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2025

Remedial Natura Impact Statement
(rNIS) – Appeal to An Coimisiún
Pleanála, Ardagh Cottage, Ballinaboy,
Clifden, Co. Galway



Remedial Natura Impact Statement (rNIS) – Appeal to An Coimisiún Pleanála, Ardagh Cottage, Ballinaboy, Clifden, Co. Galway.

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1 Introduction

1.1 Requirement for an Appropriate Assessment

ORS was appointed by Geraldine McGuinness to provide a remedial Natura Impact statement (rNIS) in support of an application for substitute consent for the refurbished Ardagh Cottage, Ballinaboy, Clifden, Co. Galway.

The nature of the development consists of the retention of a refurbished cottage and waste water treatment system installation which are noted in the planning description as: (i) front porch, (ii) revised elevations, (iii) first floor extensions, (iv) upgrading wastewater treatment system and (v) ancillary site works and landscaping which include for the upgrading of the existing vehicular entrance and driveway to the cottage, (vi) a domestic pedestrian bridge over the existing stream and (vii) steel container for storage purposes. Gross floor space of work to be retained: 31.36 sqm.

The purpose of this Appropriate Assessment is to determine the appropriateness of the proposed project, in the context of the conservation status of the site or sites within the determined Zone of Influence. In Ireland, an Appropriate Assessment takes the form of a Natura Impact Statement (NIS), which is a statement of the likely impacts of the plan or project on a Natura 2000 site. The rNIS examines the direct and indirect impacts that the plan or project might have on its own or in combination with other plans or projects on one or more Natura 2000 sites in view of the sites' conservation objectives.

1.2 Legislative Background

This Remedial Natura Impact Statement (rNIS) is prepared to fulfil the requirements of Section 177G of the Planning and Development Act 2000, as amended.

Section 177G outlines the mandatory content for an rNIS:

177G.—(1) *A remedial Natura impact statement shall contain the following:*

(a) a statement of the significant effects, if any, on the relevant European site which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out;

(b) details of—

(i) any appropriate remedial or mitigation measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy or mitigate any significant effects on the environment or on the European site;

(ii) the period of time within which any such proposed remedial or mitigation measures shall be carried out by or on behalf of the applicant;

(c) such information as may be prescribed under section 177N;

(d) and may have appended to it, where relevant, and where the applicant may wish to rely upon same:



(i) a statement of imperative reasons of overriding public interest;

(ii) any compensatory measures being proposed by the applicant.

As this is an application for retention of completed works, the assessment focuses on past, current, and future operational effects in the context of the site's conservation objectives.

1.3 The Aim of the Report

An rNIS provides the information required to establish whether or not a development is likely to have had significant effects on certain Natura sites in the context of their conservation objectives and specifically on the habitats and species for which the Natura 2000 conservation sites have been designated. In the case of the refurbishment at Ardagh Cottage, Ballinaboy, Clifden, Co. Galway, there are 19 no. Natura 2000 sites within 15 km of the property listed in section 5.1 of this report

This rNIS report has been prepared to establish whether the refurbished cottage, its waste-water treatment system, and surrounding groundworks are likely to have led to significant effects on the neighbouring SAC. This represents the source pathway receptor model. This rNIS is specifically designed to establish whether any compensatory measures or mitigation measures may be put in place to prevent any negative effects on the integrity and ecological functions of the SAC and the qualifying interests for which the designation was granted. Therefore, this private dwelling refurbishment and its waste-water treatment system has automatically proceeded to Stage II of the Appropriate Assessment Process.

Accordingly, a comprehensive assessment of the potential ecological effects of this application on designated sites and their respective QI's and SCI's was carried out by ORS Senior Ecological Consultant Larry Manning.

2 Methodology

2.1 Appropriate Assessment

This rNIS has been prepared with reference to the following:

- Irish Statute Book. Planning and Development Regulations 2001 to 2011. Section 177G, Remedial NIS.
- European Commission (2018). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
- European Commission (2021). Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.
- European Commission (2006). Nature and Biodiversity Cases: Ruling of the European Court of Justice.
- European Commission (2007). Clarification of the Concepts of: Alternative Solution, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission.
- Department of Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.
- Environmental Protection Agency: Code of Practice: Domestic Wastewater Treatment Systems (Population Equivalent ≤ 10).

The EC Guidance sets out several principles as to how to approach decision making during the process. The primary one is 'the precautionary principle' which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.

When considering the precautionary principle, the emphasis for assessment should be on objectively demonstrating with supporting evidence that:

- There will be no significant effects on a Natura 2000 site.
- There will be no adverse effects on the integrity of a Natura 2000 site.
- There is an absence of alternatives to the project or plan that is likely to have an adverse effect to the integrity of a Natura 2000 site and
- There are compensation measures that maintain or enhance the overall coherence of the Natura 2000 network and its individual sites.

This translates into a four-stage process to assess the impacts, on a designated site or species, of a policy or proposal.

The EC Guidance states that "*each stage determines whether a further stage in the process is required*". Consequently, the Council may not need to proceed through all four stages in undertaking the Appropriate Assessment.

The four-stage process is:

Stage 1: Screening – The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans and considers whether or not these impacts are likely to be significant.



Stage 2: Appropriate Assessment – The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.

Stage 3: Assessment of Alternative Solutions – The process which examines alternative ways of achieving objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain – An assessment of the compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

In complying with the obligations set out in **Articles 6(3)** and following the guidelines described above, this screening statement has been structured as a stage-by-stage approach as follows:

- Description of the proposed project.
- Identification of the Natura 2000 sites close to the proposed development.
- Identification and description of any individual and cumulative impacts on the Natura 2000 sites likely to result from the project.
- Assessment of the significance of the impacts identified above on-site integrity. Exclusion of sites where it can be objectively concluded that there will be no significant effects.
- Description of proven mitigation measures.

2.2 Statement of Competency

Author

This remedial Natura Impact Statement was carried out by Larry Manning BSc (Hons). Larry has an honours degree in Applied Freshwater and Biology from GMIT (ATU) Galway, where he gained an education in ecology and environmental management. Larry has worked on a wide variety of ecological assessments and habitat/species management surveys, including working as a consultant MMO for the Irish Whale and Dolphin Group Consulting, taking a lead role in marine engineering projects and overseeing regulatory compliance. He has extensive experience in the field of fisheries monitoring and research both in North Atlantic waters and in Antarctic waters for CAMMLR representing the South Georgia and South Sandwich Islands government. The author has worked as a fisheries scientist for the Marine Institute since 2017 on research projects, fisheries management plans, and fisheries species-specific population analysis. While working in the Fisheries Ecosystem Advisory Service at the Marine Institute, Larry engaged with the fishing fleet directly while data gathering at sea on trawlers and played a vital role in gathering sensitive data pertaining to national catch quotas and landings obligations, relevant to current regulations. Larry also has experience in implementing company strategy for offshore aerial surveys and hydrographic and geophysical surveys in line with current legislation for Offshore windfarm development. During seismic surveys the author was employed as an offshore fisheries liaison officer which required in depth knowledge of regulatory frameworks to ensure the



fishing fleet, the survey company, and the ships officers of the watch were all compliant and safe during highly complex and dynamic operations. The author also works as an ornithologist and provides habitat and species assessments for terrestrial infrastructure developments. Larry has carried out a number of Appropriate Assessment Screenings, Natura Impact Statements, Ecological Impact Assessments, Environmental Impact Assessment Reports for large projects across Ireland developments in the marine and terrestrial space.

Co-Author

This remedial Natura Impact Statement was co-authored by Seán Burke, MSc. Seán has a bachelor's degree in science – Single Honours Biology from Maynooth University and a master's degree in Ecology & Biodiversity from Stockholm University. His academic experience has provided fundamental training in scientific methods and a strong knowledge of the theoretical background of biological and ecological processes. Seán has previous experience working in the agri-food sector developing biological control agents for the suppression of fungal pathogens which required extensive laboratory techniques and the study of ecological interactions. His work with ORS has provided the opportunity to conduct a wide range of ecological services including macroinvertebrate sampling, bird surveying, habitat assessment and classification, preliminary bat surveying, mammal surveying, and ecological impact assessment. This experience has been applied to projects of varying sizes across commercial, industrial, and residential projects nationwide. Seán has extensive experience in Appropriate Assessment Screenings, Natura Impact Statements, Ecological Impact Assessments, Preliminary Impact Assessment Reports and Chapter authorship for Environmental Impact Assessment Reports for multiple renewable energy installations.

Reviewed by

This remedial Natura Impact Statement was reviewed by Richard Edwards, BSc (Hons), PhD, FHEA, MRSB. Rich is a molecular ecologist with over 20 years' experience working on interdisciplinary projects. A former academic research leader in bioinformatics, genomics, molecular ecology and evolution, Rich is a creative problem solver across a broad range of biodiversity and ecological sciences. He specialises in identifying pragmatic solutions that maximise mutual benefits. He has published over 80 peer-reviewed works, including papers in Nature Ecology and Evolution and Molecular Ecology, and over thirty bioinformatics tools. Rich joined the Environmental Services team at ORS in July 2025, bringing strengths in large-scale data analysis, automation, and scientific/technical writing. His experience at the forefront of applying genomic techniques to conservation and biodiversity challenges, including non-native invasive species, positions the ORS team to adapt rapidly to changes in technology relating to biodiversity management and biodiversity net gain legislation. Since joining ORS, Rich has focused on ecological survey reporting and assessing the ecological impacts of construction projects, particularly with respect to Appropriate Assessment Screening and Biodiversity Management Plans.

2.3 Desk Studies & Consultation

Information on the site and the area of the proposed development was studied prior to the completion of this statement. The following data sources were accessed in order to complete a thorough examination of potential impacts:



- National Parks and Wildlife Service - Aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species, conservation objectives, site synopses and standard data forms for relevant designated sites. A submission made by the Development Applications Unit regarding this proposed development was also consulted.
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area.
- Myplan.ie – Mapped based information.
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area.
- Bing maps & Google Street View – High quality aerials and street images.
- Galway County Council - Information on planning history in the area for the assessment of cumulative impacts.
- Planningalerts.ie

2.4 Field Survey

This rNIS is informed by a field survey carried out on Friday 28th of March 2025 to assess the extent and quality of habitats present on site. Proximity to Natura 2000 sites was also assessed to identify the potential for significant effects arising as a result of the refurbishment, waste-water treatment system and hard standing areas. The site visit was also carried out to take into consideration all works and ancillary elements of the refurbished property as stated in the description for the application for substitute consent.

2.4.1 Council Visit

A visit to the site was also carried out by members of Galway County Council on the 28th of July 2025. They confirmed that upstream water quality is designated as “Poor” and confirmed that no visible pollution was evident within the property. An extract of their correspondence is included below, with full copy included in **Appendix D**.

“Galway County Council attended your property on 28th July 2025 following a complaint raised regarding water pollution.

It is understood retention planning was applied for at this property under planning ref 21/720 & 24/60141 but could not be considered as an Appropriate Assessment was required due to proximity to the Connemara Bog Complex SAC.

Galway County Council understand that water sampling was carried out by an ecologist with ORS consultancy to satisfy an NIS requirement, which subsequently showed some level of contamination within the waterbody. Please note the threshold used in the water sampling to show exceedances relate to drinking water standards and would not directly apply to rivers/streams. Instead, stream or surface water quality should be assessed under the Water Framework Directive (WFD) and surface water regulations.

The BALLINABOY_020 waterbody has a monitored station approximately 500m upstream from your property. This waterbody has an ecological status of poor within the current WFD cycle and classified as at risk.

On the day of the site visit no visible pollution was evident across the property. Galway



County Council may consider this waterbody for further inspections under the National Inspections Plan (NIP) & National Agricultural Inspection Plan (NAIP).

Please be aware that Galway County Council now consider this complaint closed. “

2.5 Limitations

The information contained in this report is based upon information gathered during site walkover and also provided by others. It is assumed that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. This information has not been independently verified.

The results of surveys carried out to inform this report are relevant to the time of survey. The author acknowledges that conditions may be subject to change following the publishing of this report.

Unless otherwise stated in this report, it is assumed that the facilities on site will continue to persist in their current state, with no alterations or change of use.

3 Project Description

3.1 Site Location and Land Overview

The private dwelling of Ardagh Cottage is located ca. 2.2km south of Clifden, County Galway. The coordinates for the site are 53°27'47.8"N, 10°00'52.5"W. Ardagh Cottage was constructed in the 1800's prior to Natura 2000 site designation. The altitude of the site is ca. 14m AOD, the site area is mostly deciduous native woodland with some Rhododendron. The hard standing area at the East of the gable end of the property is comprised of compressed stones which makes up a short driveway to the L1105 Ardagh road. According to EPA maps, the dwelling is situated approximately 10 – 20 meters from the Bunnahowna river forming part of the Ballinaboy_030 WFD River Sub Basin which flows in a Westerly direction and flows out into the nearby Ardbear Bay approximately 351 meters away. Using the latest aerial imagery and observations following field survey, an overview of the land-use and habitats surrounding the application site was assessed and noted.

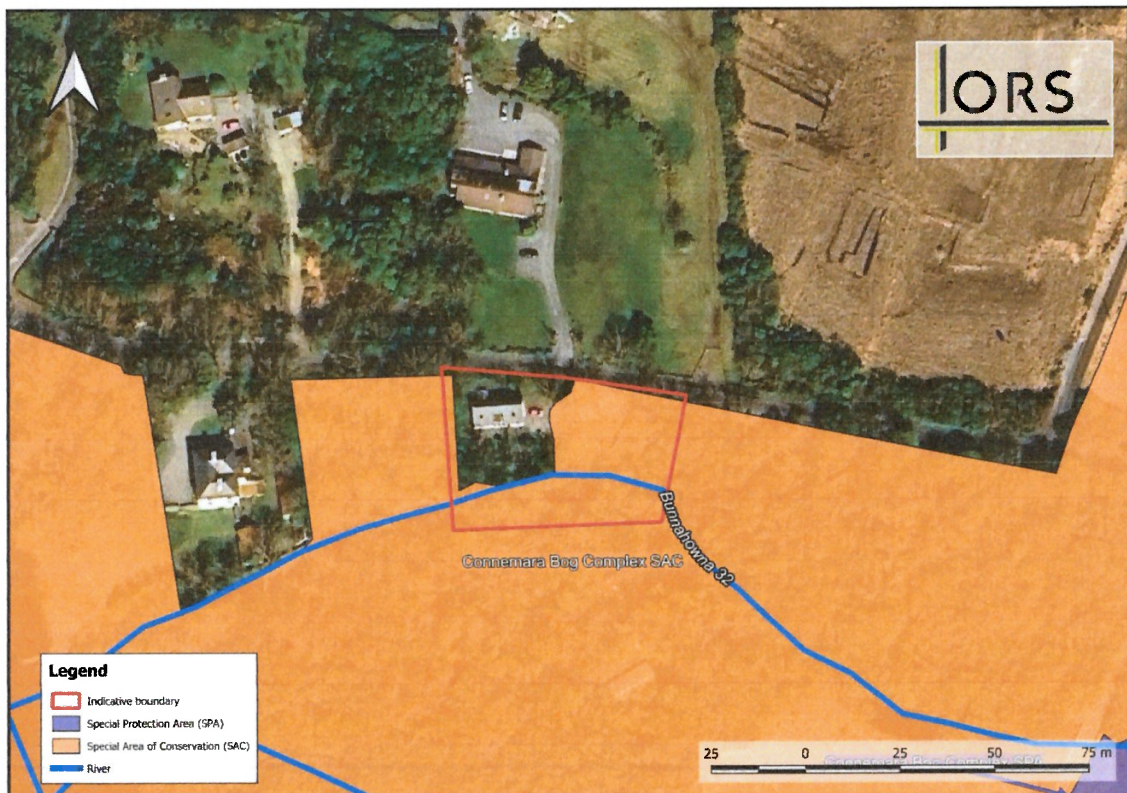


Figure 3.1: Site location in relation to nearest Natura 2000 sites and hydrological pathways.

3.2 Description of Proposed Development

The site at Ardagh Cottage is under application for retention for refurbishment works (listed in Section 1.1).

It is noted that the separation distance for the installed wastewater treatment system

(WWTP) is non-compliant with the statutory thresholds set out in the EPA's Code of Practice. However, in lieu of this compliance, the following evidence has been obtained to demonstrate no impact:

- An engineering inspection report and certificate from O'Halloran engineering and Patrick J. Sullivan Engineering Services confirming installation compliance with manufacturer's instructions and the general requirements of the EPA CoP: Domestic Wastewater Treatment Systems (U ≤ 10 P.E.) 2021 (**Appendix B**). It is noted that since works on the waste treatment system consisted of an upgrade, variances in the installation distance may be permitted (Section 1.3 of CoP).
- Confirmation from a Council investigation that no visible pollution was detected across the property (**Section 2.4.1** above). This investigation followed a complaint from Ardagh Cottage that potential pollutants may be arising from an adjacent stream.

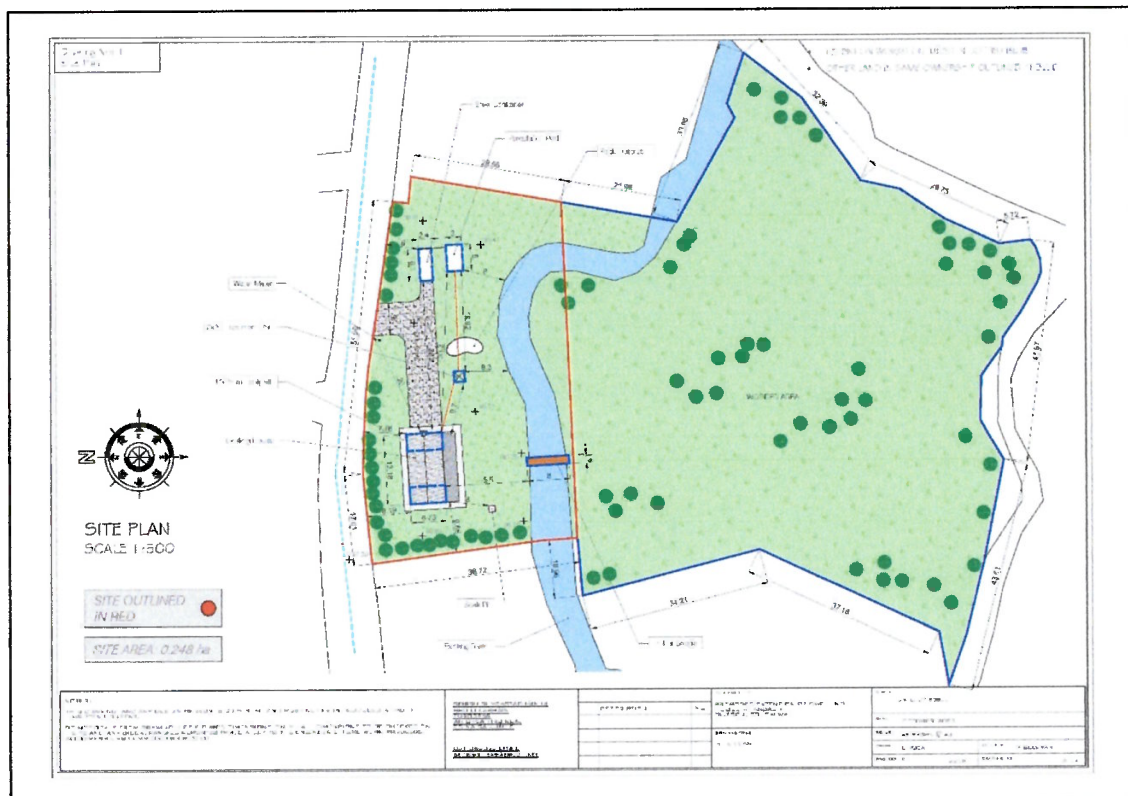


Figure 3.2. Site plan of property with measured distances of wastewater treatment facility to river.

3.2.1 Water Supply

The local water supply comes from the Tawnagreggaun Lough located approximately 0.95 km from property.

3.2.2 Drainage Systems

No dedicated surface water management measures were observed on site following inspection. Rainwater and surface water occurring on site permeates naturally through the



ground layer.

3.3 Hydrology

Maps generated by the Environmental Protection Agency (EPA) and featuring data from the EU Water Framework Directive (WFD) were consulted to assess the extent and quality of waterbodies present in the vicinity of the Site. The closest waterbody to the Site consists of the Bunnahowna river forming part of the Ballinaboy_030 WFD River Sub Basin which flows in a Westerly direction and flows out into the nearby Ardbear Bay. Much of the Ardbear Bay does not have SAC status but its Western outer reaches join the West Connacht Coast SAC 002998, that SAC is then bounded to the South by the Slyne Head Peninsula SAC 002074 and the Slyne Head Islands SAC 000328. The Bunnahowna river is fed by Lough Beaghcauneen, Cloonagat Lough and the many bogs and small lakes of the surrounding Ardagh bogs and Connemara Bog Complex SAC 002034.

EPA data collected at Station Br. d/s L. Beaghcauneen for the nearest water quality data in the form of a Q-Value water quality assessment states that the Bunnahowna River has a Q-Value score of 3 and a Q-Value status of Poor. The condition of the water is therefore unsatisfactory from data collected upstream of the property and classed as moderately polluted. The data was collected in 2023.

3.4 Geology

Teagasc soil mapping indicates that the surface and subsoils at the site are comprised of low-level Atlantic type R blanket bog. The land is described as flat undulating lowland. The Geological Survey of Ireland (GSI) bedrock database indicates that soils of the proposed site are underlain at depth by Rhyolite and rhyolitic tuff.

3.5 Hydrogeology

GSI online map viewer indicates that the Site lies within the Erriff-Clew Bay catchment area Hydrometric Area Code 32 Hydrometric Area Name Erriff-Clew Bay, River Basin District Code IEWE, Area (km²) 1504 (IE_WE_G_0017 as per WFD Cycle 3), The Ardagh Cottage site is more specifically situated in the Ballinaboy_030 Subbasin. The Clifden Castlebar groundwater body is classified as "Not at Risk" with an overall status of "Good".

3.6 Flood Risk

The OPW's national flood information portal, floodinfo.ie, was reviewed to determine the risk of flooding at the proposed development site and the incidents of any past flood events. The site is located within a Low Flood Risk zone.

3.7 Habitats and Species within the Application Site

A portion of the property to the South is part of the nearest SAC (Connemara Bog Complex 002034 comprised of the Bunnahowna River which runs past the property approximately 10 - 20 meters away from the dwelling structure. A site visit was conducted on the 28th of March 2025, and the surrounding habitats were recorded. The site visit on 28th March included observations on the river-bed composition from direct observations, results as per FOSSITS classification the Bunnahowna River is graded as Eroding/Upland Rivers (FW1). This type refers to natural river channels or parts of them that are actively undergoing erosion and are generally unstable, with minimal or no accumulation of fine sediments. These conditions are



commonly found in the upper reaches of river systems, where the terrain is often steep, leading to fast, turbulent flows. Rivers experiencing spate flows are included in this category. In some areas, such as the western regions of Ireland on the ocean-facing sides of coastal mountains, erosion can continue right down to sea level due to steep gradients and frequent heavy rainfall over short distances. While this is most common in upland rivers, some stretches of lowland rivers may also experience erosion where features like waterfalls, rapids, or weirs occur. The riverbeds in these environments typically consist of exposed bedrock and loose stones. While coarse materials like pebbles, gravel, and sand may collect in certain areas, fine sediments are rarely present. Although these rivers vary in dimensions, they are generally smaller and shallower than the depositing or lowland rivers classified as FW2.

The area around the property and bounding both sides of the Bunnahowna River are classed as Mixed Broadleaved/Conifer Woodland (WD2). This category refers to woodlands where both broadleaved and coniferous trees are present in significant proportions, with each type covering between 25% and 75% of the area. The tree species can be either native or introduced. Areas that have been planted with a mix of broadleaved and conifer trees are also included, provided the tree canopy reaches a height of over 5 meters, or at least 4 meters in wetland environments. The property is surrounded by a mix of Scots pine (*Pinus sylvestris*), Alder (*Alnus glutinosa*), Sycamore maple (*Acer pseudoplatanus*), Common Beech (*Fagus sylvatica*), Goat willow (*Salix caprea*), Ash (*Fraxinus excelsior*), Downy birch (*Betula pubescens*) and Rhododendron (*Rhododendron Ponticum*). While these woodlands are within the boundaries of the Connemara Bog Complex SAC 002034, they are not a Qualifying Interest of the SAC.

3.8 Invasive Species

Rhododendron (*Rhododendron ponticum*) was recorded at the site during walkover. This species is listed on the in the European Union (Invasive Alien Species) Regulations 2024 (S.I. No. 374/2024), making it an invasive species subject to restrictions.



4 Stage 1 - Screening for Appropriate Assessment

4.1 Natura 2000 Sites Identified

In accordance with the guidelines issued by the Department of the Environment and Local Government, a list of Natura 2000 sites within 15km of the proposed development have been identified and described according to their site synopsis, qualifying interests and conservation objectives. In addition, any other sites further than this, but potentially within the zone of interest were also considered. The zone of impact may be determined by an assessment of the connectivity between the application site and the designated areas by virtue of hydrological connectivity, atmospheric emissions, flight paths, ecological corridors etc. The measurements used here are taken from the closest point along the proposed work area to the SAC.

For significant effects to arise, there must be a potential effect facilitated by having a source, i.e., the proposed development and activities arising out of its construction or operation, a receptor, i.e., the European site and its qualifying interests and a subsequent pathway or connectivity between the source and receptor, e.g., a water course. The likelihood for significant effects on the European site will largely depend on the characteristics of the source (e.g., nature and scale of the construction works), the characteristics of the existing pathway and the characteristics of the receptor, e.g., the sensitivities of the Qualifying Interests (habitats or species) to changes in water quality.

There are 19 no. Natura 2000 designated sites within a 15km radius of the application site including:

- Twelve Bens/Garraun Complex SAC 002031
- Rosroe Bog SAC 000324
- Connemara Bog Complex SPA 004181
- Slyne Head to Ardmore Point Islands SPA 004159
- Dog's Bay SAC 001257
- Murvey Machair SAC 002129
- Slyne Head to Ardmore Point Islands SPA 004159
- Slyne Head Islands SAC 000328
- Slyne Head Peninsula SAC 002074
- West Connacht Coast SAC 002998
- Inishbofin, Omev Island and Turbot Island SPA 004231
- Omev Island Machair SAC 001309
- Barnahallia Lough SAC 002118
- Kingstown Bay SAC 002265
- Cruagh Island SPA 004170
- Aghrusbeg Machair and Lake SAC 001228
- Tully Mountain SAC 000330
- Tully Lough SAC 002130
- Illaunnaon SPA 004221.

Of these 19 no. sites, there are 5 no. sites with any potential source-pathway-receptor (S-P-R) connectivity, and only these 5 no. sites will be considered further, as per the S-P-R model. These designated areas and their closest points to the proposed development site are summarised in **Table 4.1** and a map showing their locations relative to the application site are shown in **Figure 4.1**. A full description of the sites can be read on the website of the National Parks and Wildlife Service (www.npws.ie).

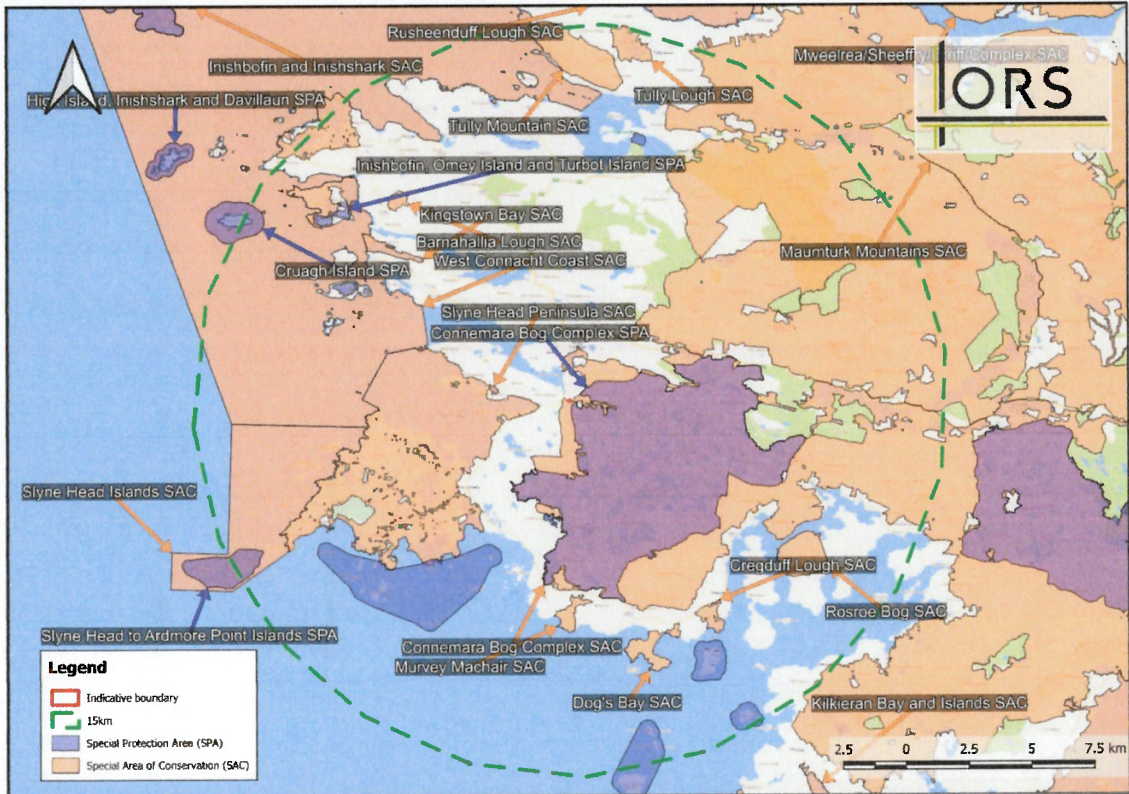


Figure 4.1: Natura 2000 sites within 15km radius of the property. (Source: EPA Maps).



Table 4.1: Natura 2000 sites with a potential source-pathway-receptor linkage with the development.

Site Name & Code	Distance & Direction from Site	Qualifying Interests	Screened In/Out
Connemara Bog Complex SAC 002034	The site is located partially within this SAC.	<p>Coastal lagoons [1150]</p> <p>Reefs [1170]</p> <p>Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110]</p> <p>Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130]</p> <p>Natural dystrophic lakes and ponds [3160]</p> <p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260]</p> <p>Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]</p> <p>European dry heaths [4030]</p> <p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]</p> <p>Blanket bogs (* if active bog) [7130]</p>	<p>Screened In.</p> <p>Due to the proximity of the subject site in relation to this SAC, and direct SPR linkage via the Bunnahowna River, this SAC has been screened in for further assessment. The primary potential source of effect from the development consists of the wastewater treatment system installed on site.</p>

<p>Connemara Bog Complex SPA 004181</p>	<p>Located 179 meters East of property.</p>	<p>Transition mires and quaking bogs [7140] Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Marsh Fritillary (<i>Euphydryas aurinia</i>) [1065] Salmon (<i>Salmo salar</i>) [1106] Otter (<i>Lutra lutra</i>) [1355] Slender Naiad (<i>Najas flexilis</i>) [1833]</p>	<p>Screened Out. Due to the size and scale and nature of the refurbishments of the property there are no significant effects foreseen on the qualifying interests or SCI's of this SPA or the ecology of the immediate area. There are no significant negative effects considered likely to occur on any of the water courses or chemical composition of the receiving environments in the vicinity of the property or further downstream of it. This SPA is located upstream of the application site and is therefore disqualified from the S-P-R model here as the local water course flow away from this SPA. The only connection with the application site is for foraging or movement behaviours of the SCI's and any ecological interconnectedness is tenuous and conservative.</p>
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<p>Slyne Head Peninsula SAC 002074</p>	<p>Located ca. 1.21km West of the property.</p>	<p>Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] Atlantic salt meadows (<i>Glauco- Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with White dunes (<i>Ammophila arenaria</i>) [2120] Machairs (* in Ireland) [21A0] Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130]</p>	<p>Screened Out. Due to the size and scale and nature of the refurbishments of the property there are no significant effects foreseen on the qualifying interests of this SAC or the ecology of the immediate area. There are no significant negative effects considered likely to occur on any of the water courses or chemical composition of the receiving environments in the vicinity of the property or further downstream of it.</p>
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		<p>Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]</p> <p>European dry heaths [4030]</p> <p>Juniperus communis formations on heaths or calcareous grasslands [5130]</p> <p>Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210]</p> <p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]</p> <p>Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>) [6510]</p> <p>Alkaline fens [7230]</p> <p>Bottlenose Dolphin (<i>Tursiops truncatus</i>) [1349]</p> <p>Petalwort (<i>Petalophyllum ralfsii</i>) [1395]</p> <p>Slender Naiad (<i>Najas flexilis</i>) [1833]</p>	
West Connacht Coast SAC	Located ca. 6.08 km West of the	Bottlenose Dolphin (<i>Tursiops truncatus</i>) [1349]	<p>Screened Out.</p> <p>Due to the size and scale and nature of the refurbishments of the property</p>



002998	property.	Harbour Porpoise (<i>Phocoena phocoena</i>) [1351]	there are no significant effects foreseen on the qualifying interests of this SAC or the ecology of the immediate area. There are no significant negative effects considered likely to occur on any of the water courses or chemical composition of the receiving environments in the vicinity of the property or further downstream of it.
Slyne Head Islands SAC 000328	Located 7.70 km West of the property.	Reefs [1170] Bottlenose Dolphin (<i>Tursiops truncatus</i>) [1349] Grey Seal (<i>Halichoerus grypus</i>) [1364]	Screened Out. Due to the size and scale and nature of the refurbishments of the property there are no significant effects foreseen on the qualifying interests of this SAC or the ecology of the immediate area. There are no significant negative effects considered likely to occur on any of the water courses or chemical composition of the receiving environments in the vicinity of the property or further downstream of it.

4.2 Identification of Potential Impacts

The property at Ballinaboy, Clifden occurs on lands that are partially within the Connemara Bog Complex SAC, with a hydrological connection being established. Due to the size and scale of the property and wastewater treatment of foul water and its annual checks, points to a lack of significant effects on any of the QI's or the SSCO's of the Natura Sites identified featuring a SPR linkage. The Cottage structure is situated outside of the Connemara Bog Complex SAC 002034. The porch has no likely significant negative effects on the Connemara Bog Complex SAC 002034.

To address the potential implications of the wooden footbridge, it can be confirmed from visual inspection that the only foreseen potential impact from this structure on the Natura 2000 sites would result from a physical collapse of the structure into the water. This identified impact would likely be short term in nature and not affect the long-term population dynamics of the salmonids in the river. The bridge does not have the potential to affect the chemical parameters of the water. The bridge sits within the boundary of the Connemara Bog Complex SAC 002034 and replaces a pre-existing wooden bridge which was in a state of disrepair.

As part of the application for substitute consent the owners of the property are also seeking retention for the driveway. The driveway was in the same size and position prior to clearing of overgrowth vegetation and was then re-gravelled. Site assessment indicates that no negative impacts from the driveway are likely to have occurred. The driveway is situated outside of the Connemara Bog Complex SAC.

The application for substitute consent also includes the retention of a steel container on site, currently used for storage. There are no chemicals stored inside the shed and the container is in good condition as if new. No negative effects are considered likely to have occurred during installation and it is considered to have negligible effects on existing conditions. The steel container is situated within the Connemara Bog Complex SAC.

Regarding the revised elevations of the cottage, they occur outside of the Connemara Bog Complex Sac 002034 and have no likely significant impacts on the nearby Bunnahowna River or the hydrologically connected SAC's, SPA and their respective SCI's or QI's.

Regarding the first-floor extensions on the cottage there are no foreseen likely negative impacts on the nearby Bunnahowna River or the hydrologically connected SAC's, SPA and their respective SCI's or QI's.

Part of the wastewater treatment facility (tertiary filter) is located outside of the current SAC boundary for the Connemara Bog Complex SAC 002034, and the other part is situated inside of the boundary. Taking a conservative approach, in a worst-case scenario, a breach or damage to the system could cause a pollution event. It must be stated though that current checks on the system are carried out annually. The existing system actively treats wastewater emissions from site, ensuring they are clean, when compared to the previous system which involved direct emission of effluent from the premises.

Under a scenario where the treatment system is to be removed and/or repositioned, it is considered likely that this will pose greater risk of contamination to the adjacent river and SAC when compared to leaving it in situ.



4.3 Assessment of Significance

This section considers the list of sites identified in **Section 4.1**. Given the scale and nature of the development, the Connemara Bog Complex SAC has been screened in for further assessment given the proximity of the site within and adjacent to the site, as well as the potential SPR linkage via the installed wastewater treatment system.

4.4 Screening Conclusions

Part of the site is situated within the Connemara Bog Complex SAC and is therefore considered “*directly connected to*”, but “*not necessary to*” the nature conservation management of the identified Natura 2000 sites as per guidelines. This report must proceed to the next stage of Appropriate Assessment, namely the Natura Impact Statement. For additional context, this rNIS is requested as part of an application for retention by An Coimisiún Pleanála.

5 Appropriate Assessment

5.1 Introduction

The main objective of this stage (Stage 2, Remedial Natura Impact Statement) in the Appropriate Assessment process is to determine whether the plans carried out at Ardagh Cottage, Ballinaboy, Clifden (either alone or in combination with other plans, programmes and projects) have resulted in significant adverse impacts to the integrity of the nearby Natura 2000 sites with respect to the site's structures, species, functions, conservation objectives and targets. This stage also outlines the mitigation measures that should be taken in order to avoid any negative effects of this application, should it receive retention.

5.2 Site Specific Conservation Objectives

For the designated Natura 2000 sites that were screened, if Site Specific Conservation Objectives (SSCO's) were available these were reviewed in light of the proposed development and any potential negative effects. These SSCO's aim to define the favourable conservation status for the particular habitats or species at that site. They outline certain attributes (e.g., distribution, population structure, water quality) for different species and habitats with targets, which define favourable status for a habitat or species at a particular site. The maintenance of habitats and species within the Natura 2000 sites at favourable conservation status will contribute to the overall maintenance of favourable conservation status of those habitats and species at national level. Where available, these SSCO's can be downloaded on the NPWS website. Any potential negative effects to the attributes and targets as defined in these SSCO's were assessed and where necessary, mitigation strategies suggested. Where SSCOS were not available, then the SSCOs of other Natura 2000 sites with comparable QIs were referred to.

For each Qualifying Interest of the SAC, the specific conservation objective is either to maintain or restore the favourable conservation condition of that interest, by defining a list of attributes and targets which are indicative of the conservation status of that interest. For habitats, the main attributes include habitat area; habitat and community distribution; vegetation structure/composition and physical structure. The main target is to ensure that the habitats are stable or increasing in area and that the other attributes are maintained or restored. For the Annex II species of the SAC, the main attributes are population trend and distribution, whilst the targets aim to ensure that the long-term population trends of the species are stable or increasing and that there is no significant decrease in the numbers or range of areas used by the species, other than that occurring from natural patterns of variation.

5.3 Relevant Natura 2000 Sites Identified

5.3.1 Connemara Bog Complex SAC 002034

Site Summary

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 Specific Conservation Objectives

During this stage of AA, and in line with the Habitats Directive, the focus is on the integrity of European sites *in light of their conservation objectives*. Generic conservation objectives have been compiled for the Connemara Bog Complex SAC. These are based on maintaining/restoring the favourable conservation condition of the habitats and species for which sites are selected.

5.4 Assessment of Potential Effects

5.4.1 Introduction

The identification of potential impacts and the assessment of their significance typically requires the identification of the type and magnitude of the impacts. For example, will the impacts be short term or long term, direct, indirect or cumulative and will they occur during construction or operation. This section will establish whether the potential negative effects of the proposed development at the application site (in this case Ardagh Cottage) identified in previous section, are likely to have occurred, will likely occur, and whether they are significant or not. These potential impacts will be examined with respect to the conservation objectives of the Natura 2000 site identified.

In the screening section of this report, the following possible future effects on the Natura sites identified in section 5.2 of this report. These factors are again listed below, and they will be dealt with in more detail in this section. Table 5.1 below outlines potential pathways established between the site and receptors associated with the Connemara Bog Complex SAC.

Table 5.1: Natura 2000 sites with a potential source-pathway-receptor linkage with the development.	
Receptor	Potential Pathway for Significant Effects
Connemara Bog Complex SAC 002034	
Coastal lagoons [1150]	Yes – Hydrological connectivity is established via the Bunnahowna River which has weak hydrological connectivity to Salt Lake north of the site which features this conservation objective.
Reefs [1170]	Yes – Hydrological connectivity is established via the Bunnahowna River which has weak hydrological connectivity to Salt Lake north of the site which features this conservation objective.
Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110]	No – There are no pathways from the subject site which could have implications on this conservation objective.
Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea</i>	No – There are no pathways from the subject site which could have implications on this conservation objective.

<i>uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130]	
Natural dystrophic lakes and ponds [3160]	No – There are no pathways from the subject site which could have implications on this conservation objective.
Water courses of plain to montane levels with the <i>Ranunculon fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260]	No – Little is known about the distribution of high-value sub-types of this habitat, with priority given to Ballynahinch/Recess, Owenriff, and Knock Catchments which are not hydrologically connected to the site.
Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]	No - Wet heaths with <i>Erica tetralix</i> have not been fully mapped within the SAC, though walkover of the site did not confirm presence of this habitat type on site or downstream.
European dry heaths [4030]	No – Dry heaths have not been fully mapped within the SAC, though walkover of the site did not confirm presence of this habitat type on site or downstream.
<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]	No -This habitat is likely to occur as rather small, fragmented areas on wet acid soils and were not recorded on site or downstream.
Blanket bogs (* if active bog) [7130]	No – Blanket bogs have not been fully mapped within the SAC, though walkover of the site did not confirm presence of this habitat type on site or downstream.
Transition mires and quaking bogs [7140]	No – Transition mires and quaking bogs have not been fully mapped within the SAC, though walkover of the site did not confirm presence of this habitat type on site or downstream.
Depressions on peat substrates of the Rhynchosporion [7150]	No – Depressions on peat substrates of the Rhynchosporion have not been fully mapped within the SAC, though walkover of the site did not confirm presence of this habitat type on site or downstream. No overlapping habitats related to this habitat were observed in the site vicinity.
Alkaline fens [7230]	No – Alkaline fens have not been fully mapped within the SAC, though walkover of the site did not confirm presence of this habitat type on site or downstream. No overlapping habitats related to this habitat were observed in the site vicinity.
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]	No – There are no pathways from the subject site which could have implications on this conservation objective.
Marsh Fritillary (<i>Euphydryas aurinia</i>) [1065]	No – The relative habitat featuring Devil's-bit scabious (<i>Succisa pratensis</i>) is not present on site.
Salmon (<i>Salmo salar</i>) [1106]	Yes – Indirect pathway via water quality. The Bunnahowna River flows adjacent to the site (approx. 10m). Historical discharge of untreated effluent present a risk of nutrient enrichment (eutrophication) and siltation, which can degrade spawning gravels and reduce oxygen levels critical for salmon spawning

	<p>However, the installation of the new tertiary WWTP (remedial work) has removed this pressure. The construction of the pedestrian bridge (completed) posed a temporary, minor risk of siltation or disturbance during works. Operational impacts are now positive due to the removal of the raw effluent pathway.</p>
<p>Otter (<i>Lutra lutra</i>) [1355]</p>	<p>Yes – Indirect Pathway via Water Quality & Disturbance.</p> <p>Otters are a qualifying interest of the SAC and may use the Bunnahowna river for commuting and foraging. No holts or signs were located within the site confines or 150m upstream or downstream. Any historical pollution from the site may have indirectly impacted prey availability (fish stocks/crayfish). The remedial installation of the WWTP improves water quality and prey biomass potential.</p> <p>Regarding disturbance, the dwelling is long-established (100+ years). Current human presence and lighting associated with the refurbishment are consistent with baseline historical usage and will not result in significant displacement or barrier effects to Otter movement along the riparian corridor.</p>
<p>Slender Naiad (<i>Najas flexilis</i>) [1833]</p>	<p>No – There are no pathways from the subject site which could have implications on this conservation objective. The nearest location featuring this conservation objective comprises the Derrywalking Lough Large ca. 2km NE of the site.</p>

5.4.2 Direct Effects

The main works comprised refurbishment of an existing cottage over 100 years old (pre-dating Natura 2000 designation), a new footbridge, and WWTP installation.

The cottage structure and its extended footprint are located outside the Connemara Bog Complex SAC 002034 boundary. No SAC habitat was lost during the building refurbishment works. The domestic pedestrian bridge is situated within the SAC boundary. The new structure replaces a pre-existing bridge that was in disrepair and pre-dates SAC designation. Due to the surrounding watercourses, a footbridge is required to traverse the land. The installation works, while physically occurring in the SAC, were localised, involved no in-stream concrete pouring, and likely resulted in a momentary duration of effect on the riparian habitat. The structure's stability mitigates the risk of long-term contamination from collapse.

Works for the WWTP installation and driveway clearance were largely contained within existing hardstanding or areas colonised by the invasive species, *Rhododendron ponticum*. The clearance of *Rhododendron* without the use of herbicides is a positive ecological intervention, as this species is known to negatively affect water pH and macro-invertebrate communities (a food source for the QI species, i.e. Salmon).

The overall habitat loss of native SAC-qualifying habitat from construction are considered to be negligible. No habitats of qualifying interest were recorded present within the confines of the site. The works completed have, through the removal and management of invasive species and remediation of the wastewater discharge, resulted in no significant negative implications on the SAC. When compared to the previous system which resulted in direct

discharge of effluent from the site, the new system significantly reduces the risk of pollution.

5.4.3 Indirect Effects

A key requirement of the EPA Code of Practice: Domestic Wastewater Treatment Systems is the maintenance of minimum separation distances. Site survey data confirms that the closest point of the tertiary filter is measured at 8.0 meters from the high-water mark of the Bunnahowna River. This is contrary to the prescribed minimum distance of 10 meters set out in the EPA Code of Practice, though allowances may be made for upgrades to existing systems under Section 1.3 of the EPA Code of Practice 2021.

The WWTP installation is a remedial measure of substitution. The new system replaces a long-standing, unmitigated source of pollution, resulting in a significant positive change to the receiving environment. The previous arrangement, which directed raw sewage to adjacent lands and potentially the river, would have constituted an adverse effect on the integrity of the Connemara Bog Complex SAC.

To demonstrate that the current system's non-compliant setback distance has not resulted in an adverse effect on the SAC's integrity, and is not currently occurring, the following evidence is presented in lieu of physical relocation:

- **Performance Standard:** The new wastewater treatment system provides full secondary and tertiary treatment, achieving a high-quality effluent, whereas previously, there was no treatment. This is a clear remedial measure which has significantly enhanced the quality of wastewater treatment on site.
- **Engineer Certification:** A certificate from the project engineer confirms that the installation was carried out in accordance with the manufacturer's instructions. While it is observed that installation is not within EPA CoP guidance distance (10m), the system is in good working order with no observable pollution present. Movement of the system to meet the requirements of the CoP is considered likely to introduce risk of effects on the SAC when compared to leaving it in situ (**Appendix B**).
- **Monitoring:** The system is subject to continued annual checks and maintenance, with the latest satisfactory service certification dated March 31, 2025 (**Appendix C**).
- **Local Authority Confirmation:** An inspection by Galway County Council on the 28th of July 2025 confirmed no visible pollution in the stream.
- **Water Quality Test Results:** Water quality analysis was carried out by Everpure Analysis Ltd to determine water quality of samples downstream and upstream of the development, as well as the adjacent secondary stream to the east of the site. Results of this analysis indicated *E. coli* and high phosphate levels in the small stream adjacent the site, and Coliform bacteria and high phosphate levels in the downstream sample. No elevated levels were recorded in the upstream sample. The recorded Coliform levels were elevated in the eastern stream. As the existing WTP system is not located in the vicinity of this water feature, and has passed engineer inspection, the subject site is not considered a source of raised Coliform levels within the Bunnahowna River. A copy of the laboratory reports and sampling locations is provided in **Appendix E**.

Based on this evidence, and applying the precautionary principle with verifiable data, it is objectively concluded that the operation of the upgraded WWTP, despite the non-compliant setback distance, has not, and is not currently having, a significant adverse effect on the integrity of the Connemara Bog Complex SAC and its qualifying interests.



Figure 5.1: Pump measured at 8.3 meters from high water mark. The additional pump and initial filter stage at the bottom left of the picture were measured as beyond 8 meters from the high-water mark.

5.5 Mitigation Measures

In accordance with the requirements for a remedial Natura Impact Statement as described in the Planning and Development Regulations 2001 to 2011, section 177G, the below mitigations measures have been identified and have been completed, or are recommended to be completed, to fulfil the requirements for substitute consent.

The owners of Ardagh Property have been in communication with the local fisheries group for advice and they have been working together to improve the water course for salmonids which are a QI for the adjacent Natura Site (Connemara Bog Complex SAC 002034). The author asked for evidence of communications between the property owners and Saul Joyce

who is the secretary of Clifden Trout Anglers Association. Saul Joyce states that “The Owenaleeaun or Ballinaboy river that flows through Jim O’Driscols property forms part of the angling waters of the Clifden Trout Anglers Association. This river drains a number of lakes all of which hold sea trout and it forms the only path to and from the sea. The association is active in maintaining the integrity of the river by cutting back invasive species and removing any blockages to fish movement in the river. All works being carried out in cooperation with I.F.I and NPWS. Since Mr O’Driscol purchased the property he has shown a keen interest in assisting the Association in these works. He has enabled ease of access to the river to carry out works and has also removed copious amounts of invasive rhododendron ponticum on the property. He has also shown a keen interest in the fishery and has notified us of issues that may be of concern to the association.”

Annual checks on the waste-water treatment system have been carried out by the property bodies as can be evidenced in the latest certifications seen in **Appendix C**. The site visit carried out by the author on 28th March 2025 included the measurement of the waste-water treatment systems main filter and its closest measured distance point to the high-water mark of the river resulted in a measure of 8.3 meters during the spring season. The smaller secondary pump filter close to the property was measured at 8 meters from the high-water mark. The first primary filter stage of the water treatment system seen on the bottom left corner of **Figure 5.1** was measured as beyond 10 meters from the high-water mark. The main water treatment filter (tertiary filter) was measured as 10 meters from the nearest high-water mark of the river. This complies with EPA regulations stated in the EPA Code of Practice: Domestic Wastewater Treatment Systems (Population Equivalent ≤ 10), though non-compliance is noted for the main and secondary filters.

It must be noted that the new wastewater treatment facility has replaced an old pipe system that channelled un-treated foul and sewage water straight into the river from the house. The new wastewater system greatly improves potential bio load on the river compared to previous historical accounts and significantly improves environmental health of the surrounding area, specifically the adjacent SAC.

Suggested mitigation actions for the purpose of this rNIS and for the preservation of water quality, ecosystem and ecological health in the hydrologically connected area surrounding Ardagh Cottage include the following:

- Continued annual checks of the waste-water treatment system
- On-going communication with the local angling association to ensure a healthy water course for the salmonids which make up the relevant QIs for the surrounding designated Natura Site.
- Continued management of *Rhododendron ponticum* on the property without the use of herbicides.
- Continued hygienic environmental practices relating to the surrounding area outside of the cottage where no plastic or other waste is to be left lying around or deposited without care.

5.6 Residual Impact Assessment

A Residual Impact is defined as the effect remaining after all necessary mitigation and remedial measures have been successfully applied and implemented. This assessment



considers the long-term impact of the retained dwelling and the operational effects of the completed remedial works.

The primary potential negative pathway identified during the screening stage was the deterioration of water quality in the Bunnahowna River, leading to a potential impact on the Qualifying Interests of coastal lagoons, reefs, Salmon (*Salmo salar*) and Otter (*Lutra lutra*) associated with the Connemara Bogs Complex SAC.

A certified tertiary Wastewater Treatment Plant (WWTP) mitigates the risk of effluent runoff causing significant effects on this SAC. The system is designed to meet or exceed the requirements of the EPA Code of Practice and ensures the discharge is significantly attenuated, both hydrologically and chemically. Given the pre-existing poor water quality attributable to the raw discharge, the implementation of the new, compliant system results in a positive residual impact by actively reducing the nutrient load entering the system. The residual impact associated with the treated discharge from the operational dwelling is therefore considered Imperceptible and below the threshold for ecological impact.

The physical disturbance associated with the construction of the WWTP and pedestrian bridge is completed. The pre-existing bridge, which pre-dates SAC designation, was in a state of disrepair and at risk of causing debris to enter the river. Due to the location of the property in relation to the nearest watercourses, a footbridge is required to traverse the premises. The works were contained within the curtilage, and appropriate reinstatement has occurred. Furthermore, the removal of the invasive Rhododendron (*Rhododendron ponticum*) from the curtilage area without the use of herbicides represents a direct positive residual effect on the SAC habitat, specifically in maintaining the favourable conservation status of the Blanket Bog habitat by preventing the spread of a competitive and damaging non-native species downstream of the site.

In conclusion, taking into account the remedial measures and the application of standard operational controls, the project will not result in any residual adverse effects that would prevent the Connemara Bog Complex SAC from achieving or maintaining its conservation objectives.

It is determined that the retention of the dwelling and the use of the operational wastewater treatment system, following the completion of the remedial works, will not result in an adverse effect on the integrity of the Connemara Bog Complex SAC (002034).

5.7 Potential In-Combination Effects

This section of the NIS examines whether any other plans or projects in the area have the potential to act cumulatively or in-combination with the proposed development to adversely affect the integrity of the Natura 2000 sites identified.

There is only one planning application relevant to the S-P-R model of this report, which is situated upstream of Ardagh Cottage, Clifden ca. 854 meters East (unknown distance as per length of river). The planning application upstream of Ardagh Cottage is a Planning Application for retention which has been granted conditional approval Ref. 16787 at Beaghcauneen for a single storey extension to the rear of dwellinghouse (gross floor space 29.2sqm), grant date 28/11/2016.



The refurbished property and its water treatment system will not have any significant in-combination effects on the identified Natura 2000 sites, their QI's or their SSCO's.

6 Appropriate Assessment Conclusion

This remedial Natura Impact Statement has been undertaken to evaluate the potential negative effects of Ardagh Cottage, Clifden upon the conservation objectives and qualifying interests (including the habitats and species) of the Connemara Bog Complex SAC 002034. It is considered that following appropriate mitigations suggested in this report, the refurbished cottage and its porch, the wastewater treatment facility, the driveway and the container/shed have not, nor have the potential to significantly affect the conservation objectives of any Natura 2000 site. The integrity of the Connemara Bog Complex SAC will not be adversely impacted. The new wastewater treatment facility has made a large improvement to the pre-existing system which discharged untreated effluent directly into the Bunnahowna river. Having considered the nature, scale and location of the project, risk to any surface and/or groundwater water bodies either qualitatively or quantitatively are considered unlikely.

The treatment of *Rhododendron* at the site has likely improved the ecology of the immediate area as it has allowed space for locally important flora and fauna to flourish. Native plant and tree species were observed naturally seeding at the site and therefore will be having a net positive effect on the soil and ground communities as well as on the water quality of the river which runs through the property. *Rhododendron* impacts water pH, and its leaf litter can alter pH and freshwater macro-invertebrate species community structure. The macro-invertebrates at the site (if maintained at a high standard through the current environmental procedures), are a major food source for the qualifying interests of the Connemara Bog Complex SAC, in particular salmonids at various stages of their development.

The qualifying interests of the site and their potential to be affected upon from the potential development were listed in **Section 5.4**. It is considered that these potential effects have been successfully mitigated against. With implementation of the mitigation measures there will be no deterioration in water quality or impacts upon any designated habitat or any species dependent on these designated habitats. The attributes and targets which have been set out to maintain or restore the favourable conservation condition of these interests in the Natura 2000 sites will not be impacted upon.

Table 6.1 follows the integrity of the SAC / SPA checklist, which shows that the integrity of the sites would not likely be affected by the proposed development.

This remedial Natura Impact Statement (rNIS) has assessed the existing development at Ardagh Cottage, Clifden, for its potential to have had, or to be having, significant adverse effects on the integrity of the **Connemara Bog Complex SAC 002034**.

The assessment confirms that the existing works, particularly the installation of a tertiary wastewater treatment system, despite a non-compliant setback distance, constitutes a net ecological improvement over the prior system which discharged untreated effluent. The works have also resulted in the beneficial removal of the invasive *Rhododendron ponticum* from the riparian zone.

It is concluded that, on the basis of objective scientific information, and ensuring the implementation of the specified mitigation and monitoring measures, the development

subject to the application for substitute consent, individually or in combination with other plans or projects, has not adversely affected and will not adversely affect the integrity of any water body (rivers, lakes, groundwaters, transitional and coastal) either qualitatively or quantitatively or on a temporary or permanent basis or otherwise jeopardise any water body in reaching its WFD objectives. By extension, it is concluded that the subject development has not adversely affected, nor will adversely affect the Connemara Bog Complex SAC 002034 or any other relevant European Site, in light of the sites' conservation objectives and the mitigation measures carried out and proposed in the future.

Table 6.1 – Integrity of the SAC / SPA Checklist (From NPWS, Information Checklist for AA, Box 6, EC (2002))

Conservation Objective: Does the project have the potential to:	Yes / No
Cause delays in progress towards achieving the conservation objectives of the site?	N
Interrupt progress towards achieving the conservation objectives of the site?	N
Disrupt those factors that help to maintain the favourable conditions of the site?	N
Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site?	N
Other Objectives: does the project have the potential to:	
Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem?	N
Change the dynamics of the relationships (between, for example, soil and water or plants and animals) that define the structure and/or function of the site?	N
Interfere with predicted or expected natural changes to the site (such as water dynamics or chemical composition)?	N
Reduce the area of key habitats?	N
Reduce the population of key species?	N
Change the balance between key species?	N
Reduce diversity of the site?	N
Result in disturbance that could affect population size or density or the balance between key species?	N
Result in fragmentation?	N
Result in loss or reduction of key features (e.g. tree cover, tidal exposure, annual flooding, etc.)	N



Larry Manning, BSc (Hons)
Senior Ecological Consultant



A handwritten signature in black ink, appearing to read 'Seán Burke'.

Seán Burke, BSc, MSc
Ecological Consultant

Appendix A: References & Further Reading

Department of the Environment, Heritage and Local Government (2009) *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities*.

Dwyer, (2000) *Protecting Nature in Ireland, The NGO Special Areas of Conservation Shadow List*. Published by the Irish Peatland Conservation Council, Dublin.

EPA (2001) *Parameters of Water Quality - Interpretation and Standards*. Environmental Protection Agency, Ireland.

EPA (2002) *Guidelines on the Information to be contained in Environmental Impact Statements*. Environmental Protection Agency, Ireland.

EPA (2003) *Advice Notes on Current Practice in the Preparation of Environmental Impact Statements*. EPA, Wexford, Ireland.

EPA (2012) *Guidance on the setting of trigger values for storm water discharges to off site surface waters at EPA licensed IPPC and waste facilities*. EPA, Wexford.

Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. The Heritage Council, Leitrim.

Institute of Environmental Assessment (1995) *Guidelines for Baseline Ecological Assessment*. Institute of Environmental Assessment, Great Britain.

IUCN (2003) *Red List of Threatened Species*. International Council for Conservation of Nature and Natural Resources.

ORS

Appendix B: Engineer Report and Certificate (Patrick J. Sullivan Engineering Services and O'Halloran Engineering)

Certification of Installation of Wastewater Treatment System

Project Details

Site Address:	Ardagh Cottage, Clifden, Galway, H71KD34
Client:	James O'Driscoll & Geraldine McGuinness
Engineer:	Patrick J Sullivan, BEng (Hons)
Installation Date:	14 February 2022

I, Patrick J Sullivan, being a Chartered Engineer, hereby confirm that I have supervised/inspected the installation of the domestic wastewater treatment system and associated percolation area/polishing filter at the above site.

The system installed comprises:

- 7 P.E. Klarp One packaged wastewater treatment unit with 125ltr pump chamber
- Ecoflo Coco Tertiary Treatment filter system/gravel distribution trench
- Ancillary works (distribution pipework, venting, access covers, etc.)

I confirm that:

1. The installation has been carried out in accordance with the manufacturer's instructions, and the requirements of the Environmental Protection Agency Code of Practice: Domestic Wastewater Treatment Systems (U ≤ 10 P.E.) 2021.
2. All works were completed to good engineering practice, with appropriate levels, falls, and construction materials.
3. The completed system has been inspected and tested, and it is my professional opinion that it is suitable for use and capable of treating the domestic wastewater generated on site.
4. A copy of the manufacturer's certification and maintenance requirements has been provided to the homeowner.

Signed: 

Name: Patrick J Sullivan

Qualifications: BEng (Hons)

Date: 27 October 2025

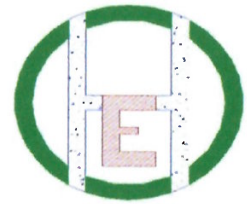
PATRICK J. SULLIVAN **ENGINEERING SERVICES**

Cois Locha, Derrartha More, Carraroe, Co. Galway
Quantity Surveying - Planning Design - Project Management

Tel: 087 650 4170
Email: seirbhisi777@gmail.com

O'HALLORAN ENGINEERING

RONAN J. O'HALLORAN B.E.
ARDNASILLAGH, OUGHTERARD, COUNTY GALWAY.



ON-SITE WASTE WATER TREATMENT SYSTEM INSPECTION REPORT

IN ACCORDANCE WITH

The Environmental Protection Agency

CODE OF PRACTICE – *Domestic Waste Water
Treatment Systems (Population Equivalent ≤ 10)*

Compiled By:

O'HALLORAN ENGINEERING

RONAN J. O'HALLORAN B.E.
ARDNASILLAGH, OUGHTERARD, COUNTY GALWAY

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RONAN J. O'HALLORAN B.E.

ARDNASILLAGH, OUGHTERARD, COUNTY GALWAY.

Our Ref: O/2022.

Date: March 2022.

Regarding:

Report on existing waste water treatment and disposal system in operation at a dwelling in Ardagh, Clifden, County Galway.

Clients: Jim O'Driscoll & Geraldine McGuiness

Planning Reference Numbers: 07/3252 12/1256 21/720

1.0 Outline:

1.1

The clients Jim O'Driscoll & Geraldine McGuiness are proposing to seek planning permission and retention planning permission at their property in Ardagh, Clifden, County Galway.

1.2

As part of their proposed planning application, Jim O'Driscoll & Geraldine McGuiness have requested a condition report on the existing waste water treatment and disposal system that is currently in operation and servicing their dwelling.

1.3

Please note O'Halloran Engineering had no involvement with the installation, construction, supervision or certification of any aspect of the original construction of the dwelling including the associated waste water treatment and disposal system on site.

1.4

The field work / site survey was completed on Thursday February 10th 2022.

1.5

Ronan J. O'Halloran was accompanied on site by the planning agent Mr. Patrick J. Sullivan – Seirbhísí Meastacháin Uí Shúilleabháin.

1.6

The weather conditions on the day of the field work / site survey were cold, dry and intermittent rain showers.

1.7

The wastewater treatment system onsite was not de-sludged while I was present onsite.

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2.0 Introduction:

2.1

This report is compiled on behalf of the clients Jim O'Driscoll & Geraldine McGuinness. The waste water treatment unit the subject of this report; services a standalone one-off dwelling located at Ardagh, Clifden, County Galway, (Eircode – None assigned).

2.2

The content of this report including all opinions and conclusions are based on information provided to O' Halloran Engineering by the client and on information gathered during a site inspection which was conducted on Thursday February 10th 2022. All conclusions and opinions are based on the available information on that particular day only.

2.3

The field work included a visual inspection of the existing waste water treatment unit on site. This inspection of the insitu wastewater treatment system was conducted from ground level only and also included the examination of surrounding ground conditions on that particular day (Thursday February 10th 2022).

2.4

Please note as per **Chapter 12. Operation and maintenance of DWWS of the Environmental Protection Agency CODE OF PRACTICE – Domestic Waste Water Treatment Systems (Population Equivalent ≤ 10) section 12.2.4 Septic Tanks: -**

"In performing inspections and other maintenance, a septic tank should not be entered. The septic tank is a confined space and entering it can be extremely hazardous because of toxic gases and / or insufficient oxygen."

Thus, the waste water treatment unit was not entered at any time.

2.5

All opinions, conclusions and recommendations contained in this report are based on existing site conditions on the day of inspection only; All conclusions and opinions are based on the available information on that particular day only (Thursday February 10th 2022).

I do not, and cannot take into account the impact of any future variations in these site conditions, including but not exhaustively, changes in site conditions as a result of changes in weather conditions or extreme weather occurrences; or as a result of any activity carried out on this particular site or on neighbouring areas which may have an effect on the site characteristics and the operation of the waste water treatment unit.

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3.0 Existing Waste Water Treatment System:

3.1

The existing waste water treatment unit in operation on this site consists of a "**Klaro One**" wastewater treatment system which utilises SBR technology. There is also a separate pumping chamber located adjacent to the wastewater treatment system. This pumping chamber appears to pump the treated wastewater effluent to a Tertiary Filter unit which takes the form of an EcoFlow Coconut Filter unit.

3.2

The wastewater treatment system unit is located due south east of the existing dwelling and is located approximately 9.7m away.

3.3

The wastewater treatment system unit is located due north of the existing watercourse which traverses the site (EPA Name: Bunnahowna 32 – EPA Code: 32B07) and is located approximately 8.3m away.

3.4

The Tertiary filter unit is located due south east of the existing dwelling and is located approximately 30.3m away.

3.5

The Tertiary filter unit is located due east of the existing insitu wastewater treatment system and is located approximately 18.5m away.

3.6

The Tertiary filter unit is located due north of the existing watercourse which traverses the site (EPA Name: Bunnahowna 32 – EPA Code: 32B07) and is located approximately 8.0m away.

3.7

The Tertiary filter unit is located due south of the adjoining public road which is a local road.

Road Segment: L-1105-0 * Road Class: LP * Road Type: L * Road Name: L-1105

The Tertiary filter unit is located approximately 9.2m from the public road.

3.8

The Tertiary filter unit on site is located on top of a constructed mound and same measures approximately 5m X 3m.

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4.0 Associated Site Suitability Assessment Report:

4.1

The Site Suitability Assessment associated with the latest planning application (planning reference number: 21/720) was completed at the property in 2017. The Site Suitability Assessment was completed by Mr. Brendan McGrath, Aille, Inverin, County Galway.

4.2

I note the associated house plans depict three number bedrooms in the property. The Site Suitability Assessment Report states there are three number double bedrooms and one number single bedroom equating to a total of four bedrooms in the property. As per the **Environmental Protection Agency CODE OF PRACTICE – Domestic Waste Water Treatment Systems (Population Equivalent ≤ 10)** four bedrooms equates to a population equivalent of six people as oppose to the stated figure of five people.

4.3

I have reviewed the Groundwater Data Viewer online which is associated with the Geological Survey of Ireland website.

I note the site is divided in Soil Classification - Teagasc Soils Classification for the western part of the site is as follows:

- Parent Material Name: Bedrock at surface non-calcareous.
- IFS Soil Description: Predominantly shallow soils derived from non-calcareous rock or gravels with/without peaty surface horizon.

Soil Classification - Teagasc Soils Classification for the eastern part of the site as follows:

- Parent Material Name: Peat.
- IFS Soil Description: Blanket Peat.

I note the Groundwater Rock Unit associated with the site is as follows:

- Rock Unit Code: OV
- Description: Ordovician Volcanics

4.4

The site is located circa 1.5km from the Atlantic coastline which is due south west. In the Site Suitability Assessment report the Landscape position is referenced as a "Costal Flatland".

I further note that both granite and limestone outcropping was recorded on this particular site.

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4.5

I note under section 5.0 Recommendations within the Site Suitability Assessment report, reference is made as follows:

"...the treated effluent will discharge to surface water...."

5.0 Associated Planning Application Drawings:

5.1

I note the location of the Wastewater treatment system on the Site Layout drawing, drawing number 01; does not correspond with the physical location of the wastewater treatment system onsite. I understand from the planning agent that the location of the physical wastewater treatment system altered during the construction process.

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6.0 Desludging:

6.1

Records of de-sludging must be maintained by the homeowner under the Water Services Act 2007 (as amended).

De-sludging must be carried out by a contractor authorised under the Waste Collection Permit Regulations and the contents disposed of in accordance with all relevant national legislative requirements or directions pertaining at the time.

6.2

The homeowner must obtain evidence of de-sludging or a receipt from the authorised contractor each time their tank is de-sludged, and such evidence or receipt shall be retained for a period of five years.

6.3

Table 12.2: De-sludging frequency (1 to 5 years) for various sizes of tank and Number of house occupants

Tank useable volume (m3)	Number of house occupants						
	2	3	4	5	6	7	8
2.5	5	3	2	1	1	1	1
3.0	5	3	2	2	1	1	1
3.5	5	4	3	2	2	1	1
4.0	5	5	3	3	2	2	1
4.5	5	5	4	3	2	2	2
5.0	5	5	5	3	3	2	2
5.5	5	5	5	4	3	2	2
6.0	5	5	5	5	3	3	2

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7.0 Percolation / Polishing Area:

6.1

A polishing filter bed or percolation area, are applications contained underground. They are outside the bounds of a visual inspection, after construction / installation is complete.

7.2

My inspection on site was conducted on Thursday February 10th 2022, this is after construction / installation was completed.

7.3

There is no evidence of effluent ponding on site, the ground surrounding the wastewater treatment unit was firm and dry underfoot on the date of my inspection.

7.4

It appears that the Tertiary Filter Unit onsite takes the form of an Ecoflo Coconut Tertiary Filter which can be used after any EN 12566-3 wastewater treatment system. This filter unit can be used instead of a standard percolation area, low pressure pipe network, sand polishing filter or reed bed system.

7.5

The Tertiary filter unit is located due south east of the existing dwelling and is located approximately 30.3m away. The Tertiary filter unit is located due east of the existing insitu wastewater treatment system and is located approximately 18.5m away. The Tertiary filter unit is located due north of the existing watercourse which traverses the site (EPA Name: Bunnahowna 32 – EPA Code: 32B07) and is located approximately 8.0m away.

7.6

The Tertiary filter unit on site is located on top of a constructed mound and same measures approximately 5m X 3m.

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8.0 Conclusions & Recommendations:

8.1

Based on my site inspection undertaken on Thursday February 10th 2022, and the information obtained during this inspection. The wastewater treatment system / tank on site appears to take the form of a Klaro One waste water treatment system, and adjacent associated pumping chamber to a Tertiary Filter unit which takes the form of an EcoFlow Coconut Filter unit.

8.2

The wastewater treatment system unit is located due north of the existing watercourse which traverses the site (EPA Name: Bunnahowna 32 – EPA Code: 32B07) and is located approximately 8.3m away. While the existing insitu wastewater treatment unit does not meet the required 10m distance as per the **Environmental Protection Agency CODE OF PRACTICE – Domestic Waste Water Treatment Systems (Population Equivalent ≤ 10)**. The wastewater treatment system unit is a sealed factory produced unit with no effluent escaping the unit under correct working conditions. This should be highlighted in any future planning applications.

8.3

The Tertiary filter unit is located due north of the existing watercourse which traverses the site (EPA Name: Bunnahowna 32 – EPA Code: 32B07) and is located approximately 8.0m away. The Tertiary filter unit does not meet the required 10m distance as per the **Environmental Protection Agency CODE OF PRACTICE – Domestic Waste Water Treatment Systems (Population Equivalent ≤ 10)**.

It is advisable that reference is made to Page 6 Section 1.3 of the Environmental Protection Agency CODE OF PRACTICE – Domestic Waste Water Treatment Systems (Population Equivalent ≤ 10) which states as follows:

1.3 Variances for Existing Systems, Sensitive Areas and New Technologies

Adoption without modification of the specifications in this document may not, in all circumstances, be appropriate.

In sensitive areas, such as bathing water catchments, high status river catchments, high status lake catchments, drinking water source protection areas or zones of contribution to public water supplies, localities adjacent to shellfish areas designated through the Shellfish Water Directive (2006/113/EC) or pearl mussel catchments, local authorities may apply and require standards higher than those specified within this CoP.

Existing DWWTSs may not meet the performance requirements as set out in this CoP.

If existing DWWTSs are being upgraded, variances to the requirements set out within this CoP may be considered by the local authority where the authority is satisfied that the proposed upgrade will protect human health and the environment.

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DWWTs serving buildings of architectural or historical interest may be especially likely to give rise to such circumstances.

Homeowners should consult with their local authority to determine if planning permission is required for proposed upgrades.

The use of new and innovative products and technologies must be considered in detail by local authorities on a case-by-case basis with due regard to:

- *compliance with building regulations;*
- *compliance with technical standards as appropriate;*
- *evidence of suitability internationally or in Ireland;*
- *adequate protection of the environment and human health.*

8.4

The associated house plans depict three number bedrooms in the property.

The Site Suitability Assessment Report states there are four number bedrooms in the property.

As per the **Environmental Protection Agency CODE OF PRACTICE – Domestic Waste Water Treatment Systems (Population Equivalent ≤ 10)** four bedrooms equates to a population equivalent of six people.

The Site Suitability Assessment report notes a figure of five people.

It may be prudent to rectify this slight anomaly.

8.5

Within the Site Suitability Assessment, it may be prudent to review the Landscape Position which is referenced as a "Costal Flatland".

Also, while there may be both Granite and Limestone outcropping on site as per the Site Suitability Assessment Report; same may need to be reviewed.

8.6

Under section 5.0 Recommendations within the Site Suitability Assessment report, reference is made as follows:

"...the treated effluent will discharge to surface water...."

This may simply be an error within the report but it is advisable that clarification be sought regarding the proposed destination for discharge. It is highly unlikely that a discharge to surface waters would be acceptable in this situation. Discharge licence applications are a specialised item and are normally associated with commercial and or industrial applications as oppose to a domestic one-off dwelling application. I would advise that this be reviewed and revised accordingly prior to any future planning application being submitted.

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8.7

The Wastewater treatment system location on the Site Layout drawing does not correspond with the physical location of the wastewater treatment system onsite. The associated drawing may need to be updated.

8.8

I note the Site Suitability Assessment was completed onsite in 2017. Please note there has been a new revised regulatory manual adopted last year. It may be prudent to enquire if the original Site Suitability Assessment could be updated to reflect this new regulation as any future planning application may be issued a Further Information request seeking such an upgrade.

8.9

Reference is made in the Site Suitability Assessment report to the source of water for the dwelling being a Private well / borehole onsite. The associated planning application states there is an existing water connection. If there is in fact a private well onsite specific attention should be given to the separation distance between the well the source of water supply and the wastewater polishing filter bed which can be a source of contamination.

8.10

On a minor note, the date on the Domestic Commissioning Certificate & Warranty is the 14th of February 2022. This may be the date the certificate was issued but it may be prudent to note the date the wastewater treatment plant was actually commissioned, thus to avoid confusion.

8.11

I note within email correspondence from the system supplier the reference to the filter bed being reduced down to 17.25m².

The size of the filter bed within the Site Suitability Assessment Report is recorded as 8.25m².

The filter bed on the associated planning drawings is 48m²

It may be prudent to revise the documents and drawings to reflect the one size.

8.12

It is strongly advised that any future planning application emphasis that the wastewater treatment and disposal system installed onsite is an upgrade of an older less efficient treatment system. It should be emphasised that the installed wastewater treatment and disposal system will provide a much clean and higher quality wastewater effluent

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9.0 Photograph Log:

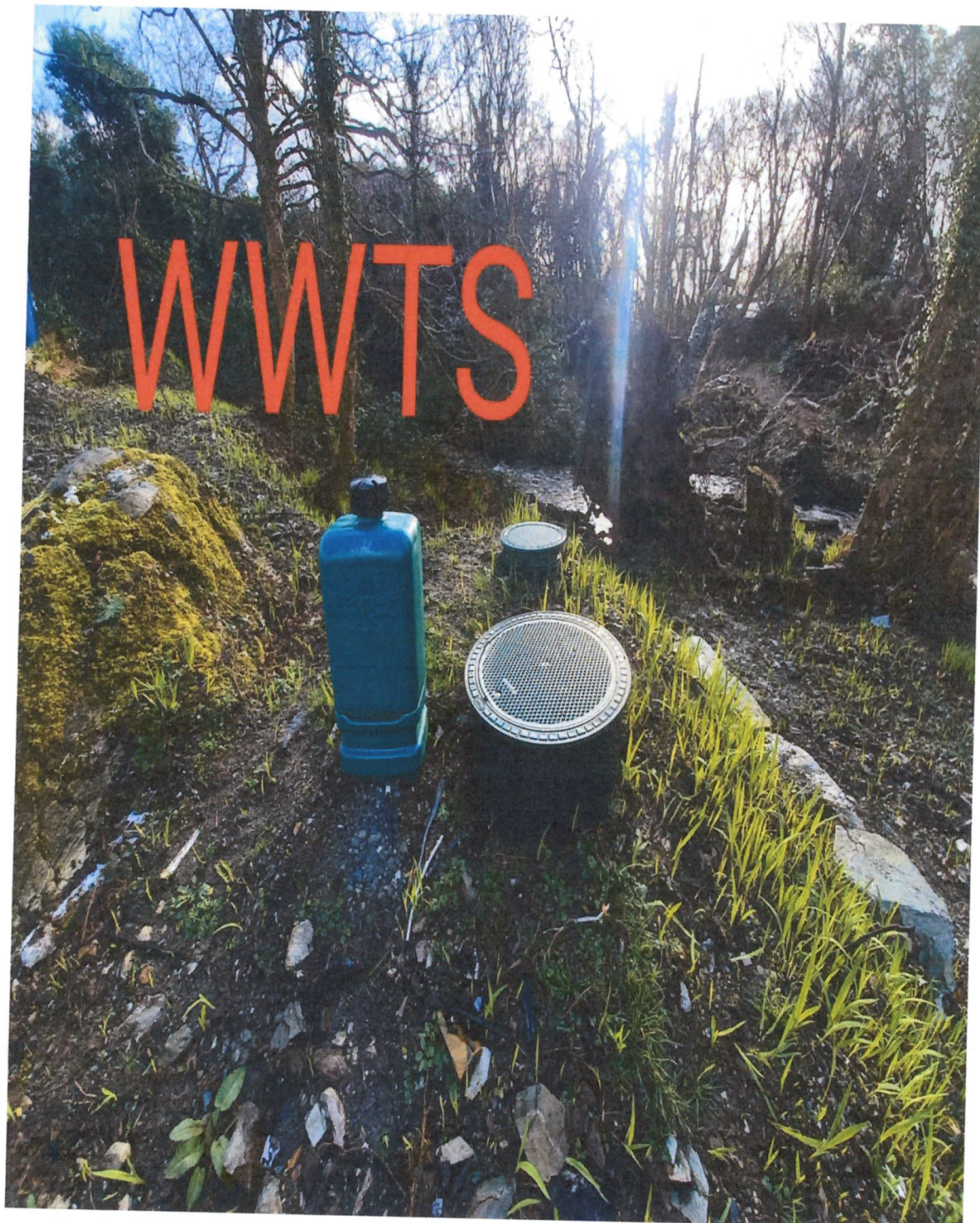


Figure 9.1 – Waste Water Treatment Unit On-Site

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Figure 9.2 – Tertiary Filter Mound On-Site

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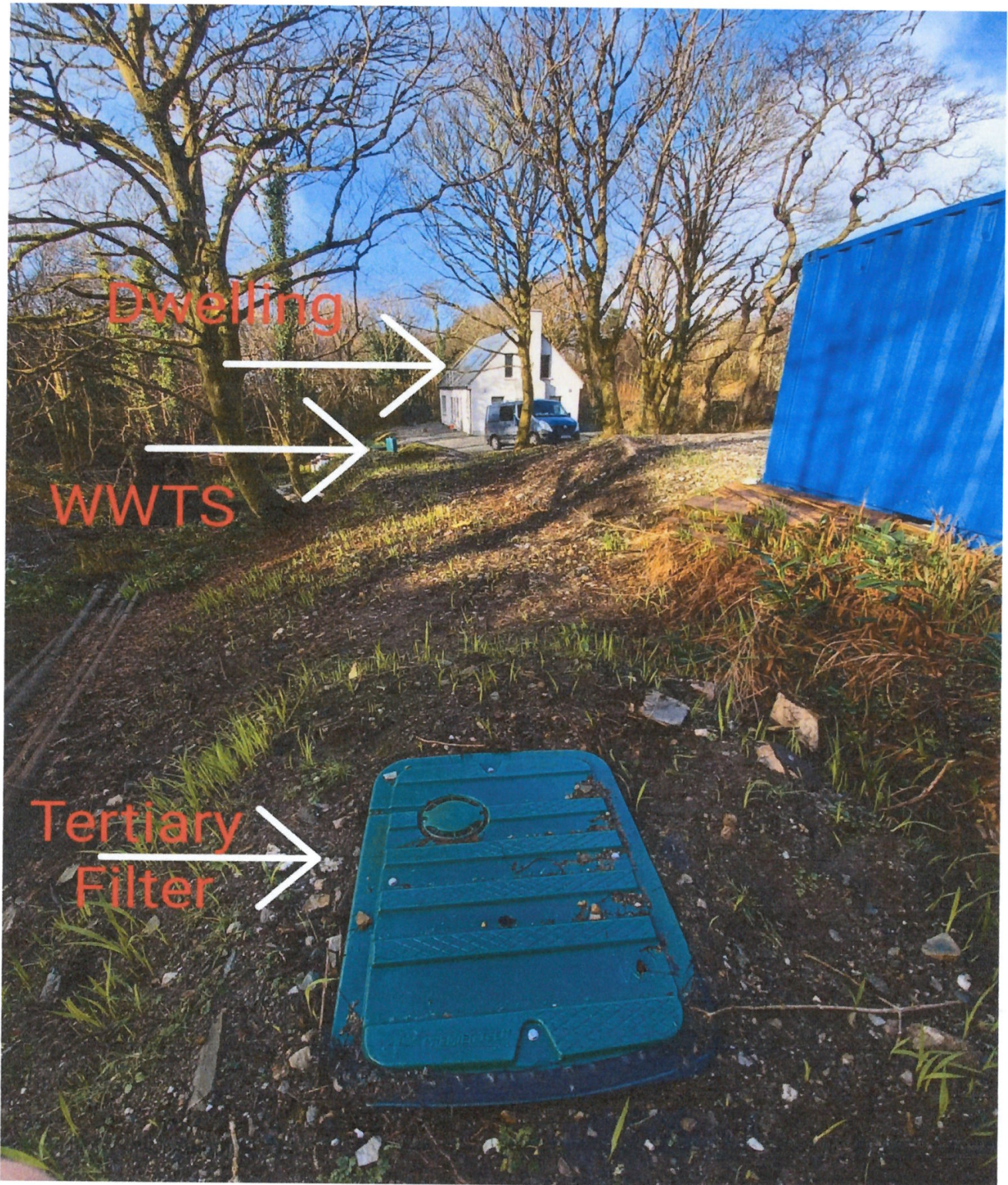


Figure 9.3 – View from the Tertiary Filter Mound towards the House

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Figure 9.3 – View from the House Towards the WWTS and the Tertiary Filter Mound

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9.0 National Skills Certification:



I am a Civil Engineer engaged in full time private practice with experience in the domestic wastewater industry, of which the above report would form part. I have successfully completed the appropriate Fetac course in site suitability assessment and enclose a copy of my certificate for same.

Regards,

Ronan O'Halloran

Ronan J O'Halloran

(Rónán Ó hAllúráin)

B Eng, Dip Eng, NCEA, AMIEI, GSI/EPA Assessor

O'Halloran Engineering,


(Innealtóireacht Uí Allúráin)

Ardnasillagh, Oughterard, Co. Galway, H91EHX4

Mobile: +35387 687 3021

Email: ohalloranengineering@gmail.com

Appendix C: Inspection Certificate



Domestic Jobsheet
Date 24/Mar/2025

Company Details
Graf Wastewater Solutions
Milltown Business Park, Milltown
Co. Galway, H54 RD78, Ireland
Email: info@wastewatersolutions.ie

Customer address James O'Driscoll	Site address James O'Driscoll Ardagh Cottage Ardagh, Clifden Galway, H71 KD34
--------------------------------------	--

Customer Name: James O'Driscoll	Customer Ref: .
---------------------------------	-----------------

Equipment Used	Name	Brand	Model	Serial #
Tertiary Filter		Ecoflo	4EH Filter	630
Wastewater Treatment Plant		Graf	One to Clean 7 Pumped	631

Job Description:
Routine service


Work Checklist	Yes	No	N/A
Is access to site safe?			
Is the location around the tank safe to work?			
Is there access to turn off power if required?			
Can you comply to social distancing in relation to Covid 19?			
Are you happy to proceed?			

Equipment Checks	Yes	No	N/A
Inlet fittings intact?			
Air blower operational?			
Diffusers & pipe work intact?			
Aeration of good quality?			
Gravity Outlet fittings intact?			
Outlet Pump 1 operational?			
Outlet Pump 2 operational? (if fitted)			
Pumped pipe work not damaged or leaking?			
Tank is level, horizontal and properly installed			
Tank structures intact with no damage?			
Control Panel fully operational?			
Alarm System/GSM functioning?			
Electrical connections intact?			
All covers and lids have been properly secured			
The system is fully operational as per manufacturers spec?			
Low Pressure Network checked & flushed?			

Ecoflo Tertiary Filter checked and operational?	✓
---	---

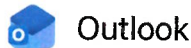
Completion Notes:
7pe Gravity One2clean, 400mm Pump Chamber, Top2 Pump, Tricel
All systems fully tested and serviced.
Replaced faulty control panel as control functions were not working as they should. System is now fully operational

Customer's name:	Customer's signature
------------------	----------------------

Engineer's name: Dylan Steede	Date 31 Mar 2025 09:12	Company Signature 
-------------------------------	---------------------------	---

ORS

Appendix D: Galway County Council Correspondence



Complaint Ref - 41763, Ardagh, Clifden, water pollution

From Brian O'Shaughnessy <boshaughnessy@galwaycoco.ie>

Date Fri 2025-09-12 10:30 AM

To Geraldine McGuinness <gmcguinn@hotmail.co.uk>; James O'Driscoll <jodrisco@hotmail.com>

A Chairde,

Galway County Council attended your property on 28th July 2025 following a complaint raised regarding water pollution.

It is understood retention planning was applied for at this property under planning ref 21/720 & 24/60141 but could not be considered as an Appropriate Assessment was required due to proximity to the Connemara Bog Complex SAC.

Galway County Council understand that water sampling was carried out by an ecologist with ORS consultancy to satisfy an NIS requirement, which subsequently showed some level of contamination within the waterbody. Please note the threshold used in the water sampling to show exceedances relate to drinking water standards and would not directly apply to rivers/streams. Instead, stream or surface water quality should be assessed under the Water Framework Directive (WFD) and surface water regulations.

The BALLINABOY_020 waterbody has a monitored station approximately 500m upstream from your property. This waterbody has an ecological status of poor within the current WFD cycle and classified as at risk.

On the day of the site visit no visible pollution was evident across the property. Galway County Council may consider this waterbody for further inspections under the National Inspections Plan (NIP) & National Agricultural Inspection Plan (NAIP).

Please be aware that Galway County Council now consider this complaint closed.

Kind regards,
Brian O'Shaughnessy

Environmental Technician | Environment Section | Galway County Council |
Centrepont, Liosbaun Estate, Tuam Road, Galway, H91 PY8H

 : 091-3788711  : boshaughnessy@galwaycoco.ie | Website: www.galway.ie |

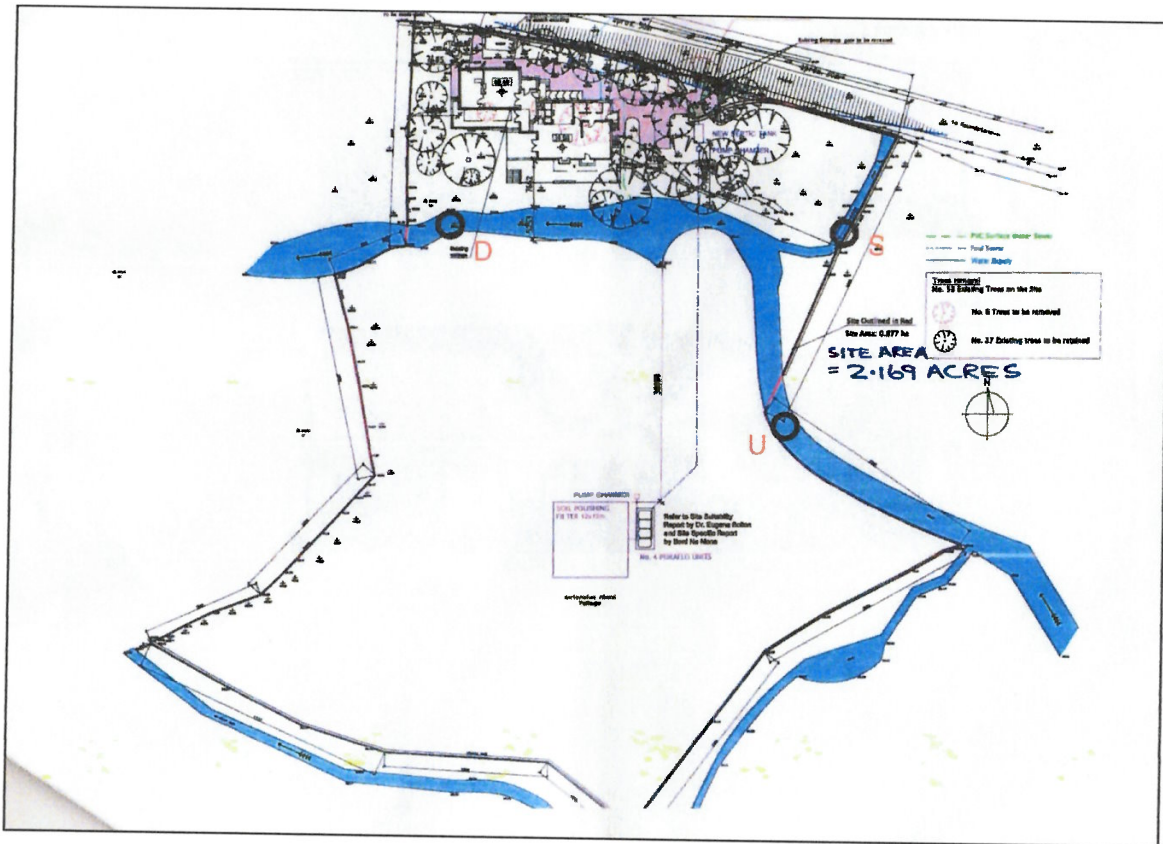
Is é Microsoft , Arna Óstáil do Comhairle Contae na Gaillimhe, a rinne an teachtaireacht ríomhphoist seo a scanadh agus a ghlanadh ó thaobh ábhair de. Tá míle fáilte roimh chomhfhreagras i nGaeilge nó i mBéarla. Tá eolas atá príobháideach agus rúnda sa ríomhphost seo agus in aon iatán a ghabhann leis agus is don seolaí amháin é. Mura seolaí thú, níl tú údaraithe an ríomhphost nó aon iatán a ghabhann leis a léamh, a chóipeáil ná a úsáid. Má tá an ríomhphost seo faighte agat trí dhearmad, cuir an seoltóir ar an eolas trí ríomhphost a sheoladh ar ais agus scríos ansin é le do thoil. Má tá an ríomhphost seo ag teastáil uait i bhformáid eile téigh i dteagmháil leis an duine a sheol chugat é.

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Appendix E: Water Quality Testing Results (Everpure Analysis Ltd.)





Address: Showgrounds rd. Ennis Co. Clare

Postcode: V95 XY60

Phone number: 0879022022

Email: info@everpureanalysis.com

Website: www.everpureanalysis.com

Date Sampled:30/5/2025	ID: Ardagh H71 KD34	Report No: 69
Date Received:30/5/2025	Sample site: Downstream	Lab. No: 001

Chemistry:	Result	EU limits	Units
pH	7.2	6.5-9.5	
Conductivity	190	*	mg/l
Total Hardness	20	250/20°C	mg/l
Total Alkalinity	160	*	mg/l
Total Iron	0.03	0.20	mg/l
Manganese	0.01	0.05	mg/l
Ammonia	0	0.3	mg/l
Nitrite	0	0.5	mg/l
Phosphate	15	5	mg/l
Nitrates	5	50	mg/l

Analysis	Result	EU limits	Units
Odour	None	*	
Turbidity	0	*	NTU

Bacteriology	Result	EU limits	Units
Enterococci	0	0	cfu/100ml
Total Coliforms	30	0	cfu/100ml
E. coli	0	0	cfu/100ml

*No reference limit recommended by European Communities (Drinking Water) (No. 2) Regulations 2023

Comments: Coliform bacteria and high phosphate detected in this water supply.

Vat No. 3453835MH

IBAN IE60AIBK93538740661026



Address: Showgrounds rd. Ennis Co. Clare

Postcode: V95 XY60

Phone number: 0879022022

Email: info@everpureanalysis.com

Website: www.everpureanalysis.com

Date Sampled:30/5/2025	ID: Ardagh H71 KD34	Report No: 70
Date Received:30/5/2025	Sample site: Upstream	Lab. No: 001

Chemistry:	Result	EU limits	Units
pH	7.1	6.5-9.5	
Conductivity	190	*	mg/l
Total Hardness	30	250/20°C	mg/l
Total Alkalinity	160	*	mg/l
Total Iron	0.03	0.20	mg/l
Manganese	0.01	0.05	mg/l
Ammonia	0	0.3	mg/l
Nitrite	0	0.5	mg/l
Phosphate	5	5	mg/l
Nitrates	5	50	mg/l

Analysis	Result	EU limits	Units
Odour	None	*	
Turbidity	0	*	NTU

Bacteriology	Result	EU limits	Units
Enterococci	0	0	cfu/100ml
Total Coliforms	0	0	cfu/100ml
E. coli	0	0	cfu/100ml

*No reference limit recommended by European Communities (Drinking Water) (No. 2) Regulations 2023

Comments: No issues detected in this water sample.

Vat No. 3453835MH

IBAN IE60AIBK93538740661026



Address: Showgrounds rd. Ennis Co. Clare

Postcode: V95 XY60

Phone number: 0879022022

Email: info@everpureanalysis.com

Website: www.everpureanalysis.com

Date Sampled:30/5/2025	ID: Ardagh H71 KD34	Report No: 71
Date Received:30/5/2025	Sample site: Stream small	Lab. No: 001

Chemistry:	Result	EU limits	Units
pH	7.3	6.5-9.5	
Conductivity	180	*	mg/l
Total Hardness	40	250/20°C	mg/l
Total Alkalinity	160	*	mg/l
Total Iron	0.03	0.20	mg/l
Manganese	0.01	0.05	mg/l
Ammonia	0	0.3	mg/l
Nitrite	0	0.5	mg/l
Phosphate	25	5	mg/l
Nitrates	15	50	mg/l

Analysis	Result	EU limits	Units
Odour	None	*	
Turbidity	0	*	NTU

Bacteriology	Result	EU limits	Units
Enterococci	0	0	cfu/100ml
Total Coliforms	60	0	cfu/100ml
E. coli	10	0	cfu/100ml

*No reference limit recommended by European Communities (Drinking Water) (No. 2) Regulations 2023

Comments: E.coli and coliforms detected in this water supply and high phosphate levels.

Vat No. 3453835MH

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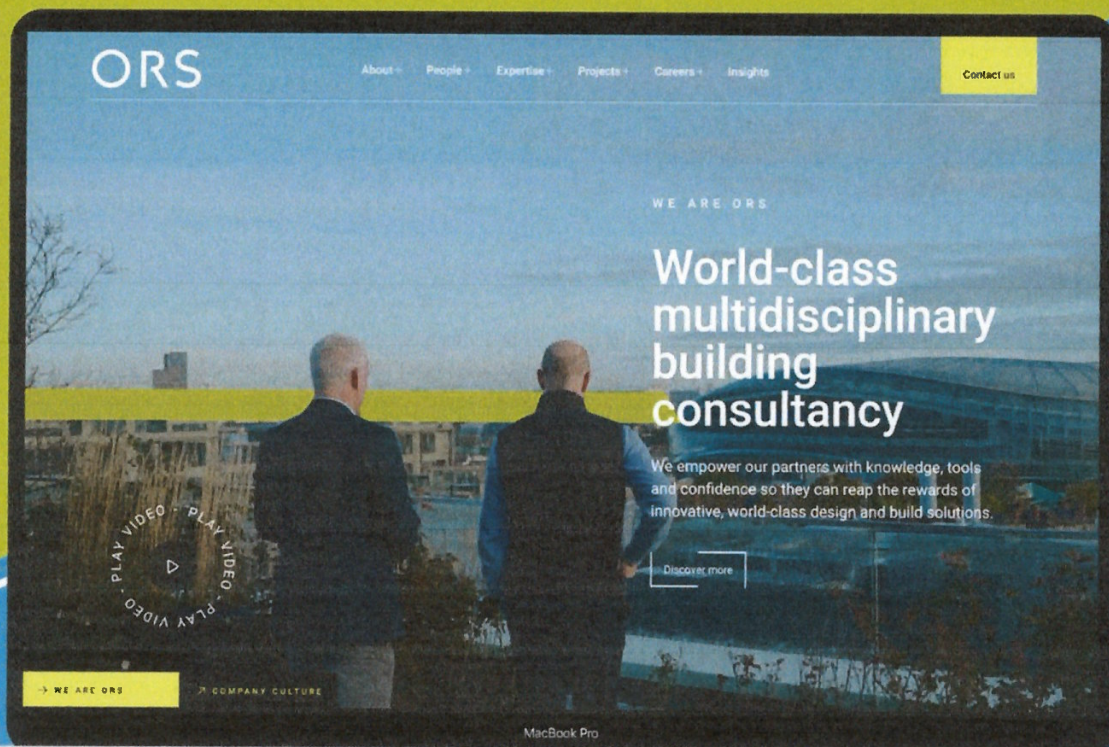
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