pruning cuts, tear-outs, wounds, cankers, compression-forks* and butt-rots;
- ▪ Damage, which encompasses; lightning strikes, hazard beams, subsidence-cracks, shearing cracks, transverse-snaps*, welds, lifting bark, desiccation-fissures and frost cracks; and
- ▪ Association, which encompasses; fluting* and ivy.

The trees were inspected during the daytime for evidence of bat usage Phase 1 inspections identified the list of trees that may be suitable for roosting by bats.

The trees were assigned a bat roost suitability score of negligible to confirmed roost, in accordance with Table 2.3 below.

Table 2-3 Categorisation of tree suitability for roosting bats.

Suitability	Description
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). Or a tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, condition and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat
Confirmed roost	Evidence of roosting bats in the form of live / dead bats, droppings, urine staining, mammalian fur oil staining

3 Results

The project site is located within the main urban area of Mountmellick Town and comprises a listed house with basement and outbuildings. The main focus of the bat survey is the two outbuildings which are proposed for renovation and reuse as a kitchen with orangery and a ground floor accessible guestroom with office on the first floor. The rear garden includes mature trees, dense ivy growth on the brick walls and extends to a improved grassland with the Owenass River to the rear of the property some 240m east of the outbuildings. The former Quaker school is to the west of the site and is also empty.

A desktop review of publicly available relevant data was undertaken on the National Biodiversity Data Centre (NBDC) and National Parks & Wildlife Service (NPWS) websites. The National Biodiversity Data Centre was reviewed for relevant data, specifically

i) existing species records for the 2km square in which the study site is located (N40) and
ii) an indication of the relative importance of the wider landscape in which the study site is located, based on Model of Bat Landscapes for Ireland (Lundy et al. 2011). In the latter, the index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats.

3.1 Desktop results

3.1.1 Designated Sites

No statutory sites designated for bats are located within 5km of the site

3.1.2 Bat Records

National Biodiversity Database was searched on 9th of June for 10km tetrad (N40) and the following records were returned:

Species name

- Brown Long-eared Bat (Plecotus auritus)
- Common Pipistrelle (Pipistrellus pipistrellus sensu stricto)
- Daubenton's Bat (Myotis daubentonii)
- Lesser Noctule (Nyctalus leisleri)
- Natterer's Bat (Myotis nattereri)
- Soprano Pipistrelle (Pipistrellus pygmaeus)

The following table lists bat records within 2km (N40N) of the site within the last 10 years

Species name	Record count	Date of last record	Title of dataset	Designation
Common Pipistrelle (Pipistrellus pipistrellus sensu stricto)	4	24/06/2022 Recorded adjacent to O'Connell square, South-West of O'Connell square, approximately 100m from project site	National Bat Database of Ireland	

Daubenton's Bat (Myotis daubentonii)	19	27/08/2021 Recorded On the river approximately 200m South-West of the project site.	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
Soprano Pipistrelle (Pipistrellus pygmaeus)	2	12/08/2014 Recorded near the river 200m South of the project site.	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts

The bat habitats at landscape scale database was reviewed and this shows the project site and environs is of second highest suitability for all bats. See Figure 3.1 below.

Figure 3-1 Bat Landscapes

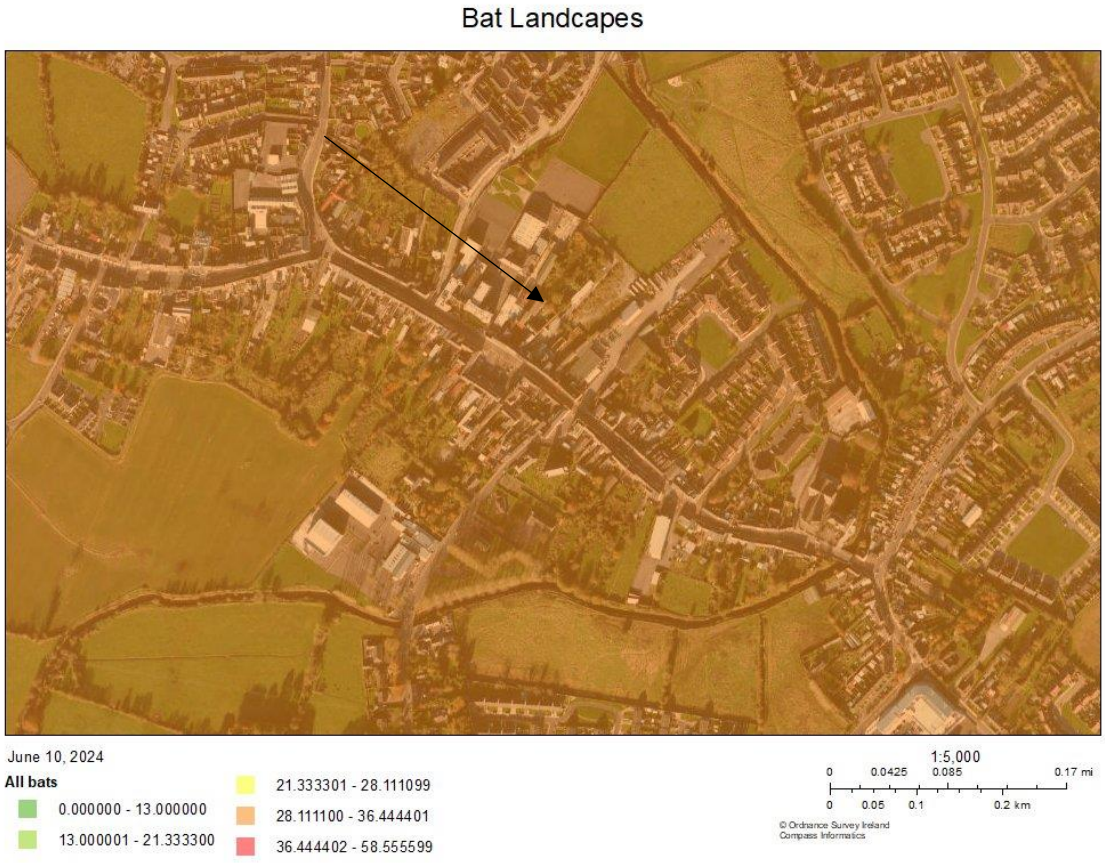
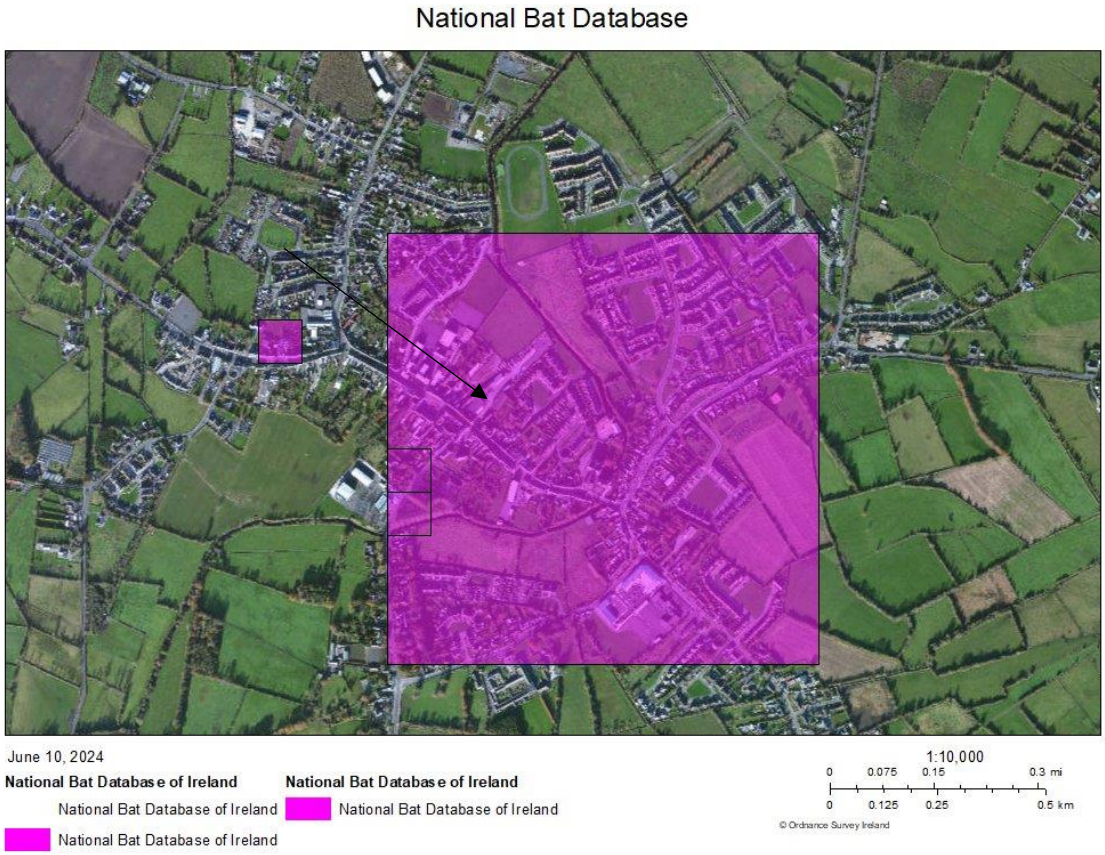


Figure 3-2 National Bat Database



3.1.3 Visual inspection exterior and interior- roost suitability potential

Figure 3.3. shows the two buildings proposed for works from the upper floor of the main house. Note works to the main house comprise internal works and do not include any works to the roof or attic space. A survey was undertaken on the upper levels and basement for evidence of bat activity as part of the survey of 9th June 2024

The buildings relevant to the project, were identified as having moderate to high roosting suitability due to the following:

- Construction type, numerous access points via arches, doors, roofing materials, space between walls, dense ivy.
- Space of voids in the upper floors, absence of artificial light and disturbance.

Only one of the roofs has older slate tiles (coach house facing courtyard) the others are corrugated sheeting which may be less attractive to bats. The condition of the coach house upper floor is very poor and partially collapsed with water ingress which may create poorer ambient conditions particularly for maternity roosts.

A small shed connects the two buildings and comprises a damp narrow space with galvanised sheeting roofing, this is for demolition.

Figure 3-3 Two buildings for redevelopment

Figure 3-4 Building B1 (Outbuilding connecting to main house, proposed for renovation and extension, restaurant use) bat roost features

Figure 3-5 B2: Coachhouse – proposed for renovation, guestroom(ground floor) and office (1st floor) front facing courtyard

Figure 3-6 Rear facing garden – numerous crevices in stonework and in arch

Figure 3-7 connecting shed proposed for demolition -low roost features due to light levels, damp and roofing material.

3.1.4 Tree roost potential and survey

A ground level survey of the rear garden identified two trees with roost potential; these appear to be mature walnut trees. These were identified as being of moderate roost potential due to their age and maturity; no significant cracks/boules or dense ivy were recorded on the tree and the tree limbs appeared relatively smooth. Notwithstanding the above, the age, size and location within an overgrown garden increased the potential for roosting bats to use the tree during the activity season.

The surveyor who was present at the rear of the coach house also surveyed the two identified trees for signs of emerging bats. None were recorded during the survey. No works are proposed to these mature trees.

There is also dense ivy growth on both walls in the rear garden but no works are proposed to these at this time.

3.1.5 Emergence survey

The most frequently recorded species were common pipistrelles (55 recordings), followed by soprano pipistrelles (13), and much less frequently recordings of Leisler bats(8), Myotis spp were recorded 8 times.. Figure 3.8 presents the overall results of activity over the emergence survey.

Overall, bat activity was greater at the garden and rear of the buildings with very few bats recorded in the courtyard. Foraging activity was observed around the trees and garden habitat though no foraging was observed at the well.

A visual observation of common pipistrelle was noted flying over from the former Quaker school building adjacent to the project site. One bat (common pipistrelle) was confirmed existing from the garden facing elevation of the coach house (north east) at the following location. No other bats were recorded emerging from either building.

Figure 3-8 Emergence Survey Results

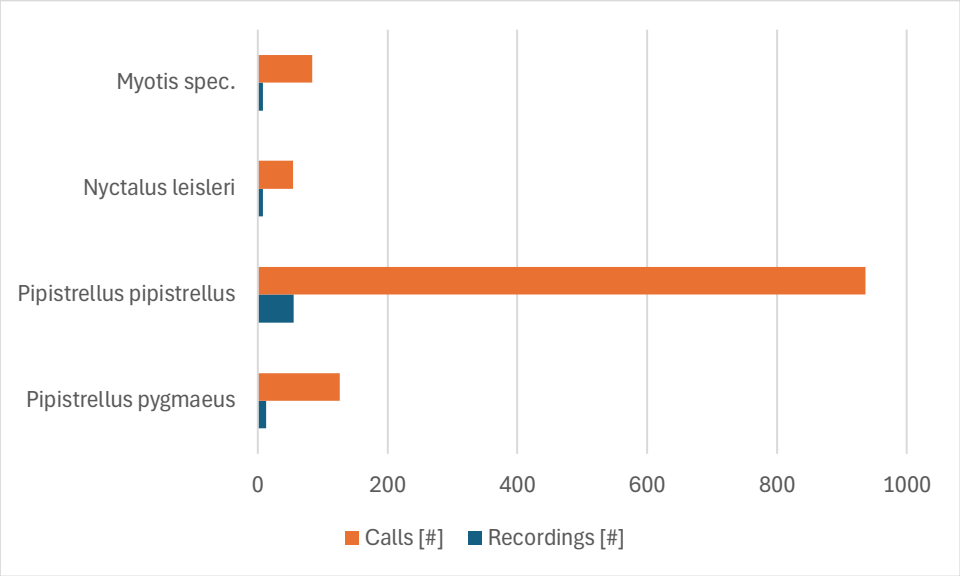


Figure 3-9 Approximate location of common pipistrelle exit

3.2 Static Detectors

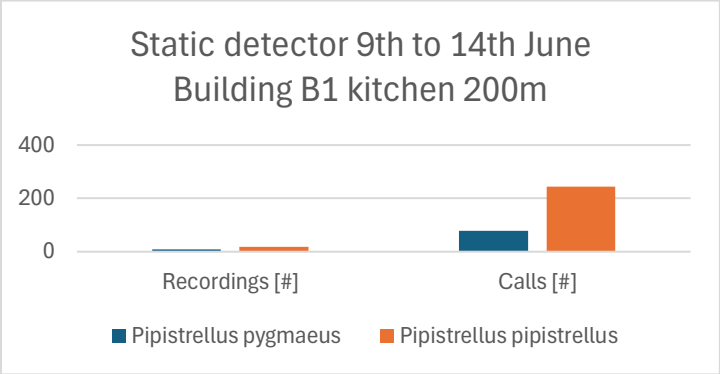
Results. The static detector results were adjusted to filter results within 50m of the structures to focus on activity within or close to the buildings. Wider results are also shown here upto 200m of each structure.

3.2.1 Building B1:Kitchen Extension:

Only 1 record of a soprano pipistrelle was noted on 13th June at 23:10 within this building based on 50m distance filter.

Within 200m of the building over the 5 nights, bat activity was quite low with only 8 recordings of soprano pipistrelles and 19 of common pipistrelles.

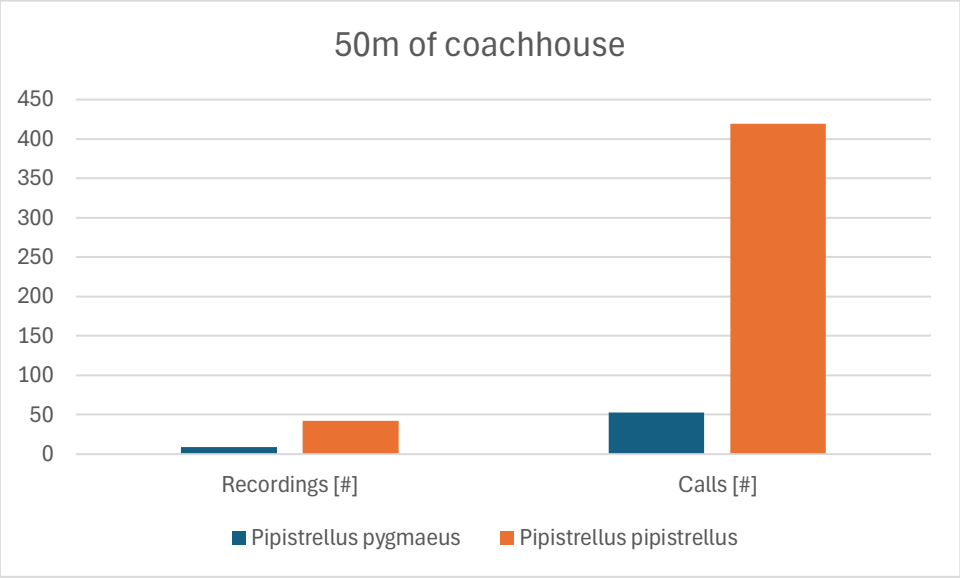
Species	Recordings [#]	Calls [#]
Pipistrellus pygmaeus	8	79
Pipistrellus pipistrellus	19	245



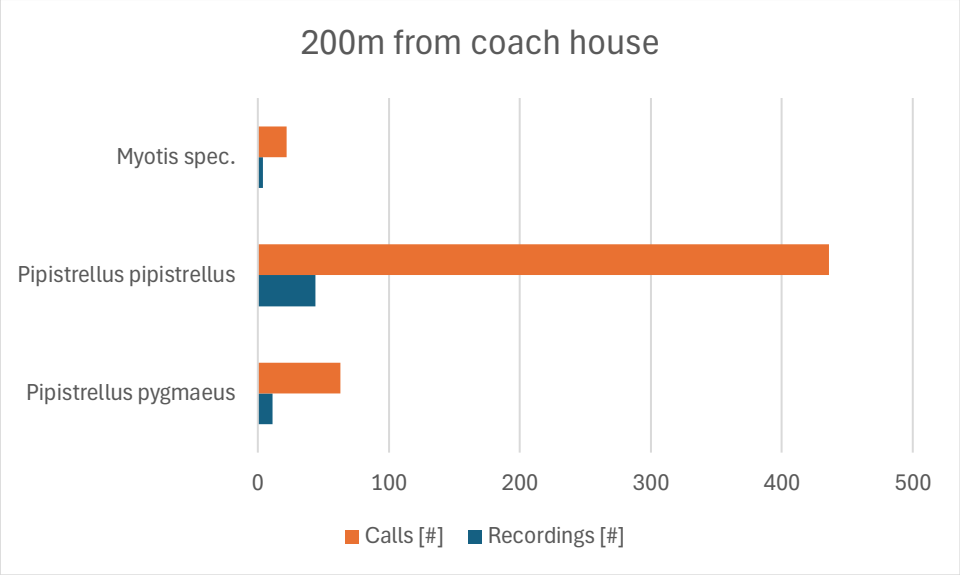
3.2.2 Building B2Coachhouse

Higher levels of activity were recorded within the coach house with 9 soprano pipistrelles and 42 recordings of common pipistrelle over the 5 nights at 50m of the building (see below figure and table).

Species	Recordings [#]	Calls [#]
Pipistrellus pygmaeus	9	53
Pipistrellus pipistrellus	42	419



At 200m from the coach house, the following species were recorded with four records of Myotis spp.



3.3 Evaluation

Based on the 2024 surveys, common pipistrelle is roosting in the coachhouse with one confirmed bat recorded exiting from the rear wall facing the garden. Overall bat activity was quite low but this may also be a reflection of cooler weather conditions.

Therefore, as the coach house has been identified as a roost for Common pipistrelle, in order to comply with legislation it is necessary to apply for a derogation license under the Wildlife (Amendment) Act 2000 permitting the disturbance to the building during the renovation works. Works to the coach house building will only proceed upon receipt of a derogation licence.

The following section comprises the Bat Mitigation Strategy for the derogation license application process.

4 Bat Mitigation Strategy

The most critical issues for mitigating the potential impact to roosting bats include the maintenance of a suitable structure at the stables of an adequate size, with appropriate bat access points that is free from routine disturbance during the operation phase of the buildings. The timing of construction activity will also be critical in ensuring bats are not significantly disturbed. Mitigation measures proposed to achieve the continued used of the stables and/or tower as bat roosts are outlined in the following sections of this report.

The timing of construction activity will also be critical in ensuring bats are not significantly disturbed.

Mitigation measures proposed to achieve the continued used of the stables as roost are outlined in the following sections of this report.

4.1 Pre Construction Timing

The timing of the renovation works is of significant importance to ensure disturbance to bats is avoided.

- Any works to the roof area for the roosting bats must be undertaken outside the bat maternity season; i.e. 1st October-1st May is the optimum period for carrying out works.
- A preconstruction survey will be undertaken immediately prior to the commencement of construction activity to ensure that no bats are present at the stables.

4.2 Scaffolding and inspections

- The erection of scaffolding can hamper bat access during the bat activity season and should be considering during siting and especially if plastic sheeting is proposed
- Some (if not all) access points must be retained during the works

4.3 Disturbance/discovery of bat during construction

In the event that a bat(s) is discovered during any stage of the proposed works the following actions will be taken to ensure that no harm will be caused to the bat(s):

- All works within the vicinity of where the bat(s) is found will immediately stop;

- The bat(s) will be removed by a suitably qualified and licenced Ecologist and placed within a temporary bat box which will be kept under suitable conditions (dark, dry, warm, quiet location) for the duration of the day;

- Works will only commence once it has been established by the Ecologist that no other bats are present within the vicinity of where the previous bat(s) was found;

- Measures will be taken to ensure that the bat(s) cannot reuse the roost in which it was found (e.g. blocking/filling the hole in which it was found; and

- The bat(s) will be released from the temporary bat box by the Ecologist after sunset on the same day that it was removed from the building.

4.4 Bat roosts

The following location and design guidance has been prepared to allow provision of access to the roof space and roost space for the bat species identified over the bat activity surveys.

The approach to reroofing follows conservation architectural practice with replacement of like for like with natural slate roof tiles.

Bat tiles are better placed adjacent to a rafter to bats can crawl in /out along timber. For species of bats that use the inside of the attic, a hole will need to be established in the felt to allow bats free access into and out of the loft. The following dimensions are sufficient for the bat species- 75mm x 30mm and it is very important to establish it immediately adjacent to a rafter or wall to allow bats to climb back out.

Some species of bat use the cavity wall, and access to here from the loft will be required. A small unit in the attic space could be provided. Modern smooth felting membranes are to be avoided in this space. The traditional hessian reinforced bitumastic roofing/slater's felt (BS747) with a sand finish on its upper surface is recommended.

Example of lead roof tile is provided below and specification is provided in appendix b to this report.

There is merit in providing 2 bat tiles each on the south west and north east roof space. Provision of woodcrete bat boxes within the garden habitat along the walls would provide further roosting space for the pipistrelles observed.

4.5 Roost requirements

- Any re-roofing must be provided on a like-for-like basis, using natural slate roof and a bat-friendly roof membrane (i.e. Bitumen 1F felt).
- Breathable roof membranes (BRM's) are not suitable in bat roosts.
- Timbers within the areas of the roost to be retained as bat roosts will remain untreated or if treatment is required, timbers will only be treated by substances that are considered harmless to bats.
- Rough timber should be provided in the roost space to allow bats to hang off them (as opposed to very smooth timber which can be difficult to grip)

4.6 Landscape measures

It is noted a number of mature trees are present at the rear of the building and form part of a long garden of historical value that extends to the river. No proposals to fell these mature trees form part of the works.

4.7 Lighting

Additional illumination can deter bats from using a roost. External lighting at the roost access point should be avoided, the use of the lighting in the garden should be minimised and where necessary over time, provided at low levels with uplighting of mature trees, the well and vegetation on the walls avoided.

More generally external lighting should be minimised and avoid light spill such as security flood lightings or excessive lighting within the courtyard other than that required for health and safety.

Lux levels close to the roost exit and woodland habitat should aim to be less than 1lux where possible. External lighting should be designed in line with the Guidance Note GN08/23 Bats and Artificial Lighting At Night (2023) and Bat Mitigation Guidelines (2022).

4.8 Post construction and Operation Phase monitoring

On completion of the proposed development and bat mitigation measures a full report will be compiled and presented to the Wildlife Licensing Unit.

In order to monitor the success of the mitigation measures, monitoring of the roost will be undertaken on the first, third and fifth year after the completion of the renovations. The monitoring will be undertaken by an experienced bat ecologist and will involve bat inspection surveys and bat activity surveys at the roost site to establish the roost size. The results of monitoring surveys will be provided to the NPWS.

4.9 Conclusion

The Bat surveys have recorded an individual common pipistrelle bat emerging from the coachhouse building proposed for renovation at Mountmellick, Co Laois.

The EU Habitats Directive 92/43/EEC states the conservation status of a species is favourable when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats

- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future

- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

An impact on the conservation status of a habitat or species is considered to be significant if it will result in a change in conservation status.

The presence of Common pipistrelle roosting at the project site is not unexpected. This species are widespread and commonly occurring throughout the country and are "*commonly encountered during bat surveys*" (NPWS, 2019). Common and Soprano pipistrelle are also "*very general in their habitat preference, foraging in woodland, riparian habitats and parkland, along linear features in farmland, and in towns and cities*" (NPWS, 2019). The national population of this species is increasing and no existing pressures or threats to the conservation status of this species at a national level have been identified. Overall, the future prospects for this species in terms of range, population and habitat are Good (NPWS, 2019).

The approach to works will ensure the longevity of both buildings which are in precarious condition. Therefore the roost space and tiles will replicate current roost conditions through the mitigation

measures presented in Section 4 of this report. The timing of the works will be informed by pre works bat surveys.. The renovation of the roof will facilitate the durability and improved ambient conditions of the roof and the provision of the roof tiles in correct locations along with woodcrete boxes within the rear garden may increase roost provision in the project site, particularly at the rear of the development which will be subject to less human activity and disturbance.

References

NPWS & VWT (2022) Lesser Horseshoe Bat Species Action Plan 2022- 2026. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland

Bat mitigation guidelines Version: January 2004 A. J. Mitchell-Jones. English Nature:
Bat Workers Manual (3rd Edition) (Eds A.J. Mitchell-Jones and A. McLeish)
An investigation of the impact of development projects on bat populations: Comparing pre- and post-development bat faunas. Bat Conservation Ireland 2008
Landscape and Urban Design for bats and biodiversity. Bat Conservation Trust 2012
Bats and Buildings Bat Conservation Trust (nd).
Marnell, F. & P. Presetnik (2010): Protection of overground roosts for bats (particularly roosts in buildings of cultural heritage importance). EUROBATS Publication Series No. 4 (English version)

Bat Conservation Global evidence for the effects of interventions 2019 Edition Anna Berthinussen, Olivia C. Richardson & John D. Altringham Synopses of Conservation Evidence

Dietz, C and Kiefer, A. Bats of Britain and Europe. Bloomsbury Wildlife, London. 2014

The Vincent Wildlife Trust's Irish bat box schemes Kate McAney & Ruth Hanniffy July 2015. Vincent Wildlife Trust

P. F. Reason / Conservation Evidence (2017) 14, 52-57 52 ISSN 1758-2067 Designing a new access point for lesser horseshoe bats, Gloucestershire, U

BCI (2021a) Common pipistrelle and soprano pipistrelle. (online) Available at: https://www.batconservationireland.org/irish-bats/species/common-and-soprano-pipistrelle (Accessed June 2024).

BCI (2021b) Avoidance, Mitigation and Compensation. (online) Available at: Avoidance, Mitigation & Compensation- Buildings, planning and development- Bat Conservation Trust (bats.org.uk) (Accessed June 2024).

BCI (2021c) Leisler's bat. (online) Available at: Leisler's Bat - Bat Conservation Ireland

Brown long-eared bat. (online) Available at: Brown Long-eared Bat - Bat Conservation Ireland (Accessed June 2024)).

BCI (2021e) Daubenton's bat. (online) Available at: (Accessed June 2024).

Daubenton's Bat - Bat Conservation Ireland

Bearing witness for wildlife: Bat roost mitigation project report. Available at:

BWWM-Report-FINAL-11.03.21.pdf (bats.org.uk)

CIEEM (2018) Reviewing the evidence on the mitigation strategies for bats in buildings: information best-practice for policy makers and practitioners.

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Ed). The Bat Conservation Trust, London.

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. Official Journal of the European Communities No L 206/7. Council Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment. Official Journal of the European Communities No L 197/30.

Marnell, F., Kelleher, C. & Mullen, E. (2022) Bat mitigation guidelines for Ireland v2. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

IWM134.pdf (npws.ie)

Lundy, M., Montgomery, I. and Russ, J., 2010. Climate change-linked range expansion of Nathusius' pipistrelle bat, Pipistrellus nathusii (Keyserling & Blasius, 1839). Journal of Biogeography, 37(12), pp.2232-2242.

Marnell, F., Looney, D. & Lawton, C. (2019) Ireland Red List No. 12: Terrestrial Mammals. National Parks and Wildlife Service, Department of the Culture, Heritage and the Gaeltacht, Dublin, Ireland. Available at: https://www.npws.ie/sites/default/files/publications/pdf/Red%20List%20No.%2012%20Mammals.p df (Accessed June 2024).

NPWS (2024) 4th National Biodiversity Action Plan 2023-2030 . Department of Culture, Heritage and the Gaeltacht. (online) Available at: . 4th_National_Biodiversity_Action_Plan.pdf (npws.ie)

Wildlife Act 1976 (as amended)
Websites:
www.biodiversityireland.ie
www.batconservationireland.ie
www.vincentwildlifetrust.ie
www.batsorg.uk
www.eurobats.org

Appendix a: Photographic Record

Photographic record -

	Front of house from O' Connell Square
	Rear of house

	Well in garden
	View of mature trees (Walnut) from well site looking towards coachhouse

	Dense ivy growth at eastern boundary wall.
	Arch roof of coach house

	Extension to main house Building 1 proposed for restaurant.
	North east elevation of coach house

Appendix B: Bat tile specifications