

July' 24



Title

Bat Inspection Survey

Development Description

“It is proposed to construct 4 no. new housing units at Moylough. 2 no. 3 bed X 2-storey terrace units and 2 no. 2 bed apartment units. It is proposed to demolish the existing structure with the exception of the street front (North) façade. Moylough is 5 km northwest of Mountbellew and 50 km from Galway. It is located on the N63 national secondary road and is also served by the R328 and R364 regional roads. This proposal represents an ideal infill opportunity within the village confines of the 50 kph speed limit zones whilst the land benefits from direct access onto the R360.”

Location

Moylough, Co. Galway

Applicants

Galway County Council

Prepared by:

Colette Casey (B.Sc (Hons))

Enviroplan Consulting Limited

Suite 3,

Third Floor,

Ross House,

Victoria Place,

Eyre Square,

Galway

T:091-423166

info@enviroplan.ie

<https://www.enviroplan.ie>

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1 Introduction

This Bat Inspection Survey has been prepared by Colette Casey (BSc (Hons)) on behalf of Galway County Council who are applying for planning permission “to construct 4 no. new housing units at Moylough. 2 no. 3 bed X 2-storey terrace units and 2 no. 2 bed apartment units. It is proposed to demolish the existing structure with the exception of the street front (North) façade. Moylough is 5 km northwest of Mountbellew and 50 km from Galway. It is located on the N63 national secondary road and is also served by the R328 and R364 regional roads. This proposal represents an ideal infill opportunity within the village confines of the 50 kph speed limit zones whilst the land benefits from direct access onto the R360.” At Moylough, Co. Galway

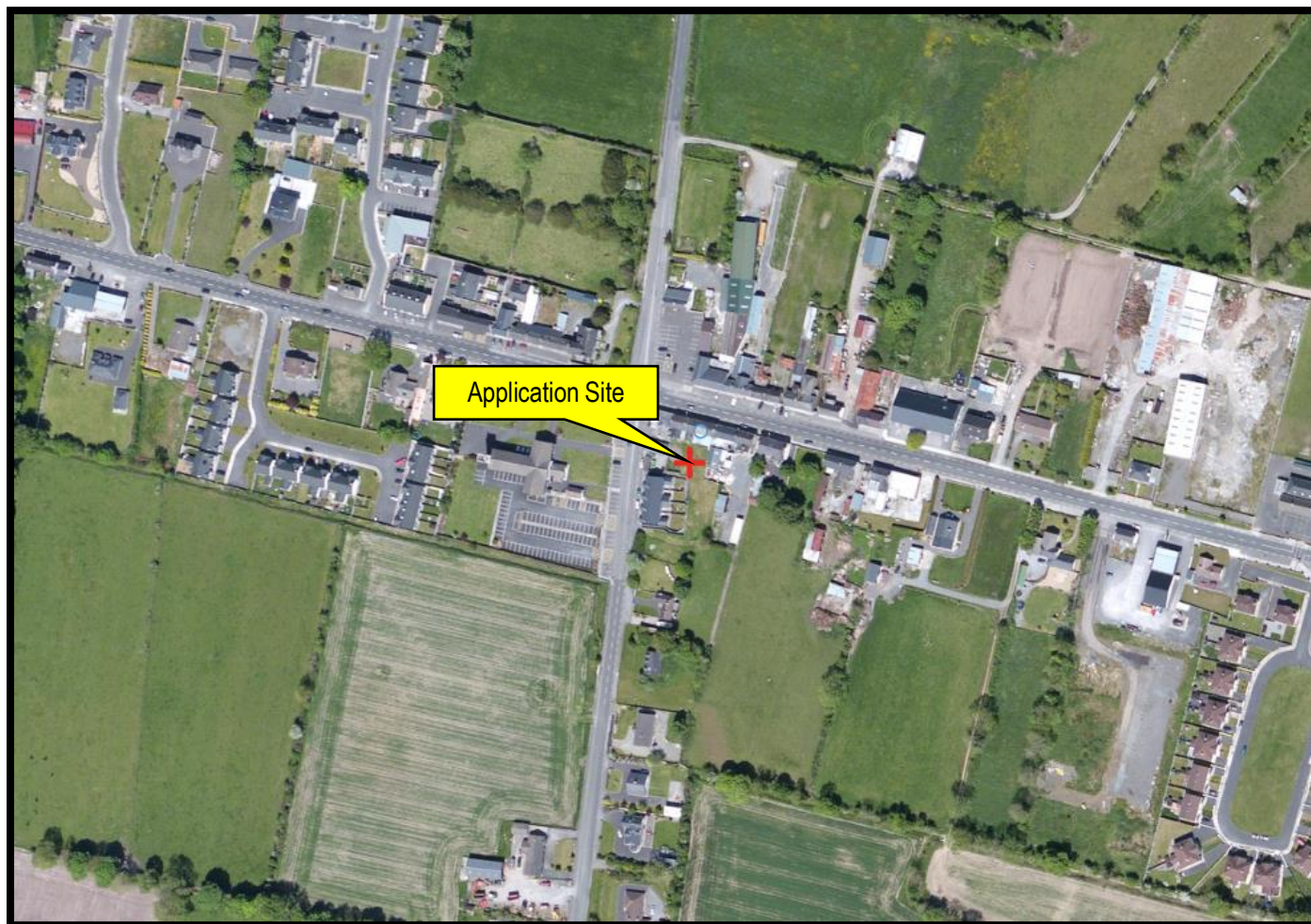


Figure 1.1 Site location map (Red X)

The Bat Inspection was informed and in accordance with the following guidance documents;

- Kelleher, C. & Marnell, F. (2006) Bat Mitigation Guidelines for Ireland. Irish Wildlife Manuals, No. 25. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.
- NRA/TII (2006a) Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes. National Roads Authority
- NRA/TII (2006b) Guidelines for the Treatment of Bats during the Construction of National Road Schemes. National Roads Authority
- Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists – Good Practice Guidelines (3rd Edition). The Bat Conservation Trust, England.

- Mitchell-Jones, A.J. and McLeish, A.P. (eds) (2004) Bat Workers' Manual (3rd Edition). JNCC. England
- CIEEM (2013) Competencies for Species Surveys: Bats. Chartered Institute of Ecology and Environmental Management. England
- Bat Conservation Ireland (2013), Lesser Horseshoe Bat Appropriate Assessment Guidelines.

1.1 Aim of Survey

This report aims to:

- Examine the existing buildings onsite and assess its suitability as potential bat roosts
- Identify species of bat (if any) using the existing buildings
- Examine potential impacts of the proposed development on bat species

2 Legislative Context

All Irish bat species are protected under the European Habitats Directive (92/43/EEC) and are listed under Annex IV of that directive. In addition, lesser horseshoe bat (*Rhinolophus hipposideros*) are also listed on Annex II of the directive. The Habitats Directive has been transposed into Irish law through the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011). EU member states are required to designate some Special Areas of Conservation (SAC's) for species listed under Annex II in order to protect them. Irish bat species are also protected under national legislation in the form of the Wildlife Acts 1976-2017.

Under Irish law it is an offence to;

- Deliberately capture or kill a bat
- Deliberately disturb a bat
- Damage or destroy a breeding site or resting place of a bat

To undertake works at a roost site, agreement must be reached with the National Parks and Wildlife Service (NPWS) and a derogation licence must be granted before works commence.

Aims

The aims of the study included the following;

- Assess if suitable roosting habitat for bats was present at the site
- Assess if suitable foraging and commuting habitat was present at the site
- Identify what bat species utilise the site
- Assess potential impacts of the proposed development on bats and recommend mitigation, if required

2.1 Statement of Competency

The bat inspection was carried out by ecologist Colette Casey (B.Sc. (Hons)). Colette Casey is an experienced and qualified ecologist. She has obtained a Bachelor's degree in Environmental Science (BSc Hons) at the National University of Ireland, Galway. She has been involved in the completion of numerous Appropriate Assessment Screening Reports (AASR's), Natura Impact statements (NIS's), Construction Environmental Management Plans (CEMP's), Otter and Bat Surveys in the Republic of Ireland. She is an active member of Birdwatch Ireland, Bat conservation Ireland. She has Completed a course in British bats, their ecology and conservation. Colette is a registered member of CIEEM and has been issued a Bat Surveying license by National Parks and Wildlife services.

3 Methodology

To assess the impacts of any project and associated activities, an understanding of the ecological baseline conditions prior to and at the time of the project proceeding is required. Ecological Baseline conditions are those existing in the absence of proposed activities (CIEEM 2018).

The following sections outline the methods utilised to establish the baseline ecological condition of the proposed harvesting site.

3.1 Desk Study

A desk study of the subject site was undertaken to collect any available information on bats and to identify any habitats and features likely to be used by bats. The following sources were consulted;

- Review of aerial photography of the study using Geohive (map.geohive.ie)
- Review of online web-mappers: National Parks and Wildlife Service (NPWS),
- Review of NPWS Site Synopses and Conservation Objectives documents
- A search of the NBDC database was undertaken

3.2 Limitations of Survey

The survey was carried out in accordance with the most appropriate guidance, Bat Surveys for Professional Ecologists Good Practice Guidelines (BCT, 2016) and Bat Mitigation Guidelines for Ireland (Kelleher and Marnell, 2006). The survey was carried out outside of the optimal weather conditions and season. Weather conditions on the day were, with temperature of 14°C, dry with a slight breeze and no limitations were identified in this regard.

Due to this survey focusing on evidence of previous bat activity and the potential of a site, these constraints are minimal in this regard.

3.3 Survey-Buildings Assessment and Inspection

A survey of the proposed development site was undertaken by ecologist Colette Casey (B.Sc. (Hons)) on the 1st of July 2024. A detailed visual inspection conducted of the site, this was undertaken to assess the suitability of the existing farm buildings as roosting habitats and to assess the suitability of commuting and foraging habitats onsite.

Habitats were classified according to *A Guide to Habitats in Ireland* (Fossitt, 2000). The entire site was walked and the potential for suitable roosting, foraging and commuting habitats to occur were assessed based on the 'Negligible, Low, Moderate and High' classification described in Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins (ed.), 2016).

The visual inspection focused on the existing buildings on the site of the proposed development.

An external survey was conducted prior to entering the buildings. The exterior of the buildings were inspected from ground level, with focus on gaps, cracks and crevices and potential entry and exit points for bats on the exterior of the building. The search included the ground, windowsills, walls, eaves, roof slates, gutters and the roof ridge. From this initial external survey it was clear that the dwelling house had a low- moderate roost potential subsequently an interior search was then

carried out. The interior search of the buildings was carried out with the aid of torches and focused on walls, floors, windowsills, lintels, shelves, tops of large equipment and furniture, etc.

An internal survey was conducted following the external review, during this the focus was on searching for indicators of bats using the buildings as a roost, these indicators would have been staining/greasing, bat droppings and insect wings or remains located around the site.

4 Description of Baseline Environment

4.1 Desk Study

4.1.1 Designated Sites

The proposed site is located approximately 2.77 km west from Shankill West Bog SAC (Site Code: 000326). An Appropriate Assessment Screening Report has been submitted as part of the application, to assess the impacts of the proposed development on these designated sites.

There is no Lesser Horseshoe Bat (*Rhinolophus hipposideros*) foraging range surrounding the application site or associated with any of the Natura 2000 sites within the 15km of the application site.

4.1.2 National Biodiversity Data Centre (NBDC)

A search of the NBDC database was carried out to examine the suitability of the proposed site for bat species found in Ireland. The Bat suitability index from the NBDC ranges from 0 to 100, with 0 showing least favourable conditions and 100 most favourable for bats. The results of the search are shown in Table 3.1.

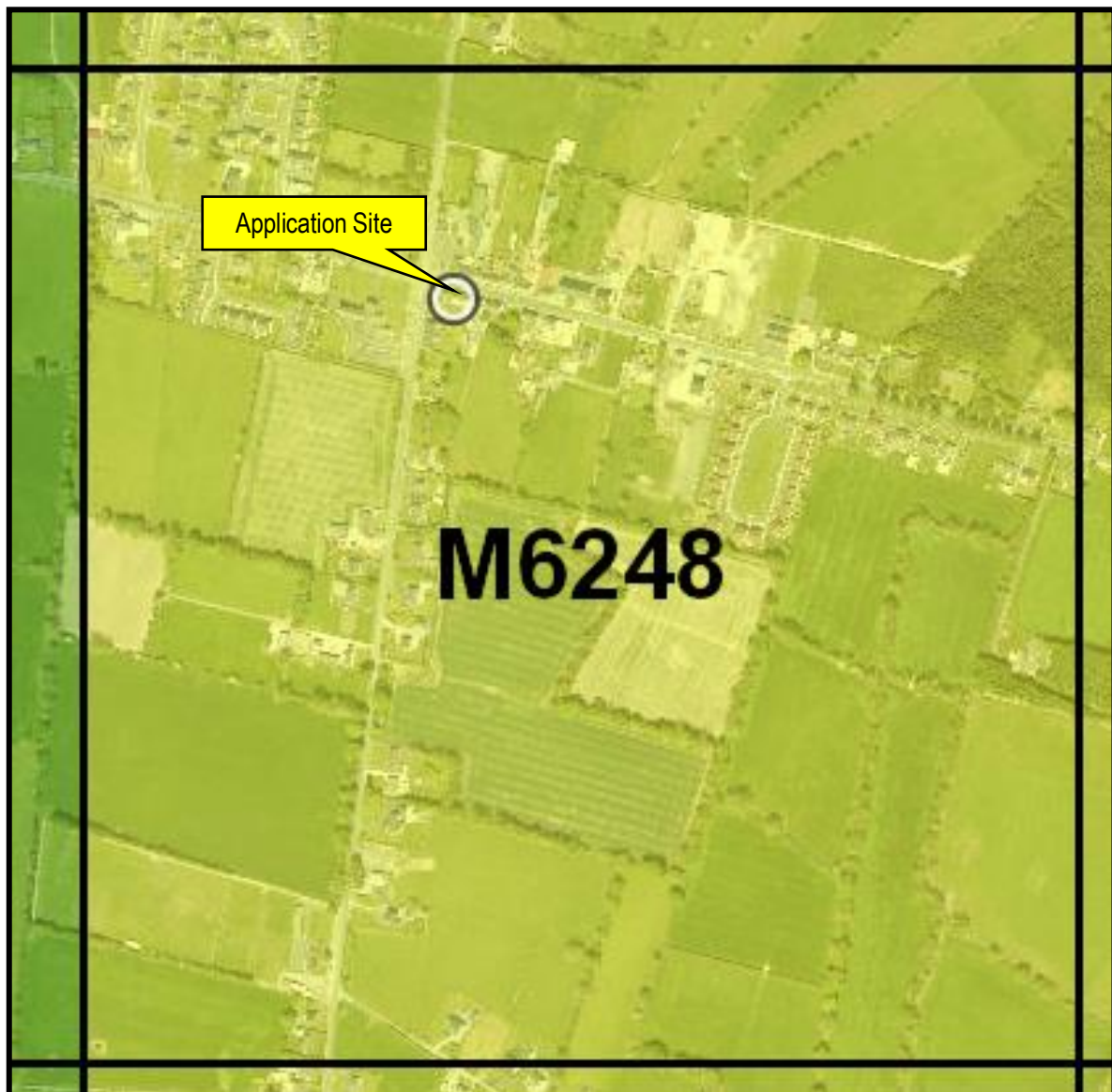


Figure 3.1 NBDC bat suitability map

Table 3.1 NBDC bat suitability index for Moylough, Co. Galway

Species Name	Scientific Name	Conservation Status	Bat Suitability Index
Brown long-eared bat	<i>Plecotus auritus</i>	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017	35
Lesser Noctule	<i>Nyctalus leisleri</i>	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017	33
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	EU Habitats Directive: Annex II & IV; Wildlife Acts 1976-2017	2
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017	40
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017	38
Natterer's bat	<i>Myotis nattereri</i>	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017	40
Nathusius' pipistrelle	<i>Pipistrellus nathusii</i>	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017	1
Daubenton's bat	<i>Myotis daubentonii</i>	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017	28
Whiskered bat	<i>Myotis mystacinus</i>	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017	27

From the table above the area would be suitability for bats, the species that would be predicted to frequent the area would be the species Common pipistrelle which is common in Ireland. This site also shows a low favourability for Lesser horseshoe bats with a suitability index of 2. Nathusius bat have the lowest suitability for this site which is rated as 1. Overall, the site has a low favourability to all bat species with the total suitability index of the site being rated as 27.11 from NBDC.

5 Inspection

5.1 Characteristics of the Area

The proposed development is located along the main street (N63) of Moylough. The 3 buildings on site are bordered by both a “Cheevers” bar to the west and a post office to the east. To the rear of the development is a number of dwelling houses, whose back gardens back onto the rear of the site boundary. The site has a lack of treelines and hedgerows, the site is mainly composed of amenity grassland and buildings and artificial surfaces.

It is noted that there is artificial lighting along the main public road (N63).

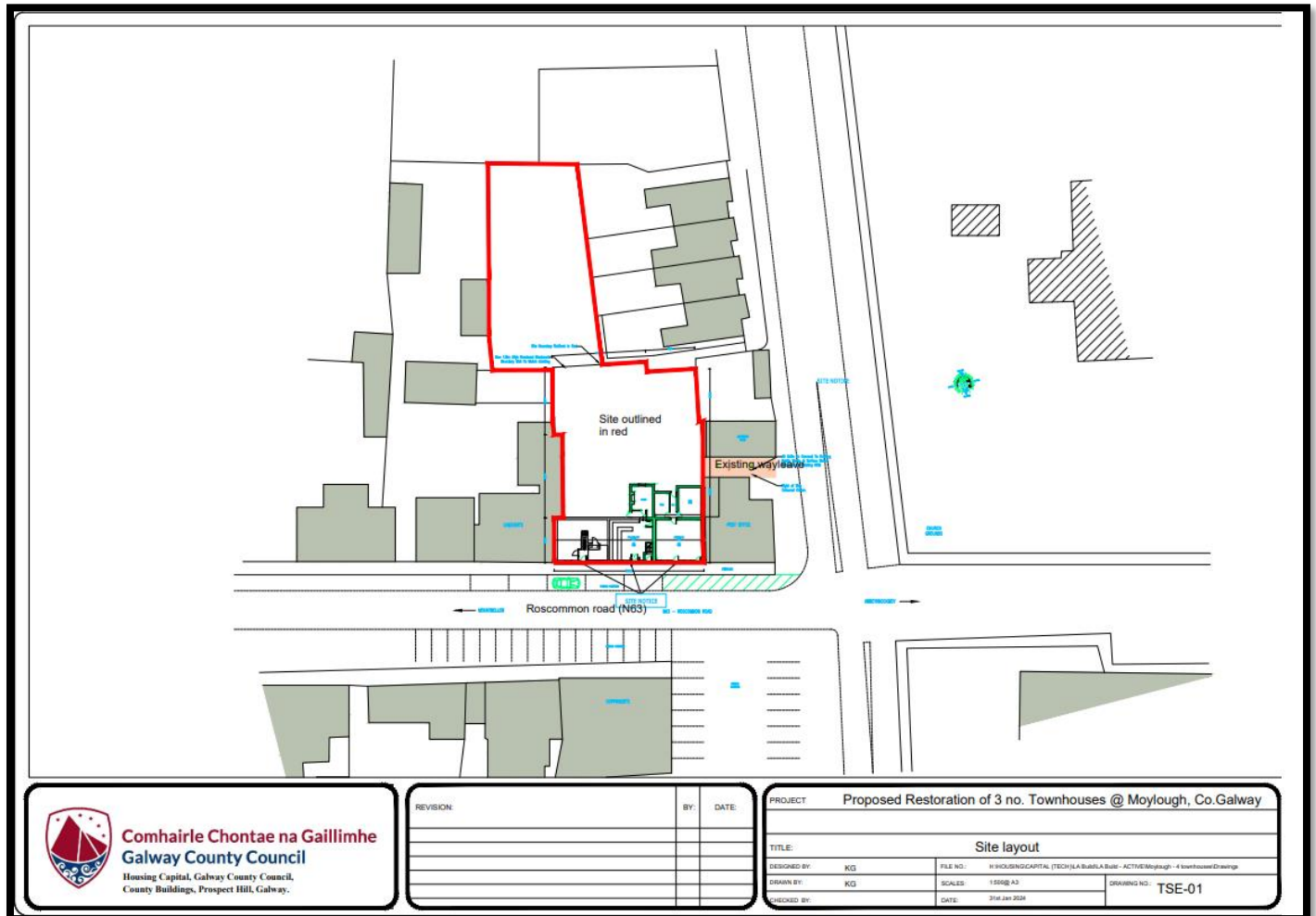


Figure 5.1- Extract From Site Layout

6 Assessment of Buildings and Habitats for Bat Suitability.

Firstly, an external inspection of the buildings was carried out deeming it to have a moderate to high roost potential in regard to the build.

The application site currently is composed of 3 buildings which are all in varying states of disrepair. For ease and clarity, the buildings will be referred to as buildings 1, 2 and 3. Figure 6.1 below indicates the buildings numbers.



Figure 6.0- 3 no. Buildings on site

6.1.1 External Inspection

Building 1 was previously used as a hairdresser, this building is two storeys, however it could not be access due to health and safety. Building 2, is a two-storey building, there is a number of holes in the roof. Also, access could not be obtained to the first floor, due to health and safety concerns. Building 3 has no first floor, as the building has been cleared internally. All windows and door to the front of the buildings are intact. To the rear of the buildings there is a number of broken windows and doors. There are areas of the buildings where there is no roof.

The front of the buildings showed no potential exit/entry points.

There are chimneys in all 3 buildings, these chimneys are still all intact. No birds were recorded nesting atop of the chimneys.

6.1.2 Internal Inspection

Building 1- This building has been the building used most recently. There is a large main room with a small hallway to the rear of the building. There was a hole in the floor above. This building had a lack of suitable cracks/crevices for bats to roost in. The first floor of the building cannot be accessed through this building and is assessed as part of building 2.

Building 2- The hallway of this building leads to an adjoining large room, with a small room, containing mostly rubble and there is a chimney. The first floor could not be accessed as the stairs have been damaged. The interior notes there is a hole in the roof.

Building 3- This building is composed of one large room and a small room with a chimney to the rear of the building. There is no roof on the small room to the rear. Vegetation has been to grow in the building. A number of chimneys are within the building, many have twigs likely for nesting birds. This building has a moderate roost potential.



Figure 6.1- Front of Building 1



Figure 6.2- Interior of Building 1



Figure 6.3- Exterior of Building 2



Figure 6.4- Roof of Building 2



Figure 6.5- Interior of Building 2



Figure 6.6- Interior of Building 2- Chimneys



Figure 6.7- Looking to at Chimney (Building 2) and First floor of Building 1



Figure 6.8- Chimney and rubble to the rear of building 2



Figure 6.9- Exterior of Building 3



Figure 6.10- Interior of Building 3



Figure 6.11-Interior of Building 3



Figure 6.12- Rear of Building 3



Figure 6.13- Rear of Buildings



Figure 6.14- Rear of Buildings



Figure 6.15- Rear of Buildings



Figure 6.16- Rear of Buildings

7 Discussion

No signs indicating the presences of bats such as grease marks, staining, droppings etc. noted in and around the existing buildings. There was no evidence found that the existing structures are utilised by roosting bats. The buildings on site have been rated as having moderate for potential for roosts. However, it is noted that there is a lack of linear features, such as treelines, hedgerows and other suitable feeding grounds. Therefore, the site has a low-moderate bat potential.

8 Conclusions

The report details the finding of a bat survey report completed as part of a planning application which is applying “to construct 4 no. new housing units at Moylough. 2 no. 3 bed X 2-storey terrace units and 2 no. 2 bed apartment units. It is proposed to demolish the existing structure with the exception of the street front (North) façade. Moylough is 5 km northwest of Mountbellew and 50 km from Galway. It is located on the N63 national secondary road and is also served by the R328 and R364 regional roads. This proposal represents an ideal infill opportunity within the village confines of the 50 kph speed limit zones whilst the land benefits from direct access onto the R360” at Moylough, Co. Galway.

Due to the number of cracks, crevices, chimneys and exposed, the existing buildings have a moderate roost potential. No signs such as butterfly wings, greasing or droppings were observed on site. The buildings are also favourable due to the level of shelter and warmth they offer.

No bats or roosts were detected on site.

9 Bibliography

Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists – Good Practice Guidelines (3rd Edition). The Bat Conservation Trust, England.

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NRA/TII (2006b) Guidelines for the Treatment of Bats during the Construction of National Road Schemes. National Roads Authority

Wildlife Acts 1976-2017