REMEDIAL NATURA IMPACT STATEMENT

October 2025

Prepared for
Patrick Ridge

Site Address
Emlaghmore, Ballyconeelly, Co. Galway

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REMEDIAL NATURA IMPACT STATEMENT

Rev.	Status	Date	Author
01	Draft	14/04/25	CM
02	Final	16/10/2025	LM

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Statement of Authority

This report was authored by Larry Manning B.Sc. (Hons). Larry Manning has over 14 years' experience as an ecologist, working across consultancy, research, and regulatory environments. He demonstrates high professional standards through rigorous application of environmental legislation, ethical practice, and clear scientific reporting. He maintains a strong CPD record, including specialist training in bat ecology, marine mammal mitigation, and acoustic fisheries research. Larry's expertise includes Appropriate Assessment, EcIA, EIAR (biodiversity chapters), and a wide range of specialist surveys (ornithology, mammals, reptiles, amphibians, bats, aquatic ecology). Larry has led ecological assessments for large-scale infrastructure, offshore renewable energy, and conservation projects, ensuring compliance with Irish and EU legislation. He is skilled in data management, GIS, statistical analysis, and the design of mitigation and monitoring strategies to achieve robust, evidence-based outcomes. As a Principal and Senior Ecologist, Larry has developed new ecological service offerings, prepared winning tenders, and contributed to business growth through strategy and client engagement. He has led successful stakeholder consultations with developers, agencies, NGOs, and local communities. Larry applies leadership and diplomacy to achieve project objectives while maintaining biodiversity protection as a core priority.

1.0 Introduction

OMC has been retained by Pat Ridge to carry out a remedial Natura Impact Statement (rNIS), prepared by Larry Manning for the retention of
A) The reinstatement of a collapsed roof and making good of an existing chimney,
B) The unblocking of windows and replacement of timber framed windows on the front elevation,
C) CCTV cameras on the building to be in place for a temporary period;

The site is approximately 2m from the Connemara Bog Complex SPA and approximately 10m from the Connemara Bog Complex SAC in the townland of Emlaghmore, Ballyconeelly, Co. Galway. As such, the potential impacts of the proposed works must be assessed by the competent authority, in accordance with Article 6(3) of the Habitats Directive 92/43/EEC (Assessment of Plans and Projects significantly affecting Natura 2000 sites). This report provides the necessary information for the completion of an Appropriate Assessment regarding the potential impacts of the proposed works on sites of European importance.

1.1 Information sources and surveys

The site surveys were carried out on Fri. 7th June 2024 and Wed. 12th March 2025. The Screening Statement for AA is, in part, informed by:

- The Department of the Environment, Heritage and Local Government (2010) Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities.
- European Commission (2002) Management of Plans and Projects significantly affecting Natura 2000 sites. Methodological guidance on the provision of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications for the European Communities, Luxembourg.
- An Bord Pleanála (ABP), 2022. Guidance for Applicants on Substitute Consent under Part XA of the Planning and Development Act 2000 (as amended). Dublin: An Bord Pleanála.
- Department of Housing, Local Government and Heritage (DHLGH), 2021. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Dublin: Government of Ireland.

- European Commission, 2019. Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC. Luxembourg: Publications Office of the European Union.
- Government of Ireland, 2000. Planning and Development Act 2000 (No. 30 of 2000). Dublin: The Stationery Office.
- Law Reform Commission, 2025. Revised Acts – Planning and Development Act 2000 (as amended), Sections 177E and 177G. Dublin: Law Reform Commission.
- www.floodinfo.ie
- en-ie.topographic-map.com

1.2 Requirement for Appropriate Assessment

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, commonly referred to as the 'Habitats Directive', and Directive 2009/147/EC of the European Parliament, and of the Council on the conservation of wild birds (codified version of Directive 79/409/EEC as amended), hereon referred to as the 'Birds Directive' are European Community Legislations established for the conservation of biodiversity and natural habitats. Sites, species and habitats under protection of Directive 92/43/EEC (Habitats Directive) and Directive 2009/147/EC (Birds Directive) are referred to as Natura 2000 sites (also referred to as European sites in the 2011 Birds and Natural Habitats Regulations).
The term Natura 2000 sites will be used in this report. Two types of Natura 2000 site designation exist and are categorised as follows;

- the Special Area of Conservation (SAC), which is designated for the conservation of flora, fauna and habitats of European ecological importance under the Habitats Directive.
- the Special Protection Area (SPA), which is designated for the conservation of bird species and habitats of European ecological importance under the Birds Directive.

These 2 categories of sites collectively comprise a network of European protected areas, 'Natura 2000'.

The term 'Qualifying Interests' (QI) refers to the specific named habitats and/or non-bird species which require protection and for which an SAC or SPA is designated. The term Special Conservation Interests (SCIs) refers to the named bird species which requires protection and for which an SPA is designated. However, the terminology of QI is predominantly used in practice for non-bird and bird species alike. The term Qualifying Interests is used throughout this report. Habitats which require protection are listed in Annex I of the Habitats Directive and include lakes, rivers, heaths and turloughs, as well as raised bogs and active blanket bogs. Species who's habitats require protection are listed in Annex II (Habitats Directive) and include Lesser Horseshoe Bat, Salmon and Otter. Endangered and migratory species which require SPAs are listed in Annex I of the Birds Directive. Naturally, protection is given on the basis of priority, with specific/heightened protection strategies pertaining to certain habitats/species.

The purpose of this report is to apply for substitute consent made directly to An Bord Pleanála under section 177E of the Planning and Development Acts.

The requirement for a Remedial Natura Impact Statement (rNIS) arises under Part XA of the Planning and Development Act 2000, as amended (the "Act"), which provides the legislative basis for the Substitute Consent process. This process enables an applicant to regularise a development that has been carried out without the appropriate environmental assessments required under EU law, namely an Environmental Impact Assessment (EIA) and/or an Appropriate Assessment (AA) under the Habitats Directive.

Under Section 177E of the Act, any person seeking substitute consent for unauthorised development must submit an application to An Bord Pleanála (the Board). That application must be accompanied by a remedial environmental impact assessment report (rEIAR), a remedial Natura impact statement (rNIS), or both, depending on whether the development is likely to have had significant effects on the environment and/or on European sites protected under the Habitats Directive. The rNIS is the core document through which the applicant retrospectively assesses the effects of the development on Natura 2000 sites (Special Areas of Conservation and Special Protection Areas) and demonstrates how such effects have been or will be remedied or mitigated.

Section 177E also sets out procedural requirements related to the submission and validation of the rNIS. Where the Board considers that a submitted rNIS does not comply with the content requirements of the Act, it must notify the applicant and direct that further information be submitted to bring the statement into compliance. If the applicant fails to provide the required information within the specified or extended period, the application for substitute consent is deemed to be withdrawn. Once a valid application, including the rNIS, is accepted, the Board transmits a copy of the application and accompanying documentation to the relevant planning authority, which is required to place it on its public planning register.

The content requirements for a Remedial Natura Impact Statement are prescribed in Section 177G of the Act. Under subsection (1)(a), an rNIS must contain a statement of the significant effects on the relevant European sites that have already occurred, are currently occurring, or can reasonably be expected to occur as a result of the development. This retrospective element distinguishes the rNIS from a standard Natura Impact Statement, as it specifically considers impacts that have already taken place due to unauthorised works.

Subsection (1)(b) of Section 177G requires that the rNIS include details of any remedial or mitigation measures undertaken or proposed by the applicant to remedy or mitigate those effects. It must also specify the time period within which any proposed measures will be implemented. In addition, under subsection (1)(c), the statement must contain any further information that may be prescribed under regulations made pursuant to Section 177N of the Act.

Section 177G(2) provides that a remedial Natura Impact Statement may also include, where applicable, a statement of imperative reasons of overriding public interest (IROPI) and details of any compensatory measures proposed by the applicant to ensure the overall coherence of the Natura 2000 network. These provisions allow the applicant to address situations in which adverse effects on site integrity cannot be fully avoided or mitigated, but where the development may nonetheless proceed in accordance with Article 6(4) of the Habitats Directive. IROPI does not apply to this application.

Together, Sections 177E and 177G establish the statutory framework for the preparation and assessment of a remedial Natura impact statement. The rNIS serves both as a corrective and evaluative document, enabling the Board to carry out an appropriate assessment of the unauthorised development in line with the requirements of the Habitats Directive and to determine whether substitute consent may lawfully be granted. In essence, the remedial Natura Impact Statement is the mechanism through which compliance with European environmental law is retrospectively achieved in cases where development has occurred without prior appropriate assessment.

1.3 Methodology

Articles 6(3) and (4) of the Habitats Directive outline the testing mechanisms which underpin the decision-making process for the consideration of plans and projects that could significantly impact the ecological integrity of a Natura 2000 site. The Department of the Environment Heritage and Local Government guidelines (DOELHG, 2009) indicates the European Commission's methodological guidance (EC 2000, 2002, 2006, 2018), outlining the approach of how plans and projects should be carried out within Natura 2000 sites. This is categorised as a 4- stage process. Whether a further stage is required is dependent on the outcome of each successive stage.

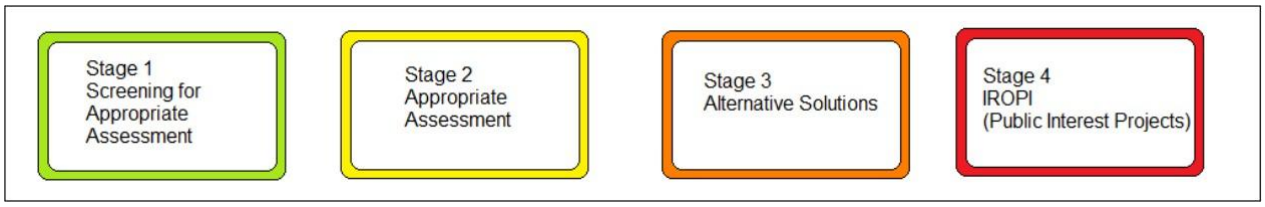


Figure 1: Stages of Appropriate Assessment

1.4 Screening

This examines the likely effects of a project or plan on a Natura 2000 site, and determines whether it can be objectively concluded that these effects will not be significant. There are four steps involved in this process which are outlined as follows;

1. It must be considered whether the project or plan is inherently connected to or necessary to the management of the site.

2. A description of the project or plan, in conjunction with other projects or plans which, together, could possibly have a significant effect on the integrity of a Natura 2000 site.

3. Identification of the possible ecological effects on the Natura 2000 site.

4. An assessment of the significance of the potential effects.

1.5 Scope

The objective of the screening exercise is to determine the possible implications of the project, alone or in conjunction with other plans or projects on the conservation objectives and ecological integrity of Natura 2000 sites. This report has been prepared in accordance with the European Commission guidance document Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001) and the Department of the Environment's Guidance on the Appropriate Assessment of Plans and Projects in Ireland (Amended 2010)

Following the preliminary screening, if effects are deemed significant or indeterminate on the conservation objectives and the general integrity of Natura 2000 sites, further assessment under Article 6(3) is necessary and it is recommended that a Natura Impact Statement (NIS) be completed.

In the case of works already completed, a remedial NIS (rNIS) is completed retrospectively.

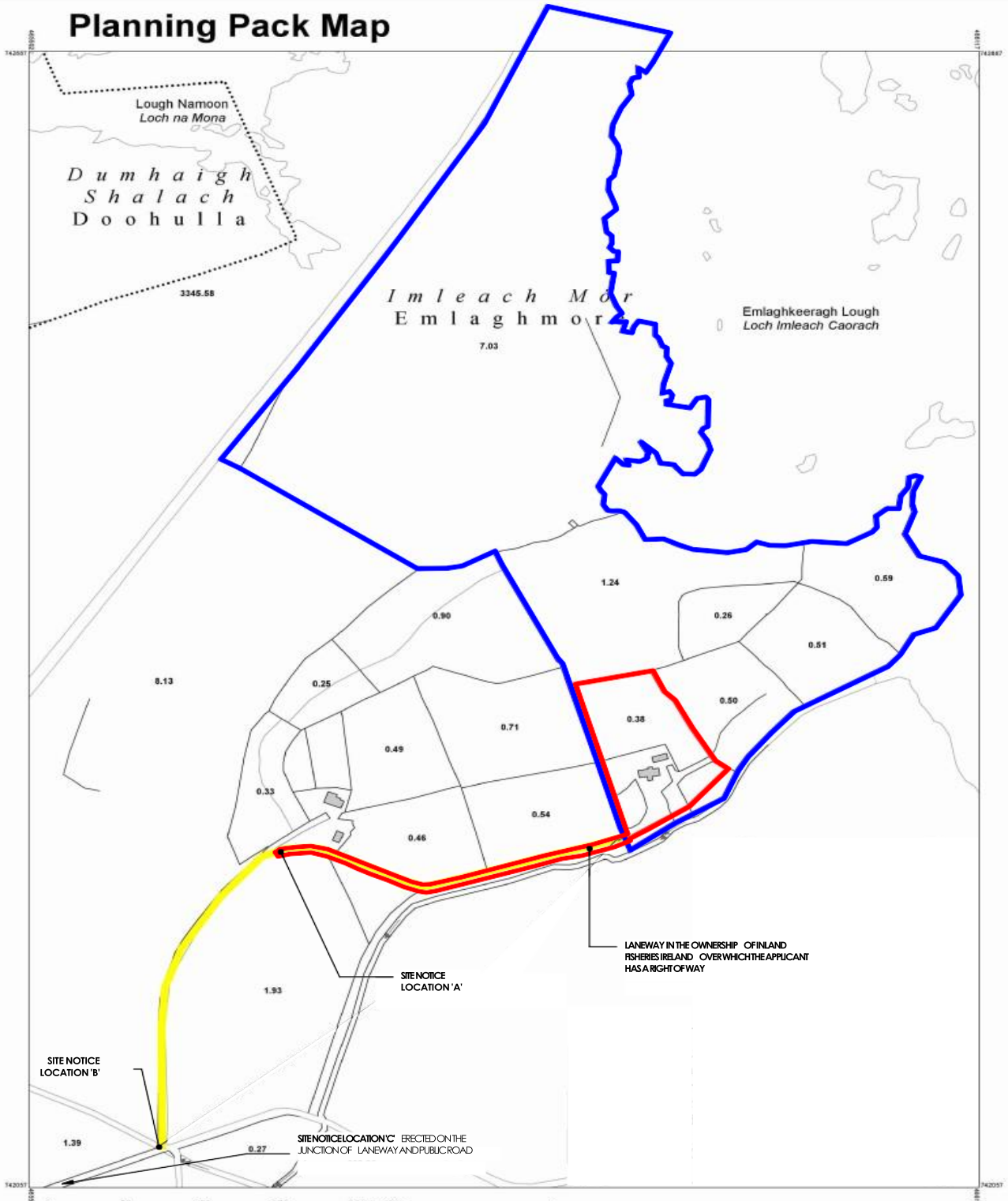
2.0 Description of development

The development description is the first step to properly identifying possible impacts. This should include all features of the project so that each can be individually considered in respect of the conservation objectives of nearby Natura 2000 sites.

2.1 Site Location

The proposed development site is located in Emlaghmore, Ballyconeelly, Co. Galway See below. The site is accessed via a shared private road, approx. 8km south of Clifden Town. The proposed development site consists of an existing semi-ruinous dwelling and stone shed on an area of land which measures approximately 0.72 hectares in area. The site is surrounded in agricultural land, with few other residential properties in the area.

Planning Pack Map



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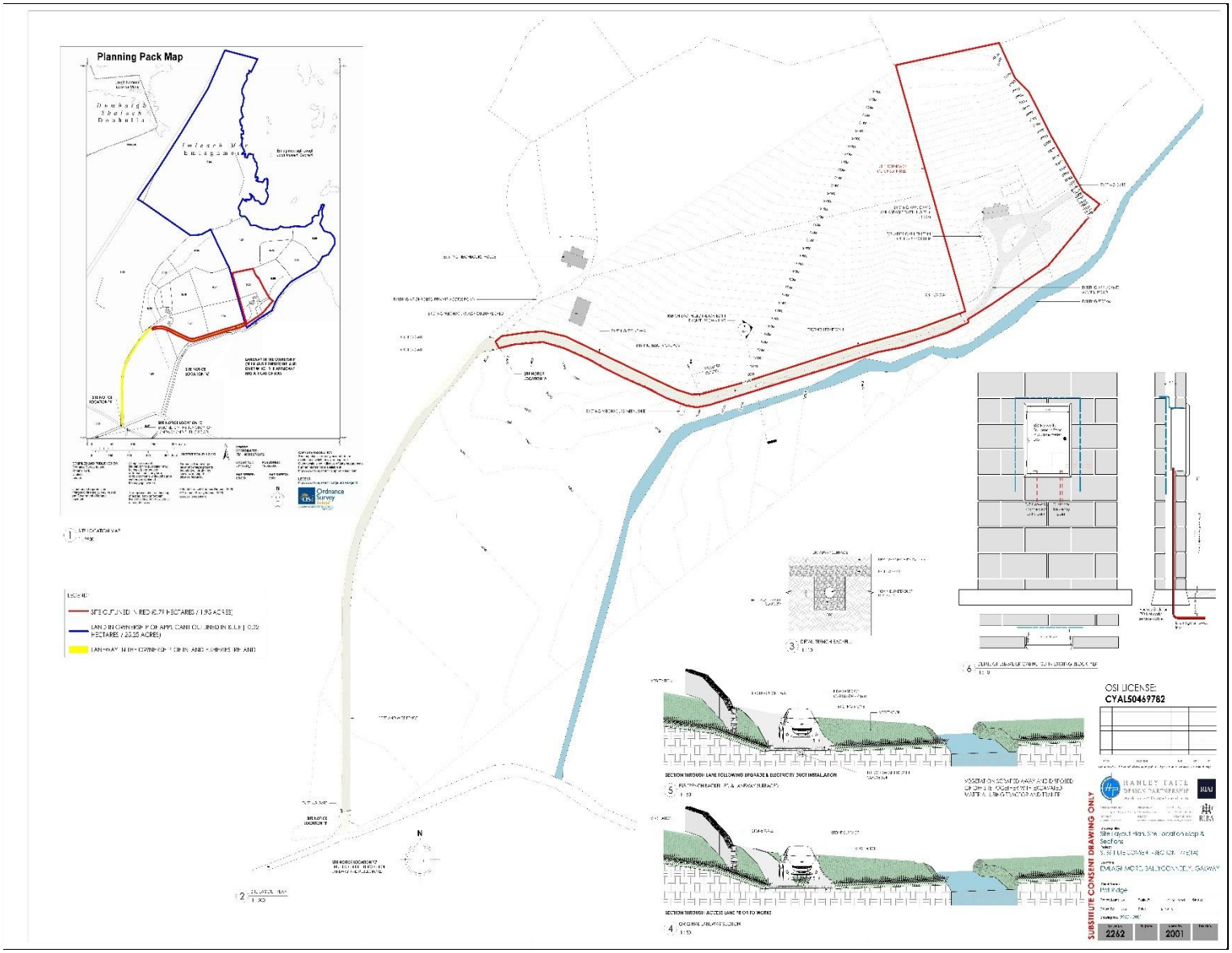
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2.2 Project description

The proposed project is to retain:

1. The reinstatement of a collapsed roof and making good of an existing chimney,
2. The unblocking of windows and replacement of timber framed windows on the front elevation,
3. CCTV cameras were erected on the building for a temporary period.

The approximate total area within the site boundaries is 0.72 Ha. The site is currently walled off from the surrounding landscape and is used periodically for low intensity grazing of cattle and sheep. The project is small in terms of size and scale.

Works carried out at the subject site to date have included:

1. Removal of collapsed tin roof
2. Construction of new wooden roof beam supports
3. Securing existing walls with concrete on top
4. Instatement of new tin roof
5. Unblocking of existing window opes (previously infilled with stone) and installation of timber framed windows
6. Rebuilding of existing chimneys to above roof level
7. Installation of electricity connections and temporary CCTV cameras.

More detailed description of the project is described below.

Roof

In the 1990's an old partially collapsed corrugated metal roof was removed by hand, placed in a trailer and taken off site by tractor and trailer for appropriate disposal. Some roof timbers were retained for reuse. A small load of gravel was delivered to site by tractor and trailer. A small quantity of concrete was mixed on site on the existing floors within the building. This concrete was then lifted by hand using buckets to the top of the external walls to allow for consolidation of the walls where necessary. New roof timbers and metal sheeting were delivered to the site by tractor and trailer. The new roof timbers and sheeting were fitted by hand from loaders. No waste was generated by these works.

Picture of the roof

Windows

In 2020 3 existing windows, which had dry loose stone, were reopened in exactly the same configuration as they originally were. This was done by removing the stone by hand. No alterations took place to the original reveals, sills or lintels.

The stones were retained on site for reuse in chimney repairs. Temporary timber framed windows, fabricated off site were fitted to ensure that the building could continue to be weathered but allow natural light in.

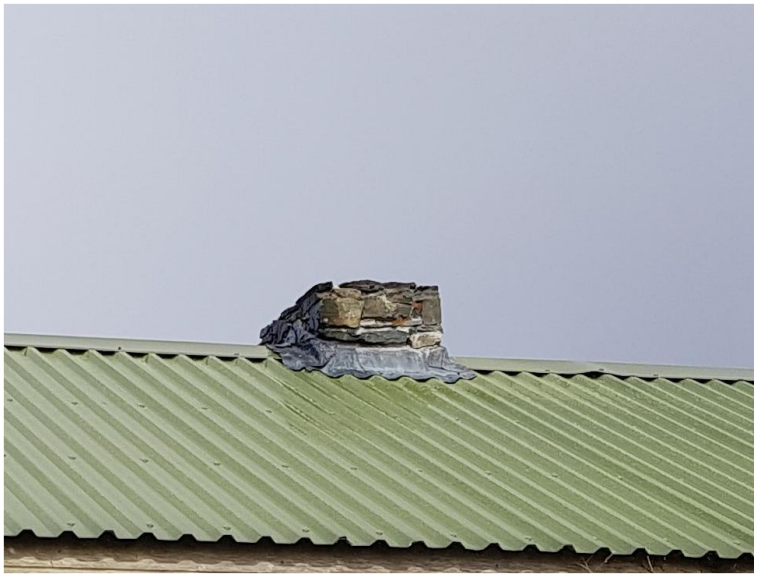
This work was undertaken to allow natural light into the building so that the building could be used as a place of refuge when visiting the farm as no other form of shelter exists on the land. The building could also be used to store items such as rain gear and wellington boots.

Original windows with stone removed

Window blocked with dry stone

Chimney

When carrying out the works to the windows an existing chimney breast was determined to be structurally unstable. Works took place to consolidate the chimney breast and make it good using the stone from the window and lime mortar which was mixed on the floor of the building internally using bagged sand and lime. There was no waste generated by these works.



Chimney repair

Access laneway resurfacing, including laying of electricity supply duct

Vegetation was scraped from the lane surface using an excavator and the material taken from the site using a tractor and trailer. Following this a trench was excavated along a portion of the access lane leading to the property, excavated material was again removed from the site by tractor and trailer, an electricity supply duct was placed in the trench, and the trench was backfilled with clause 804 type stone. Clause 804 stone is a high-quality crushed aggregate that meets the TII Specification for Roadworks and IS EN (Irish Standard 13242 &SR21) for unbound granular fill. On completion of the trench works a thin layer of clause 804 was laid on the laneway. The intention was to facilitate an electricity connection to the building to allow for the placement of a CCTV system following criminal damage, that was reported to An Garda Siochana, having taken place on the site. Also resurfacing the laneway was to make the farm more accessible to cars.

Laneway before surfacing.

Laneway with after surfacing

Construction of a pillar to house the ESB meter cabinet

A small foundation measuring no more than 300mm deep x 300mm wide x 1200mm long was excavated. Premixed concrete was brought to the site in a car trailer and poured into the foundation. A concrete block pillar was constructed, again with premixed mortar brought to the site from another construction site a few kilometers away. The ESB cabinet was fitted into the pillar and a duct laid between the pillar and the building. The intention was to facilitate an electricity connection to the building to allow for the placement of a CCTV system following criminal damage, that was reported to An Garda Siochana, having taken place on the site.

ESB meter Cabinet

Placement of cctv cameras and antenna on the building

At the cottage, 4 no. CCTV cameras and an antenna were mechanically fixed to the façade of the building and wired internally and externally without any intervention in the building fabric. The number of cameras has subsequently reduced to 3. The intention to allow for remote passive surveillance of the property following criminal damage, that was reported to An Garda Siochana, having taken place on the site.

CCTV Installation

CCTV Installation

CCTV installation.

All work at the cottage was completed at least 40m from the Connemara Bogs Complex SPA and 45m from the Connemara Bog Complex SAC.

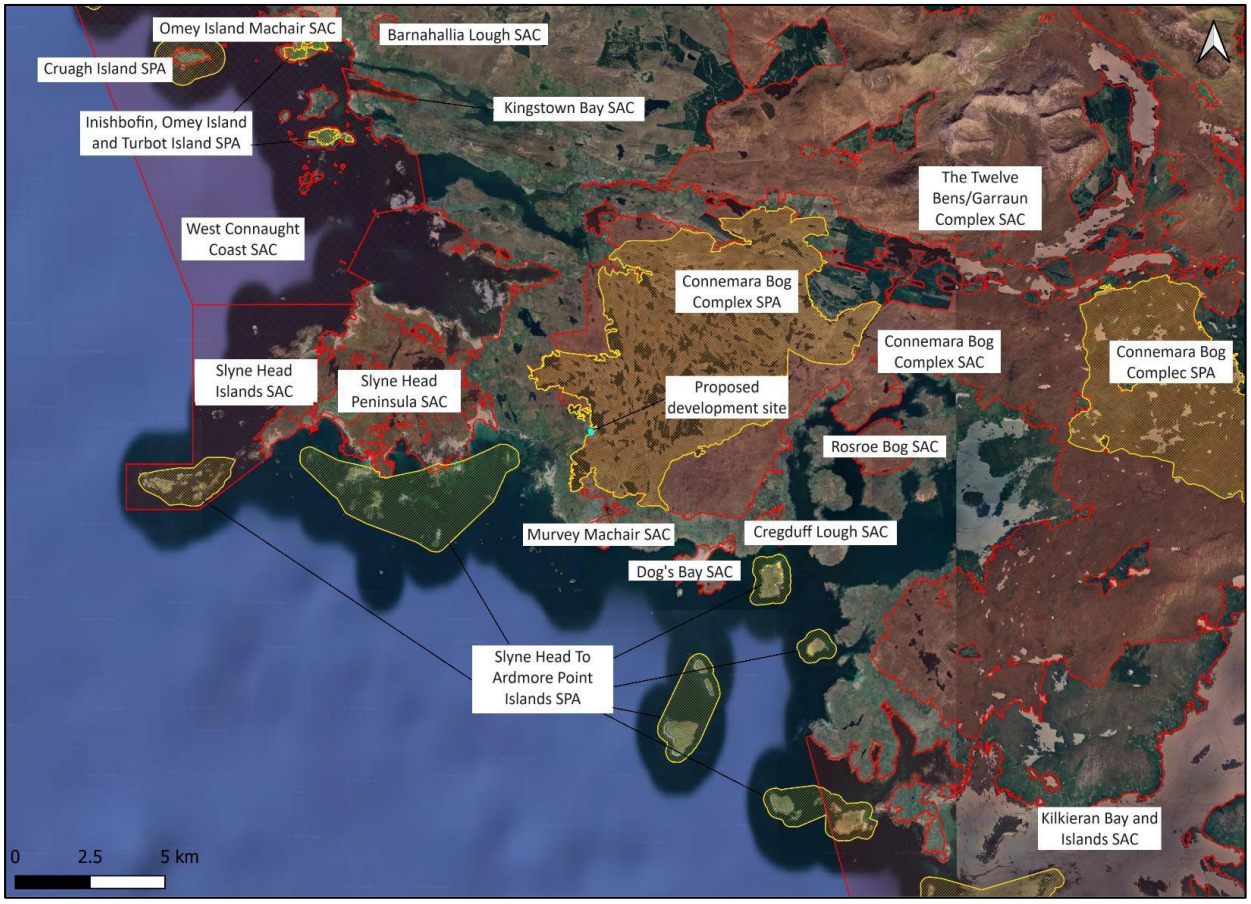
Map 1: Location of the proposed development site (blue outline), (Source: Bing maps)

2.3 Relationship to designated sites

As per NPWS guidelines, Natura 2000 sites within a 15km radius of the proposed project were initially posed for consideration. The table below lists Natura 2000 sites within the 15km screening radius.

Natura 2000 Site	Code	Distance
Inishbofin, Omey Island and Turbot Island SPA	004231	12.34km
West Connaught Coast SAC	002998	8.79km
Barnahallia Lough SAC	002118	14.53km
Twelve Bens/Garraun Complex SAC	002130	8.98km
Slyne Head Peninsula SAC	002074	3.15km
Kingstown Bay SAC	002265	12.27km
Connemara Bog Complex SAC	002034	0.01km
Connemara Bog Comples SPA	004181	0.00km
Slyne Head To Ardmore Point Island SPA	004159	2.52km
High Island, Inishshark and Davillaun SPA	004144	12.34km
Dog's Bay SAC	001257	4.95km
Cregduff Lough SAC	001251	6.1km
Rosroe Bog SAC	000324	8.57km

Table 1: Natura 2000 sites within 15km of the proposed development site



Map 3: Location of development site in relation to local Natura 2000 sites

2.4 Zone of Influence

The "Zone of Influence" can be defined as the difference between the spatial footprint of a project or development and the extent of the developments' effects on the surrounding environment, in relation to habitat and species populations.
When assessing effects on wildlife habitats and populations we must consider light, noise and hydrological connections. National guidance (DEHLG 2009) states that "Although a distance of 15km is currently recommended in the case of plans…[however] for projects, the distance could be much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis" Thus the Zone of Influence requires to be defined for each project.

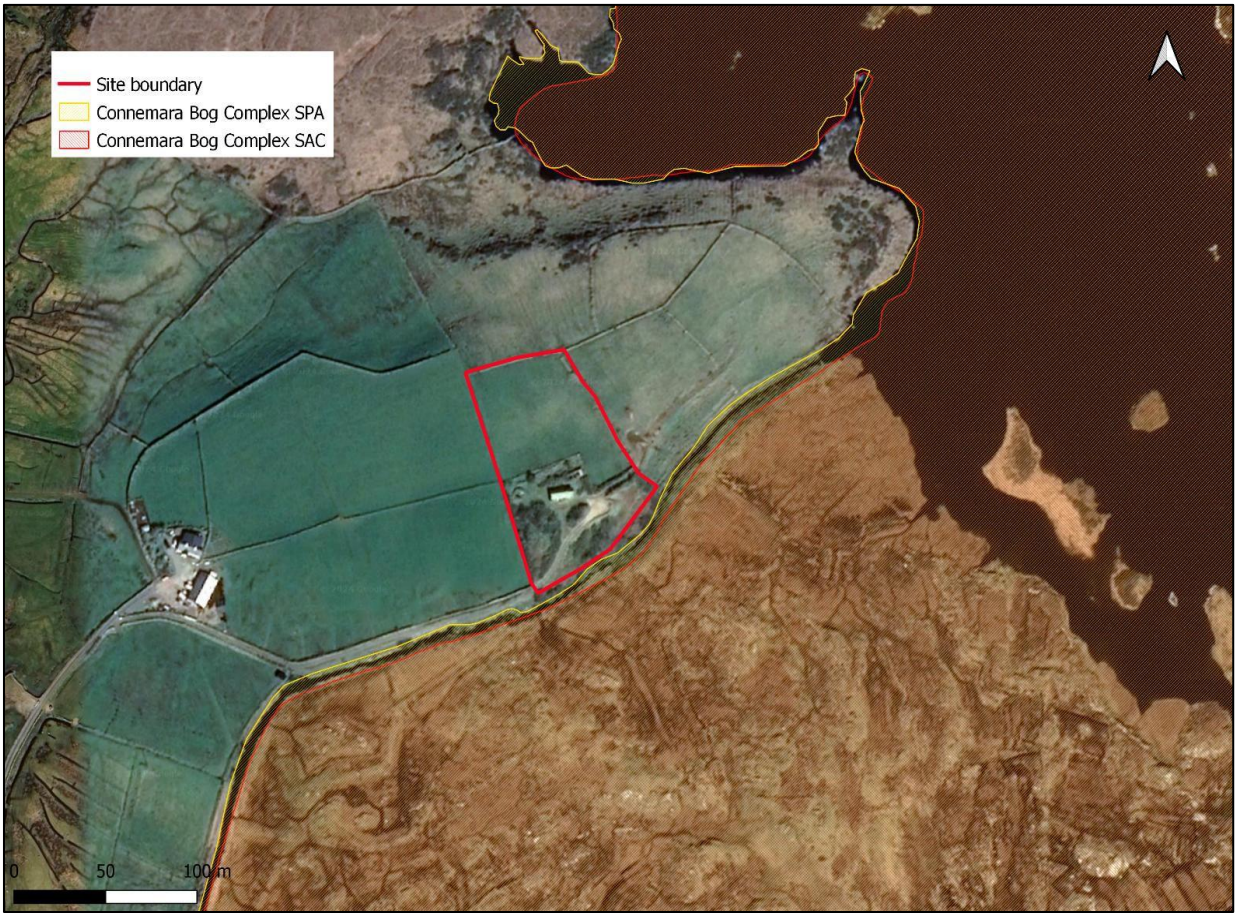
When defining the zone of influence, it is important to consider the following:

- Location of Natura 2000 sites
- The area extent to which downstream habitats could be polluted

- To what degree could noise and light impact ecological receptors

Due to the size and scale of the proposed project, in conjunction with its proximity and relevant connectivity to ecological receptors, the only sites which are recorded as being within the likely Zone of Impact are the Connemara Bog Complex SAC [site code: 002034] and the Connemara Bog Complex SPA [site code:004181].

No source-pathway-receptor chains were identified for the other sites within 15km. Thus, no further investigation is required.



Map 4: Location of proposed development site in relation to Natura 2000 sites being considered further

3.0 Description of the Natura 2000 Sites

The Habitats Directive states "Any plan or project not directly connected or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implication for the site in view of the sites conservation objectives …the competent national authorities shall agree to the plan or project only having ascertained that it will not adversely affect the integrity of the site…" The conservation objectives form the basis of the Appropriate Assessment as it is against these objectives that the assessment is made.

The primary objective of the Habitats Directive is the upkeep of biodiversity through the conservation, maintenance and when appropriate, restoration of natural habitats and associated flora and fauna populations which have been deemed of community interest. Each Natura 2000 site has Conservation Objectives which have been set out on a case-by-case basis by competent authority for the management of SACs and SPAs, the National Parks and Wildlife Service (NPWS). European and national legislations enforce the proper maintenance of habitats and species in the Natura 2000 network in light of the conservation objectives, to ensure favourable conservation status at a national level.

3.1 Connemara Bog Complex SAC

Table 2: Conservation Objectives for Connemara Bog Complex SAC (Site Code 002034)

Code	Habitats/Species	Restore/Maintain
1150	Costal lagoons	To maintain the favourable conservation condition
1170	Reefs	To maintain the favourable conservation condition
3110	Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)	To maintain the favourable conservation condition
3130	Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*	To maintain the favourable conservation condition
3160	Natural dystrophic lakes and ponds	To maintain the favourable conservation condition
3260	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho- Batrachion* vegetation	To maintain the favourable conservation condition

4010		Northern Atlantic wet heaths with *Erica tetralix*	To restore the favourable conservation condition
4030		European dry heaths	To restore the favourable conservation condition
6410		Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)	To maintain the favourable conservation condition
7130		Blanket bogs (* if active bog)	To restore the favourable conservation condition
7140		Transition mires and quaking bogs	To restore the favourable conservation condition
7150		Depressions on peat substrates of the *Rhynchosporion*	To restore the favourable conservation condition
7230		Alkaline fens	To restore the favourable conservation condition

91A0		Old sessile oak woods with Ilex and Blechnum in the British Isles	To maintain the favourable conservation condition
1065		Marsh Fritillary (*Euphydryas aurinia*)	To maintain the favourable conservation condition
1106		Salmon (*Salmo salar*)	To restore the favourable conservation condition
1355		Otter (*Lutra lutra*)	To maintain the favourable conservation condition
1833		Slender Naiad (*Najas flexilis*)	To maintain the favourable conservation condition

3.2 Connemara Bog Complex SPA

Table 3: Conservation Objectives for Connemara Bog Complex SPA (Site Code 004181)

Code	Species	Restore/Maintain
A017	Cormorant (*Phalacrocorax carbo*)	To restore the favourable conservation condition
A098	Merlin (*Falco columbarius*)	To restore the favourable conservation condition
A140	Golden Plover (*Pluvialis apricaria*)	To restore the favourable conservation condition
A182	Common Gull (*Larus canus*)	To maintain the favourable conservation condition

In the event that significant negative effects on the conservation objectives of the Natura 2000 site are anticipated, the conservation condition of qualifying interests should be taken into account, and it should be noted that to “restore” favourable conservation condition is more difficult than to “maintain”.

4.0 Receiving Environment

When assessing the receiving environment, it is important to consider which classifications of habitats are present on the proposed site, as well as hydrology in the surrounding area and the presence of invasive species.

4.1 Habitats

A walkover survey was carried out to classify the habitats present on site. The habitats recorded are classified in accordance with ‘A Guide to Habitats in Ireland’ (Fossitt, 2000), which designates habitat classifications based on the plant species present and management history of the area.

Map 4: Habitat map of proposed development site

The area surrounding the existing dwelling and shed is categorised as Improved Agricultural Grassland GA1. This area, along with the northern field, is periodically grazed by sheep. Species observed in this area include Orchard grass (*Dactylis glomerata*), White clover (*Trifolium repens*), Red clover (*Trifolium pratense*), Red fescue (*Festuca rubra*), Yorkshire fog (*Holcus lanatus*), Meadow-grass (*Poa trivialis*), Garden sorrel (*Rumex acetosa*), Ribwort plantain (*Plantago lanceolata*), Daisy (*Bellis perennis*), Creeping thistle (Cirsium arvense), Dandelion (*Taraxacum officinale*), Germander speedwell (*Veronica chamaedrys*), Silverweed (*Argentina anserina*), Cleavers (Galium aparine), Herb Robert (*Geranium robertianum*), Nettle (*Urtica dioica*), Yellow flag Iris (*Iris pseudacorus*), Creeping buttercup (*Ranunculus repens*), Lesser trefoil (*Trifolium dubium*), Common rush (*Juncus effusus*), Autumn hawkbit (*Scorzoneroides autumnalis*), Bull thistle (*Cirsium vulgare*).

This habitat (Improved Agricultural Grassland GA1) was also recorded in the field north of the dwelling and has lower species diversity. Species include Crested dogstail (*Cynocurus cristatus*), Garden sorrel (*Rumex acestosa*), Red clover (*Trifolium pratense*), Daisy (*Pellis perennis*), Sweet vernal grass (*Anthoxanthum odoratum*), Common rush (*Juncus effusus*), Silverweed (*Argentina anserina*). Some cows (no. 5-10) currently graze this area.

The majority of the scrub habitat found within the proposed development site can be described as Ornamental/ Non-native Scrub WS3, planted during previous inhabitation of the site. Fuchsia (*Fuchsia magellanica*) is the primary occupier of this area. Other species include Plum (*Prunus domestica*), Wild privet (Ligustrum vulgare) Blackthorn (*Prunus spinosa*), Ivy (*Hedera helix*), Montbretia (*Crocosmia X crocosmiiflora)*.

The scrub which adjoins the river in the most southern part of the site includes more native elements such as Willow (*Salix cinerea*), Ash (*Sorbus aucuparia*), Blackberry (*Rubus ulmifolius*), Brackenfern (*Pteridium aquilinum*). Non-native elements include Fuchsia (*Fuchsia magellanica*) and Sycamore (*Acer pseudoplatanus*). This area can be described as native Scrub WS1, forming mosaics with Ornamental/Non-native scrub WS3.

The semi ruinous dwelling is recorded as Buildings and Artificial Surfaces BL3 and the shed to the rear of the house is regarded as Stonewalls and Other stonework BL1 because of the less intact nature of the building.

The road leading up to the dwelling is categorised as Exposed Sand, Gravel or Till ED1. Here there are small patches of plants such as Yorkshire fog (Holcus lanatus),

Common birds-foot trefoil (*Lotus corniculatus*), and Daisy (*Bellis perennis*), Dandelion (*Taraxacum officinalis*).

No drainage ditches exist on site but an Eroding/lowland River FW1 (River Callow EPA code: IE_WE_31C250230) exists just beyond the southern site boundaries and flows in a south- westerly direction from Maumeen Lough with lies approx. 0.46 km from the proposed development site, to the shore (approx. 1.3km) and is within the Connemara Bog Complex SAC.

The primary land use in the area is agricultural with few residential developments.

4.2 Invasive Species

No invasive species listed in the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations (S.I. 477 of 2011) were documented during the survey conducted in June. (E.g. Rhododendron (*Rhododendrum ponticum*), Japanese knotweed (*Fallopia japonica*).)

Non-native ornamentals recorded during the site survey include Montbretia (*Montbretia crocosmia*). This is a low-risk invasive species according to the National Biodiversity Data Centre (NBDC).

4.3 Hydrology

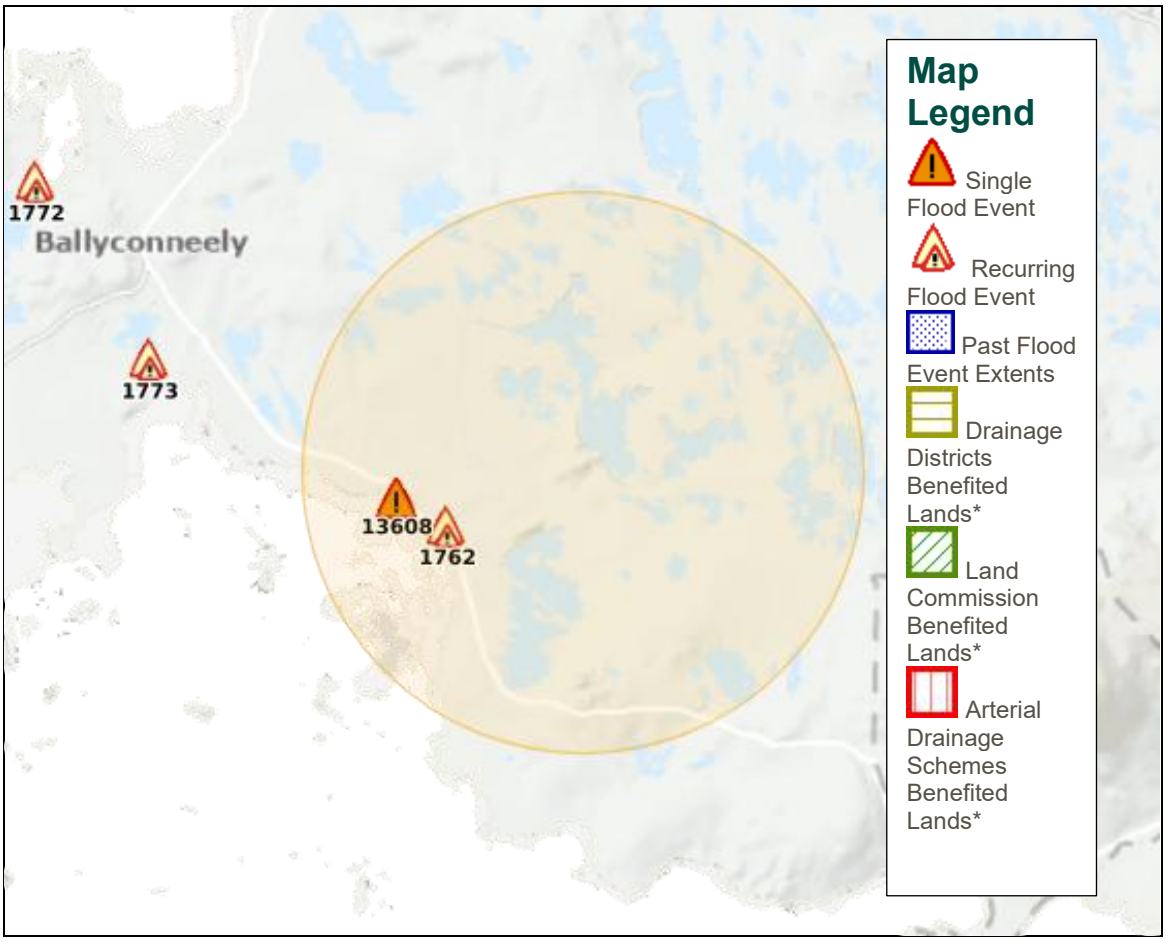
Hydrology assumes a critical role in the ecological evaluation of a site. Water pollution is one of the main factors responsible for indirect impacts on Natura 2000 sites through the migration of pollution (sediments and hydrocarbons) downstream where they come into contact with conservation objectives.

Water quality information and individual waterbody status for all river districts and coastal waters in Ireland can be accessed through the online EPA map viewer. This map viewer was consulted on 10th April 2025.

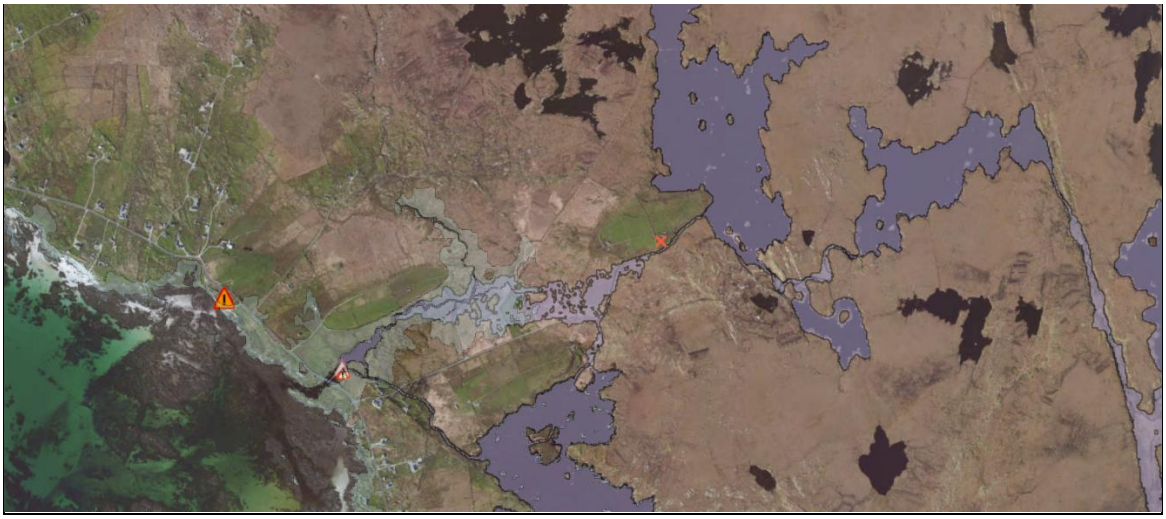
The proposed development site is located in the hydrological sub-catchment Recess_SC_020. The WFD coastal water bodies risk assessed the coastal waters (IE_WE_010_0000) Aran Islands, Galway Bay Connemara "Review". The overall status of this waterbody is described as 'high' ecological status in the WFD monitoring program (2016-2021).

The site is located in the Spiddal groundwater catchment and has been assigned a status of 'not at risk' in the Water Framework Directive (WFD) ground waterbody approved risk. The groundwater status of this catchment has been assigned as 'good' status in the WFD groundwater monitoring program (2016-2021).

Map 6: River flow direction (Source: EPA Maps)



Map 7. Past Flood Event Local Area Summary Report (OPW). Map shows single flood and recurring flood events West of the application site.



Map 8. Localised flooding extents recorded with the OPW and Flood Maps. Application site at red cross.

Historic flood extents were investigated to see whether the site lies in an area prone to flooding. Analysis of the available data indicates that flooding does not occur and has not occurred on the site. See maps 7 and 8. Map 7 shows where there is recurring flooding downstream of the application site to the Southwest on the R341 coastal road. Map 8 displays general flood extents in the area. In a worst-case scenario, the Geological Survey Ireland Groundwater Flooding - Low Probability data for the area was analysed. The Groundwater Flooding Low Probability map shows the expected flood extent of groundwater flooding in limestone regions for annual exceedance probabilities (AEP's) of 0.1%, which correspond with a return period of every 1000 years. The map was created using groundwater levels measured in the field, satellite images and hydrological models. The map is a vector dataset. Vector data portray the world using points, lines, and polygons (area). The floods are

shown as polygons. Each polygon has info on the data source, and the area of the flood. The flood extents were calculated using remote sensing data and hydrological modelling techniques with various precision levels. As such, it should be used with caution. This data showed that no such flooding scenario is modeled for the application site and that no such flooding events have been modeled in the area. Topographical maps were analysed to search for any possibility of flooding outside of the current data. The application site is situated on sloped higher ground where any extreme unforeseen flooding would drain away from the site to South and East and not occur on site.

4.4 Fauna

4.4.1 Birds

4.4.1.1 *Connemara Bog Complex SPA*

SCI species for this site include:

- A017 Cormorant (*Phalacrocorax carbo*)
- A098 Merlin (*Falco columbarius*)
- A140 Golden Plover (*Pluvialis apricaria*)
- A182 Common Gull (*Larus canus*)

The Connemara Bog Complex SPA borders the proposed site to the south and is therefore within the core foraging range of 4km for the Golden Plover (*Pluvialis apricaria*), 5km for the Merlin (*Falco columbarius*), 50km for the Common Gull (*Larus canus*) and 35km for the Cormorant (*Phalacrocorax carbo*).

[A017] Cormorant (*Phalacrocorax carbo*)

This species forages in freshwater and marine environments. The closest breeding colony to the development site is located approximately 6km northeast of the proposed development site.

[A098] Merlin (*Falco columbarius*)

This species breeds on lake islands and forage over moors and heathland, peat bogs and semi-natural grasslands. The nearest island that has the potential to support breeding merlin is located 200m from the site on Emlaghkeeragh Lough.

[A140] Golden Plover (*Pluvialis apricaria*)

This species are ground nesting birds that breed in open habitats such as blanket bog and other peatland habitats. The closest suitable nesting habitat is located 20m south of the site. Golden Plover forage at ground-level in a range of habitats including grasslands, lakeshores and other wetlands.

[A182] Common Gull (*Larus canus*)

This species breeds on lake islands and forage in terrestrial, freshwater and marine habitats in the broader area. The nearest islands which have the potential to support breeding gulls are located 200m from the proposed site in Emlaghkeeragh Lough.

Although a range of breeding and foraging habitats exist in close proximity to the proposed site, the proposed works, as described in Section 2, are not found to have resulted in disturbance levels which would significantly impact the above SCI species. The scrub areas which are to be retained within the site serve as a biological barrier between the construction works and the SPA and serve as natural noise mitigation. Furthermore, the works already completed which are confined to: 1) The reinstatement of a collapsed roof and making good of an existing chimney, 2) The unblocking of windows opes and replacement of timber framed windows on the front elevation, 3) CCTV cameras on the building to be in place for a temporary period; are considered

to be minimal in nature. The duration of the work already completed is estimated to be about 2 weeks, collectively, at most. Potential impacts are deemed to be short-term and insignificant.

No Cormorant (*Phalacrocorax carbo*), Golden Plover (*Pluvialis apricaria*), Merlin (*Falco columbarius*) or Common Gull (*Lanus canus*) were observed using the habitats within or adjacent to the site. However, with the precautionary principle in mind, mitigation for controlling noise levels during the future construction period is proposed in Section 6.

All bird species recorded during both the site visits are recorded in Table 3. Nine bird species were observed in total, two of which are of Amber conservation status and seven of which are green-listed and are regarded as common Irish bird species. No Annex I species were observed to be utilising habitats within the site during the site visit.

It is the author's opinion that the potential impacts or negative effects on the SPA and its SCI's arising from the developments described in this report are imperceptible in the short and long term.

Table 3: Bird species observed on site

Species	Observed	Date	Conservation Status
Robin (*Erithacus rubecula*)	On site	07/06/24, 12/03/25	Green listed
Great Tit (*Parus major*)	On site	12/03/25	Green listed
Blue Tit (*Parus parus*)	On site	12/03/25	Green listed
Blackbird (*Turdus merula*)	On site	07/06/24, 12/03/25	Green listed
Eurasian skylark (*Alauda arvensis*)	Flying over	07/06/24	Amber listed
Hooded crow (*Corvus cornix*)	Flying over	07/06/24, 12/03/25	Green listed
Dunnock (*Prunella modularis*)	On site	07/06/24	Green listed
Eurasian wren (*Troglodytes troglodytes*)	On site	07/06/24, 12/03/25	Green listed
Eurasian Linnet (*Linaria cannabina*)	On site	07/06/24, 12/03/25	Amber listed
Magpie (*Pica pica*)	Flying over	12/03/25	Green listed

4.4.2 Non-volant mammals

A walkover survey was carried out to assess the presence of a range of protected animal species, as well as their associated habitats. The results of the walkover survey concluded that no significant faunal species or habitat was recorded.

An otter survey was undertaken with the goal of assessing habitats on site for the suitability of otter. The watercourse which adjoins the site is identified as potential foraging/commuting habitat for otter. The site, including the adjoining watercourse, was searched for evidence of otter including holts, couches, spraints or tracks. No signs of otter were observed. However, it is presumed that otter may use the watercourse for commuting/foraging purposes. With this in mind, and considering the riparian vegetation which exists as a natural buffer area adjoining the stream and was unaffected by the works, in conjunction with the fact that works were minimal in nature and carried out within daylight hours, it is assessed that there is no identified potential for the described alterations to have resulted in significant impacts on otter.

A badger (Meles meles) survey was performed during the field survey which was in compliance with TII/NRA (2009) guidelines (Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes). The site was searched for setts, latrines, shuffle holes, and badger paths and prints.
The survey concluded that no evidence of badgers was recorded within the proposed development site.

4.4.3 Other species

The site was searched for evidence of species which are protected under the Irish Wildlife Act 1976-2018, including Irish hare, Irish stoat and pygmy shrew. These species are widespread in Ireland and are likely to be found in the broader area. However, no signs of species were located within the site boundaries.

5.0 Impact prediction and assessment

Following a description of the proposed project and of the nearby Natura 2000 sites, an assessment for possible impacts can be carried out. This is in compliance with the “Assessment of plans and projects significantly affecting Natura 2000 sites- Methodology guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission, 2002”.

5.1 Proximity and relevance of Qualifying Interests of Connemara Bog Complex SAC (site code: 002934) to the proposed development site

Code	Habitats	Proximity
1150	Costal lagoons	6.35km north. No hydrological pathways. No impact predicted.
1170	Reefs	6.54km north. No hydrological pathways. No impact predicted.
3110	Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)	2.51m north at Lough Fadda. No hydrological links. No impact predicted.
3130	Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*	0.46km south at Maumeen Lough. The river which borders the site to the south is identified as a hydrological connection to the lake. Complete source-pathway-receptor link identified. Remedial mitigations will be required to ensure long term protection from silt or chemical imbalance as a result of the gravel track.
3160	Natural dystrophic lakes and ponds	1.2km southeast. No hydrological pathways. No impact predicted.
3260	Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation	Not mapped by NPWS. The river to the south of the site has the potential to qualify for this habitat. Complete source- pathway-receptor link identified. Remedial mitigations will be required to ensure long term protection from silt or chemical imbalance as a result of the gravel track.
4010	Northern Atlantic wet heaths with Erica tetralix	Not mapped by NPWS. Potentially within 30m south of the proposed development site. However, a river exists separating the potential habitat from the proposed construction area. No impact predicted.
4030	European dry heaths	Not mapped by NPWS. Potentially within 30m south of the proposed development site. However, a river exists separating the potential habitat from the proposed construction area. No impact predicted.
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)	Not mapped by NPWS. Potentially within 30m south of the proposed development site. However, a river exists separating the potential habitat from the proposed construction area. No impact predicted.

7130	Blanket bogs (* if active bog)	Not mapped by NPWS. Potentially within 50m of the proposed development site to the south. However, a river exists separating the potential habitat from the proposed construction area. No direct or indirect impacts are predicted.
7140	Transition mires and quaking bogs	Not mapped by NPWS. Potentially within 50m to the south. However, a river exists separating the potential habitat from the proposed construction area. No impact predicted.
7150	Depressions on peat substrates of the Rhynchosporion	Not mapped by NPWS. Potentially within 50m to the south. However, a river exists separating the potential habitat from the proposed construction area. No direct or indirect impacts are predicted to result from the proposed project.
7230	Alkaline fens	Not mapped by NPWS. Potentially within 50m to the south. However, a river exists separating the potential habitat from the proposed construction area. No direct or indirect impacts are predicted to result from the proposed project.

91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	10.83km northeast (NSNW: 1602). Removed from development site. No impact predicted.

1065	Marsh Fritillary (*Euphydryas aurinia*)	Not mapped by NPSW. This species requires the presence of Devil's bit Scabious (*Succissa pratensis*) which is recorded in close proximity to the existing cottage. However, the habitat itself is not prime conditioning for the species. Colonies can be found in a variety of locations including dry calcareous grassland, wet heath, degraded bogs, transition mires and fens of up to 300m (Regan et al. 2010). *Succissa pratensis* is common in Connemara and in relatively low abundance on site. This is not considered significant.
1106	Salmon (*Salmo salar*)	Not mapped by NPWS. Potentially present in oligotrophic lake Maumeen Lough which lies 0.46km south of the proposed development. Potential hydrological connectivity. Complete source-pathway-receptor link identified. Remedial mitigations will be required to ensure long term protection from silt or chemical imbalance as a result of the gravel track.
1355	Otter (*Lutra lutra*)	The river to the south of the site has the potential to be used for otters for foraging and commuting purposes. Complete source-pathway-receptor link identified. Remedial mitigations will be required to ensure long term protection from silt or chemical imbalance as a result of the gravel track.
1833	Slender Naiad (*Najas flexilis*)	0.46km south at Maumeen Lough. The river which borders the site to the south is identified as a hydrological connection to the lake. Mitigation is required. Complete source-pathway-receptor link identified. Remedial mitigations will be required to ensure long term protection from silt or chemical imbalance as a result of the gravel track.

The identified pathways for effects on Qualifying Interests of this site are as follows: Deterioration of water quality/ habitat quality during the construction and operational phase of the proposed development, resulting in pollution to surface waters, adversely impacting the aquatic influenced QI species within the SAC, in the absence of mitigation.

5.2 Impacts on Habitats

The habitats for which the proposed development has the potential to impact are:

[3130] Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*+-

[3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation

The site was assessed as being hydrologically connected to the above QI habitats. There were no cements used near the vicinity of the nearby river. If construction materials such as cement and gravel were used within the vicinity of the river, potential for point and diffuse adverse changes in water quality would have been identified. Adverse changes arise from silt-laden run-off, the use of cement and hydrocarbons and the use of other potentially polluting chemicals or materials during construction. Such adverse changes could result in changes to the habitat and water quality downstream of the polluting event(s) which could indirectly result in a change of integrity on at least a temporary basis. This was not the case with the application site at Emlaghmore.

The works already carried out on the site which includes A) The reinstatement of a collapsed roof and making good of an existing chimney, B) The unblocking of windows and replacement of timber framed windows on the front elevation, C) CCTV cameras on the building to be in place for a temporary period; are considered to be of small scale, with an estimated collective duration of a 2 weeks. Those aspects will have negligible effects on the integrity of the nearby SAC and its QI's in the short and long term. The works required a small amount of concrete and gravel to be transported to the site via tractor and trailer. Concrete mixing was performed within the existing structure, at least 45m from the SAC. No evidence of pollution was recorded in the adjoining watercourse, or in the riparian scrub area between the cottage and the watercourse, which also assists with surface water attenuation towards the stream. The author suggests that to ensure the safety of the SAC and its QI's, in particular [3130] Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*+- [3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion vegetation*remedial mitigations must be put in place to ensure long term protection. No change of use has occurred at the site since the work was carried out. The site is still partly used for low-intensity agriculture.

5.3 Impacts on Species

The habitats for which the proposed development has the potential to impact are: [1106] Salmon

(*Salmo salar*)

[1355] Otter (*Lutra lutra*)

[1833] Slender Naiad (*Najas flexilis*)

The site was assessed as being hydrologically connected to the above QI species. If construction materials such as cement and gravel were used within the vicinity of the river, there is the potential for point and diffuse adverse changes in water quality. Adverse changes arise from silt-laden run-off, the use of cement and hydrocarbons and the use of other potentially polluting chemicals or materials during construction. Such adverse changes could result in changes to the habitat and water quality downstream of the polluting event(s) which could indirectly result in a change of integrity of the above species on at least a temporary basis. It must be noted that no

such materials were used in the construction of the laneway as above.

The works already carried out, as assessed above, are not predicted to have resulted in a deterioration of water quality at the subject site. Additionally, the nature, duration and timing of the works are not predicted to have resulted in significant disturbance to otter.

No change of use has occurred at the site since the work was carried out. The site is still partly used for low-intensity agriculture. Furthermore, it is deduced that the project has not significantly effected the integrity of the [1106] or [1355] or [1833] QI species with respect to the Connemara Bog Complex SAC either during construction or operation. Considering this, a precautionary approach must be observed whereby remedial mitigation measures are put in place to ensure the integrity of the SAC and its QI's. The current level of disturbance to any species is likely to be low due to the size and scale of the gravel track, but to ensure long-term conservation and adherence to the conservation objectives of the site, some mitigation measures will be laid out in section 6.

5.4 Cumulative Impacts

Cumulative impacts are alterations to the environment arising from the combined impact of past, present and future anthropogenic activities and natural processes. When examining cumulative impacts, it is important to look at activities causing disturbance or pollution to the same Natura 2000 sites. Pressures on the ecosystem can be listed and evaluated on the basis of pressure positive, negative or neutral on the designated sites that are under consideration for the proposed project.

Plans/Activities in the Area	Relevance/Description
Galway County Development plan 2022-2028	National Heritage/Biodiversity NHB1- Natural Heritage and Biodiversity of Designated Sites, Habitats and Species. Protect and where possible enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts) and extend to any additions or alterations to sites that may occur during the lifetime of this plan. Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI 94 of 1999). Support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural Heritage Areas, proposed Natural Heritage Areas, Ramsar Sites, Nature Reserves, Wild Fowl Sanctuaries (and other designated sites including any

	future designations) and the promotion of the development of a green/ ecological network. NHB2- European Sites and Appropriate Assessment. To implement Article 6 of the Habitats Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011. All such projects and plans will also be required to comply with statutory Environmental Impact Assessment requirements where relevant. NHB 3 – Protection of European Sites. No plans, programs, or projects etc. giving rise to significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programs, etc. or projects.* NHB4 - Ecological Appraisal of Biodiversity. Ensure, where appropriate, the protection and conservation of areas, sites, species and ecological/networks of biodiversity value outside designated sites. Where appropriate require an ecological appraisal, for development not directly connected with or necessary to the management of European Sites, or a proposed European Site and which are likely to have significant effects on that site either individually or cumulatively NHB5 - Ecological Connectivity and Corridors Support the protection and enhancement of biodiversity and

	ecological connectivity in non-designated sites, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, stonewalls, geological and geo-morphological systems, other landscape features and associated wildlife areas where these form part of the ecological network and/or may be considered as ecological corridors in the context of Article 10 of the Habitats Directive. NHB9 - Protection of Bats and Bats Habitats. Seek to protect bats and their roosts, their feeding areas, flight paths and commuting routes. Ensure that development proposals in areas which are potentially important for bats, including areas of woodland, linear features such as hedgerows, stonewalls, watercourses and associated riparian vegetation which may provide migratory/foraging uses shall be subject to suitable assessment for potential impacts on bats. This will include an assessment of the cumulative loss of habitat or the impact on bat populations and activity in the area and may include a specific bat survey. Assessments shall be carried out by a suitably qualified professional and where development is likely to result in significant adverse effects on bat populations or activity in the area, development will be prohibited or require mitigation and/or compensatory measures, as appropriate. The impact of lighting on bats and their roosts and the lighting up of objects of cultural heritage must be adequately assessed in relation to new developments and the upgrading of existing lighting systems. Water Objectives WR 1- Water Resources. Protect the water resources in the plan area, including rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as well as surface waters, aquatic and wetland

Northern & Western Regional Assembly Regional Spatial and Economic Strategy 2020 2032 (RSES)	habitats and freshwater and water dependant species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the River Basin District Management Plan 2018 – 2021 and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same) and also have regard to the Freshwater Pearl Mussel Sub-Basin Management Plans. WR 2 - River Basin Management Plans. It is a policy objective of the Planning Authority to implement the programme of measures developed by the River Basin District Projects under the Water Framework Directive in relation to: Surface and groundwater interaction, Dangerous substances, Hydro-morphology, Forestry, On site wastewater treatment systems, Municipal and industrial discharges, Urban pressures, Abstractions. RPO 5.4 Encourage the prioritisation of Site-Specific Conservation Objectives (SSCO) for all sites of Conservation Value, designated in EU Directive (i.e., SACs, SPAs) to integrate with the development objectives of this Strategy. RPO 5.5 Ensure efficient and sustainable use of all our natural resources, including inland waterways, peatlands, and forests in a manner which ensures a healthy society a clean environment and there is no net contribution to biodiversity loss arising from development supported in this strategy. Conserve and protect designated areas and natural heritage areas. Conserve and protect European sites and their integrity. RPO 5.7 Ensure that all plans, projects, and activities requiring consent arising from the RSES are subject to the relevant environmental assessment requirements including SEA, EIA, and AA as appropriate.

Planning applications in the area	A search was conducted on the Galway County Council website of local planning applications in the last 5 years which gave the following results: The development will consist of: a) the restoration of existing single storey cottage including elevation modifications (existing floor area 55 sqm), b) the provision of single storey extensions to side and rear (157 sqm). The development will include a new wastewater treatment system and new vehicular entrance from the existing private lane, along with associated site works. The application is accompanied by a Natura Impact Statement (NIS). Gross floor space of proposed works:157 sqm. (Planning Ref: 212242). refurbishment and upgrading works [including (where necessary) replacement of existing poles along the existing overhead electricity line, minor ground works e.g. replacement or installation of stays, and maintenance or improvement works]; and all associated ancillary works including the provision of temporary accessways. Replacement poles will be constructed at, or immediately adjacent to, the existing structures that they will replace. Replacement poles will have a maximum height of 12m abo (Planning Ref: 2360507).
Housing developments	A dispersed housing pattern can be observed in the local area.
Agriculture	Agricultural practices in the local area primarily consist of low-intensity cattle, sheep and pony grazing and associated activities such as herbicide and pesticide use.
Tourism	The site is in close proximity to the Wild Atlantic Way. Tourism has the potential to put pressure on the catchment due to increased water usage.
Peat cutting	Turf cutting within 500m south of the proposed development site incurring degradation, fragmentation and loss of protected bog habitat.

Table 6: Cumulative assessment

5.5 Cumulative assessment conclusion

Agricultural practices in the area are not excessive and have remained low intensity due to the low-quality agricultural attributes of much of the land. No significant negative impact is anticipated. The dispersed housing developments and holiday homes in the area, and associated water and peat use are the largest threat the ecological integrity of the SAC.

The described works have not made the cottage habitable, and as such, the works have not contributed to peat cutting the Connemara Bog Complex SAC for the purposes of heating the dwelling house.

The proposed project has been assessed, both individually and in conjunction with the combining effects of other plans and projects in the area. It is assessed that the works have not resulted in any significant residual effects on any ecological receptors or Natura 2000 sites. Therefore, there is no potential for the proposal to contribute to any potential cumulative impacts, when considered in combination with other developments in the locality. No cumulative impact is identified.

6.0 Mitigation

It is the opinion of the author that remedial mitigations should be implemented on the laneway where Clause 804 gravel has been used for resurfacing. Mitigation measures are necessary for the protection of the nearby SAC and its QI habitats, species and their conservation objectives. These measures will allow for the continuation and support of the Galway County Development Plans (2022-2028) objectives, specifically NHB1, NHB2, NHB3, WR1 and WR2.

The laneway must not be disturbed further by trying to lay yet another surface material or by altering it by tracked vehicles or otherwise to remove any material at the laneway. This could lead to unnecessary deposition or transition particulate matter entering the nearby watercourse and SAC.

Establish vegetation buffer strips on both sides of the laneway where water flows toward watercourses. Widths depending on local topography (e.g. minimum 5-10 m, more if steep slopes). Plant with native species appropriate to the SAC (bog species, riparian shrubs, trees). Ensure riparian shade, cover, bank stability.

Establish baseline to monitor downstream/upstream water chemistry & turbidity/SS/TSS monthly for first year, then quarterly for years 2-5. Key parameters: suspended solids, turbidity, pH, conductivity, major salts, heavy metals. This should be done with the appointment of an Ecological Clerk of Works (ECoW). This will form the basis of a phased monitoring plan. This should be carried out annually for three years and reports sent to Inland Fisheries Ireland. Once baseline established, re-visiting after third year results in re-assessing whether continued monitoring should take place.

Monitor substrate quality in salmon spawning areas (percent fines, substrate permeability) annually for first 3 years.

Monitor *Najas flexilis* populations: abundance, extent, health (light penetration, water chemistry) annually for three years. Avail of a suitably qualified and experienced ECoW for all the monitoring and reporting. The ECoW will be responsible for liaising with the landowner and the relevant authorities.

Check drainage elements (channels, culverts, infiltration zones) after heavy rain; ensure that erosion or blockages are repaired.

Monitor water table in peatland / bog area adjacent to the laneway (if impacted) to ensure that

compaction or diversion is not lowering water table which could harm bog habitat.

As part of an adaptive management strategy, employ additional sediment traps, regrading or re-surfacing sections, replacing problematic material, diverting flows, installing retention ponds or swales, replanting buffer zones if needed after monitoring indicates degradation.

Evaluate whether sections of the laneway might need to be removed or rerouted if impacts are persistent.

Internal review after 1, 3, 5 years to assess whether conservation objectives for the SAC are being met in the impacted catchments.

Update the NIS or associated management / monitoring plan if required in light of any new findings.

7.0 Conclusion

Following an assessment of the potential effects of the project on Natura 2000 sites, including an evaluation of all relevant source–pathway–receptor linkages for qualifying habitats and species, it is concluded that the completed works, as described in Section 2, are not likely to have resulted in any significant adverse effects on the integrity of any Natura 2000 site, either alone or in combination with other plans or projects.

The site is outside the boundaries of any Natura 2000 site therefore there is no potential for direct impacts. The potential for indirect impacts on QI and SCI species of the Connemara Bog Complex SAC and the Connemara Bog Complex SPA has been assessed and due to the nature, size and scale of the completed works, impacts have been ruled out for all elements of the work apart from the laneway. The laneway surface may well be safe, but the precautionary principle dictates that we must apply mitigation to ensure the conservation objectives of the nearby Connemara Bog Complex SAC and its habitats and species are protected in accordance with Article 6(3) of the Habitats Directive 92/43/EEC (Assessment of Plans and Projects significantly affecting Natura 2000 sites).

The works did not result in loss of any significant habitat for any Annex I or BoCCI red-listed bird species. The works did not have the potential to significantly interfere with the conservation status of any SCI of the Connemara Bog Complex SPA, or the broader Natura 2000 network.

Based on the findings of this report no observable significant effects on the conservation objectives of the nearby SAC and SPA have occurred as a result of this development. The building in question is currently uninhabited. Its existing condition and associated land use do not give rise to any direct or indirect pathways for impact on nearby Natura 2000 sites. In the event that the structure was to become occupied in the future, such a change in use would not be expected to give rise to any long-term or significant adverse effects on the qualifying interests, conservation objectives, or overall integrity of the adjacent SAC or SPA. This conclusion is based on the absence of any hydrological, hydrogeological, or ecological linkages between the building and the designated sites, and on the limited scale and nature of potential future occupation. It is important to note that the laneway was resurfaced to facilitate continued access for agricultural activities. The route previously consisted of an established gravel track that had deteriorated over time and required maintenance. The resurfacing works have therefore served to stabilise the existing access route, reducing the potential for ongoing erosion and surface degradation. In this context, the improved surface is likely to decrease, rather than increase, the risk of sediment or particulate matter being mobilised and entering the adjacent SAC or SPA. The initial work involved replacing a storm damaged roof in the 1990's purely to protect the building. The recent work (opening windows, repairing chimney, ESB connection and CCTV) was to allow for the building to be used as a place of refuge in bad weather while

visiting the farm, for storing items such as rain gear and wellies and to provide for surveillance following damage to property on the farm. Future use will be the same unless planning permission is obtained for other improvements.

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Site Synopses

Site Name: Connemara Bog Complex SAC Site Code:

002034

The Connemara Bog Complex SAC is a large site encompassing the majority of the south Connemara lowlands in Co. Galway. The site is bounded to the north by the Galway–Clifden road and stretches as far east as the Moycullen–Spiddal road. The site supports a wide range of habitats, including extensive tracts of western blanket bog, which form the core interest, as well as areas of heath, fen, woodlands, lakes, rivers and coastal habitats.

The site is underlain predominantly by various Galway granites, with small areas along the northern boundary of Lakes Marble, schist and gneiss. The Roundstone Bog area has a diverse bedrock geology composed mainly of the basic intrusive rock, gabbro. An area of rock, possibly Cambrian in age, called the Delaney Dome Formation occurs in the north-west of this area. Gabbro also occurs in the Kilkieran peninsula and near Cashel. The whole area was glaciated in the last Ice Age which scoured the lowlands of Connemara.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[1150] Coastal Lagoons*

[1170] Reefs

[3110] Oligotrophic Waters containing very few minerals [3130]

Oligotrophic to Mesotrophic Standing Waters [3160] Dystrophic

Lakes

[3260] Floating River Vegetation [4010] Wet

Heath

[4030] Dry Heath

[6410] Molinia Meadows [7130]

Blanket Bogs (Active)* [7140]

Transition Mires

[7150] Rhynchosporion Vegetation

[7230] Alkaline Fens

[91A0] Old Oak Woodlands

[1065] Marsh Fritillary (Euphydryas aurinia) [1106]

Atlantic Salmon (Salmo salar) [1355] Otter (Lutra

lutra)

[1833] Slender Naiad (Najas flexilis)

The Connemara Bog Complex is characterized by areas of deep peat surrounded by rocky granite outcrops covered by heath vegetation. However, the main habitat within this site is lowland Atlantic blanket bog, as most of the area is covered by blanket peat greater than 1 m in depth. A mosaic of different communities exists in association with the blanket bog, including hummock/hollow systems, inter-connecting bog pools, flushes, transition and quaking mires, freshwater marshes, lakeshore, lake and river systems. The key plant species of lowland blanket bog are Black Bog-rush (*Schoenus nigricans*), Purple Moor-grass (*Molinia caerulea*), Cross-leaved Heath (*Erica tetralix*), Deergrass (*Scirpus cespitosus*), Common Cottongrass (*Eriophorum angustifolium*), Bog Asphodel (*Narthecium ossifragum*), White Beak-sedge (*Rhynchospora alba*) and bog moss species (*Sphagnum spp*.). Rhynchosporion vegetation is found on the blanket bog by lake and pool margins, in wet hollows and in quaking areas. Species such as White Beak-sedge, Common Cottongrass, Bogbean (*Menyanthes trifoliata*), sundews (*Drosera spp*.) and bog mosses are common. Areas of wet heath are widespread throughout this site, where blanket peat becomes shallower. There is a limited amount of dry heath, with species such as Western Gorse (*Ulex gallii),* St. Dabeoc's Heath (*Daboecia cantabrica*) and Bell Heather (*Erica cinerea*) recorded.

Both oligotrophic and dystrophic lakes are found within Connemara Bog Complex SAC, with the greatest concentration in the west of the site. The latter type are generally smaller, have a mainly peaty bottom and there is generally an abrupt transition from blanket bog to open water. Oligotrophic lakes in this site typically have shallow margins, with a mixed rocky/peaty bottom. Typical plant species of the lake edges include Water Lobelia (*Lobelia dortmanna*), Pipewort (*Eriocaulon aquaticum*), Shoreweed (*Littorella uniflora*), Many-stalked Spike-rush (*Eleocharis multicaulis*) and Bulbous Rush (*Juncus bulbosus*). The rare species Slender Naiad (*Najas flexilis*) and Pillwort (*Pilularia globulifera*) have both been recorded from

oligotrophic lakes at this site. Species commonly encountered in dystrophic lakes/pools include the bog mosses *Sphagnum auriculatum* var. *auriculatum* and *S. cuspidatum*, along with White Beak-sedge, Lesser Bladderwort (*Utricularia minor*), Pipewort and Bogbean.

The main river systems within the site are the Owenmore (Ballynahinch) river, the Glashanasmearany and Derrygauna rivers (to the south of Lough Bofin), the Cashla river (which flows out of Glenicmurrin Lough), the Glengawbeg river (which connects Lough Agraffard and Lettercraffoe Lough) and the Owenboliska river and its tributaries (north of Spiddal). Vegetation associated with some of these waterways includes Alternate Water-milfoil (*Myriophyllum alternifolium*), Bulbous Rush, Floating Club-rush (*Scirpus fluitans),* water-lilies, Great Fen-sedge (*Cladium mariscus*), Bog Pondweed (Potamogeton polygonifolius), Broad-leaved Pondweed (P. natans), Water Horsetail (Equisetum fluviatile) and the liverwort *Scapania undulata*.

Within this site, areas of transition mire occur mainly along the margins of lakes and bog streams. The surface of such areas is typically quaking and there is often evidence of base-enrichment. Typical plant species include Bog-sedge (*Carex limosa*), Slender Sedge (*C. lasiocarpa*), Bog Pondweed, Bogbean, Blunt-flowered Rush (*Juncus subnodulosus*), Common Cottongrass, Purple Moor-grass and White Beak-sedge. Locally there may be some Great Fen-sedge or Black Bog-rush. The rare and legally protected species Slender Cottongrass (Eriophorum gracile) occurs in this habitat. Moss cover is variable.

Areas of Molinia meadow at this site contain species such as Purple Moor-grass, Meadow Thistle (*Cirsium dissectum*), Sharp-flowered Rush (*Juncus acutiflorus*) and Tormentil (*Potentilla erecta).* The community occurs on wet acid soils.

There are a number of areas of old oak woodland, but the woodland at Shannawoneen, north of Spiddal, is the best known. This woodland lies in the valley of the Owenboliska river. It provides a good example of a Sessile Oak (*Quercus petraea*) dominated canopy woodland, although there is also a lot of Downy Birch (*Betula pubescens*). Other examples of this habitat at the site are found at Ballynahinch, Glendollagh, Derrywaking Lake, as well as on some of the lake islands. The invasive alien shrub Rhododendron (Rhododendron ponticum) is found in some areas of woodland.

There are some limited, but nonetheless well developed, examples of alkaline fen at this site. These fens are often species-rich, and support species not typically found in association with blanket bog areas - e.g. Dioecious Sedge (*C. dioica*),

Black Bog-rush, Broad-leaved Cottongrass (*E. latifolium*), the moss *Campylium stellatum* and Lesser Clubmoss (*Selaginella selaginoides*).

Four main lagoons occur within this site: Lough Ahalia, Doire Bhanbh, Lough Aconeera and Salt Lake. All four are regarded as saline lake lagoons and they range in size from 1–90 ha. The smallest (Doire Bhanbh) is quite shallow and surrounded by Common Reed (*Phragmites australis*) swamp, while the three larger lagoons are relatively deep and are surrounded by moorland and exposed granite. Salt Lake contains a serpulid worm reef. Lough Ahalia consists of a series of basins, and these are deep in places, with an unusual salinity structure. The lowest lake is relatively shallow (0–4 m) and brackish throughout, while the middle lake is deep (13 m) and permanently stratified, with water below 3 m depth measuring 14 ppt. The flora and fauna of this lagoon system are extremely diverse, with many communities found. This, along with Lough Aconeera, is the only known site in Ireland for the Red Data Book stonewort *Chara balthica*. Another Red Data Book plant, Lamprothamnium papulosum, also occurs, as well as *Chara aspera* and *C. virgata*. An unusual form of Fennel Pondweed (*Potamogeton pectinatus*) occurs in high salinity water. There are a number of other notable records of plant and animal from this lagoon. Lough Aconeera is less remarkable in terms of flora and fauna, but nonetheless supports a sizeable number of lagoonal specialists.

Nine species protected under the Flora (Protection) Order, 2015, occur within this site: Forked Spleenwort (*Asplenium septentrionale*), Parsley Fern (*Cryptogramma crispa*), Bog Hair-grass (*Deschampsia setacea*), Slender Cottongrass, Bog Orchid (*Hammarbya paludosa*), Slender Naiad, Heath Cudweed (*Omalotheca sylvatica*), Pillwort and Pale Dog-violet (*Viola lactea*). Rare and threatened species such as Dorset Heath (*Erica ciliaris*), Mackay's Heath (*Erica mackaiana*) and Green- winged Orchid (*Orchis morio*) also occur within this site. All of the above species are listed in the Irish Red Data Book, and Slender Naiad is listed on Annex II of the E.U. Habitats Directive.

The Annex II butterfly species, Marsh Fritillary, is known to occur at this site.

Atlantic Salmon, a species listed under Annex II of the E.U. Habitats Directive, occurs in many of the rivers within the site. The Cashla and Ballynahinch systems are good examples of western acidic spate rivers which support the species.
Good spawning and nursery grounds for the species occur in these systems. Arctic Char occurs in a number of lakes within the site: Ballynahinch Lake, Glenicmurrin Lough and Lough Shindilla. The species has also been reported from Lough Oorid and Lough Glendollagh in the past, but has not been recorded from

these lakes in recent years. Arctic Char is listed as threatened in the Irish Red Data Book.

Otter have been recorded as occurring in the Connemara Bog Complex. Irish Hare, another mammal listed in the Red Data Book, occurs on the site. Common Frog breeds on the site.

The site is of national importance for wintering populations of Greenland White- fronted Goose. Small flocks (up to 30) are found on Roundstone Bog and also use the bogs between Recess and Maam Cross. In April 1989 a synchronised ground and air census of the Connemara bogs located 7 flocks of Greenland White- fronted Goose, totalling 134–137 birds. In 1991/93 wintering numbers were considered to be approximately 60 birds.

There is an internationally important breeding area for Cormorants at Lough Scannive with 218 pairs present in 1985 in a colony which is known to have existed pre-1968. Golden Plover, a species listed on Annex I of the E.U. Birds Directive, nests at up to four locations in the site, with a maximum of two pairs noted at any one location. Another Annex I species known to be present in the site is Merlin. Lough Naskanniva is an important inland breeding site for Common Terns (up to 60 pairs in 1977 and 1992) and Choughs, both of which are also Annex I species under the E.U. Birds Directive.

The main damaging operations and threats in the Connemara Bog Complex are peat cutting, over-grazing and afforestation. Extensive peat extraction using 'Difco' machines has become common in the region in recent years, and cutting by excavator and hopper is also increasing. The hand-cutting of peat is less threatening as it is usually on a much smaller scale, but nonetheless it should be controlled within the site. Over-grazing and poaching by sheep and cattle is a widespread problem within the site, with erosion of peat ensuing. The above operations are the most extensive but other threats and potentially damaging operations include land drainage and reclamation, fertilization, quarrying and dumping.

In summary, the Connemara Bog Complex encompasses a large area of relatively undamaged lowland Atlantic blanket bog of high conservation significance both in Ireland and at a European level. The site also contains good examples of at least 13 other habitats listed on Annex I of the E.U. Habitats Directive, as well as four species listed in Annex II. Further, the site supports a number of threatened and protected plant species. The site is internationally important for Cormorant and nationally important for Greenland White-fronted Goose, and contains nesting sites for Golden Plover

Site Name: Connemara Bog Complex SPA Site Code:

004181

The Connemara Bog Complex SPA is a large site encompassing much of the south Connemara lowlands of Co. Galway. The site consists of three separate areas - north of Roundstone, south of Recess and north-west of Spiddal. It is underlain predominantly by a variety of igneous and metamorphic rocks including granite, schist, gneiss and gabbro. The whole area was glaciated during the last Ice Age which scoured the lowlands of Connemara.

The Connemara Bog Complex SPA is characterized by areas of deep peat surrounded by heath-covered rocky outcrops. The deeper peat areas are often bordered by river systems and the many oligotrophic lakes that occur, resulting in an intricate mosaic of various peatland/wetland habitats and vegetation communities; these include Atlantic blanket bog with hummock/hollow systems, inter-connecting pools, Atlantic blanket bog pools, flushes, transition and quaking mires, as well as freshwater marshes, lakeshore, lake and river systems.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Cormorant, Merlin, Golden Plover and Common Gull.

Lough Scannive, located within Roundstone Bog, supports a nationally important breeding population of Cormorant (160 breeding pairs in 2001). Other breeding birds using the site include Merlin and Golden Plover. A partial survey in 2009 recorded 8 pairs of Merlin at various locations throughout the site; 15 breeding locations for this species were recorded at the site in an earlier survey undertaken in 1985/86. A survey of upland birds in 2004 recorded 27 pairs of Golden Plover within the site. The numerous lakes scattered throughout the site provide suitable breeding locations for Common Gull (45 pairs in 2000); a survey in 2010 recorded 40 pairs of this species at the site.

The site is also utilised by a wintering population of Greenland White-fronted Goose; small flocks of up to 30 birds have been recorded at various locations within the site.

Connemara Bog Complex SPA is of high ornithological importance, in particular for its nationally important breeding populations of Cormorant, Merlin, Golden Plover and Common Gull. It is of note that three of the regularly occurring species, Greenland White-fronted Goose, Merlin and Golden Plover, are listed on Annex I of the E.U. Birds Directive.