

# Natura Impact Statement for Proposed Wastewater Treatment System in Rosses Upper, Rosses Point, Co. Sligo.

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## 1. Introduction

### 1.1. Requirement for an Appropriate Assessment

In August 2024 Coyle Environmental Ltd was appointed on behalf of Graham Byrne to provide the necessary information to allow the competent authority (in this case Sligo County Council) to conduct an Article 6 (3) Appropriate Assessment for a proposed development on Location. This information is being submitted as a Natura Impact Statement (NIS).

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 NIS comprises an assessment of the plan or project and it 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. The Aim of the Report

This Natura Impact Statement (NIS) has been prepared in accordance with the current guidance (DoEHLG, 2009, Revised February 2010).

The purpose of this NIS is to provide the information required to establish whether a proposed development is likely to have a significant impact 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.

## 2. Regulatory Context

### 2.1. Relevant Legislation

The EU Habitats Directive (92/43/EEC) provides legal protection for habitats and species of European importance. It sets up the Natura 2000 network, a European network of important ecological sites comprising of Special Areas of Conservation (SACs) designated under Member States under this directive and Special Protection Areas (SPAs) classified under the Birds Directive (Directive2009/147/EC).

The Birds Directive seeks to conserve all wild birds, protecting birds, their eggs, nests and habitats. The Directive (Directive2009/147/EC) requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conservation of bird species listed in Annex 1 of the Directive. SPAs are selected for threatened and migratory bird species (listed in Annex I of the Birds Directive). SPA areas are of international importance for these migratory birds.

The EU Habitats Directive (92/43/EEC) also requires that protection is given to sites (Special Areas of Conservation) which are made up of, or support, particular habitats and species listed in annexes to this Directive.

To protect this network, Articles 6(3) and 6(4) of this Directive also call for the undertaking of an Appropriate Assessment on any plan or project, not directly connected or necessary for the management of which is likely to have a significant effect on any European designated sites in view of the conservation objectives.

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

Article 6(4) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission to other imperative reasons of overriding public interest.”

The Water Framework Directive (WFD) (2000/60/EC) aims to ensure that Member States achieve water quality at least *Good Status* in rivers, lakes, groundwater, estuaries and coastal waters by 2027 and that status does not deteriorate in any waters. The WFD was transposed

into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). Water quality must be protected and highly impacts species diversity as such it is an important factor to consider in Appropriate Assessment.

### 3. Methodology

#### 3.1. Appropriate Assessment

This AA has been prepared with reference to the following:

- 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.
- Office of the Planning Regulator (2021). Appropriate Assessment Screening for Development Management.
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.
- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.

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 the site integrity.

- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

### 3.2. Statement of Competency

This AA Screening report was carried out by Catherine Howarth. Catherine Howarth has a BSc (Honours) in Conservation Biology and Ecology from the University of Exeter and a Certificate in Ecological Consultancy. Catherine Howarth has over 16 years' experience in habitat monitoring and surveying.

### 3.3. Field Based Studies

The site at Rosses Upper, Rosses Point, Co. Sligo was visited for the purposes of Appropriate Assessment for the original development by Aisling Walsh of Ash Ecology and Environmental on the 10th of May 2019, when field notes, species lists and photographs were taken. The site was surveyed in accordance with the Heritage Council's *Habitat Survey Guidelines* (Smith et al., 2010) and the Institute of Environmental Assessment's *Guidelines for Baselines Ecological Assessment* (IEA, 1995). Habitats within the application site were classified in accordance with Level 3 of *A Guide to Habitats in Ireland* (Fossit, 2000). These habitats are denoted in the text along with their habitat code, e.g., the habitat code for improved agricultural grassland is GA1. All mammal and bird activity was also noted. The site visit report was provided to Coyle Environmental Ltd. to inform our NIS.

### 3.4. Desk Studies & Consultation

A desk study was carried out to collate information on European sites in the vicinity of the proposed development. The following data sources were accessed to complete a thorough examination of potential impacts prior to the completion of this statement:

- 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.
- 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;
- Google Street View – High quality aerials and street images;
- Coyle Environmental – Information regarding the proposed development including site plans and specifications and information on the farm.
- Sligo County Council – Information on planning history in the area for the assessment of cumulative impacts.



### 3.5. Assessment Methodology

The development was assessed to identify any potential ecological impacts and its 'Zone of Influence' (Zoi). The Zoi of a proposed development is the geographical area over which it could affect the receiving environment in a manner that could have significant effects on the Qualifying Interests of a European site.

For significant effects to arise there must be a potential impact from a Source, i.e., a development, to a Receptor, i.e., a European site via an Ecological pathway e.g. a water course. If there is no ecological pathway or functional link between the proposed development and the European site, there is no potential for impact and the project can be screened out.

Based on the potential impacts and their Zoi, the Natura 2000 sites potentially at risk from direct, indirect or in-combination impacts were identified. The assessment considered all potential impact sources and pathways connecting the proposed development to Natura 2000 sites, in view of the conservation objectives supporting the favourable conservation condition of the site's Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

The conservation objectives relating to each Natura 2000 site and its QIs/SCIs are cited generally for SACs as "to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or Annex II species for which the SAC has been selected", and for SPAs "to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA".

The conservation status of a habitat is defined in Article 1 of the Directive. The conservation status of a natural habitat will be taken as favourable when:

- Its natural range and area it covers within that range is stable or increasing.
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future.
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- The population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats.
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future.
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

A distance of 15km is a baseline used for plans with regard to Zoi according to CIEEM 2018 Guidance, however the Zoi will vary for different ecological features depending on their sensitivity to an environmental change, therefore this must be evaluated on a case-by-case

basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors and the potential for in-combination effects. Where site-specific conservation objectives (SSCOs) have been prepared for a European site, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured. Where potential significant effects are identified, then these SSCO should be considered in detail.

#### 4. Screening

##### 4.1. Development Description

Graham Byrne is applying to Sligo County Council for planning permission for proposed a Wastewater Treatment System in Rosses Upper, Rosses Point, Co. Sligo. The current development will consist of the following:

Mr Graham currently has permission for the construction of a split-level dwelling house with domestic garage, access road, connection to public sewer and all associated site works which is near completion. Permission is now being sought for the installation of a wastewater treatment system.

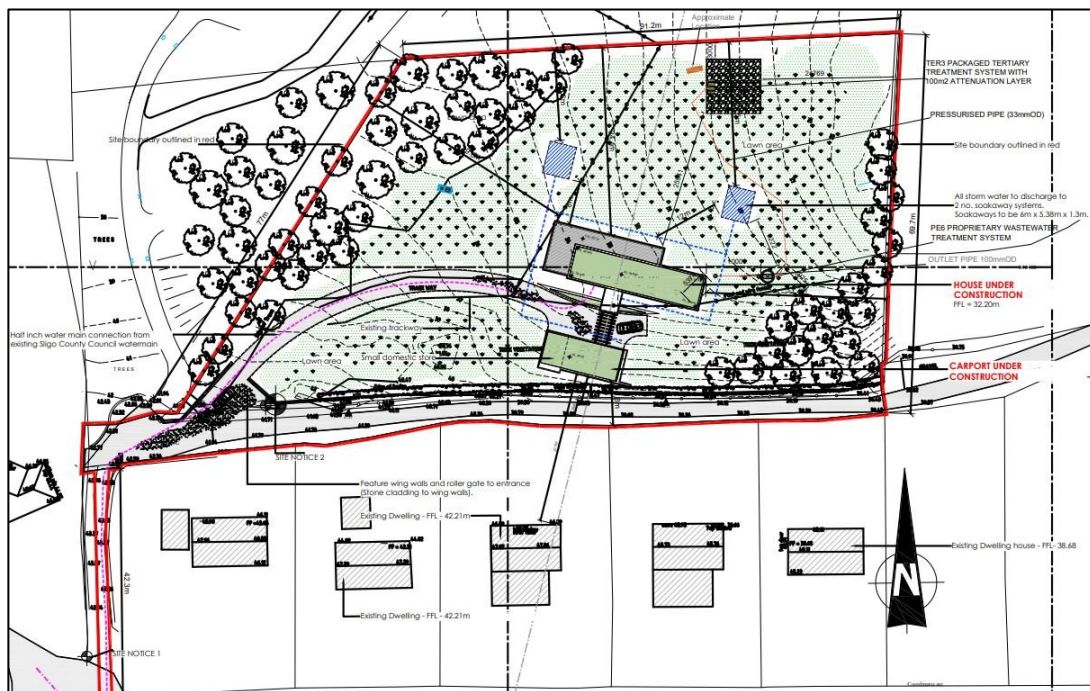


Figure 1 – Extract from Site layout with WWTS (James Lohan Engineers).

#### 4.1.1. Waste Water Treatment Plan

The application site is located within a locally important aquifer - karstified (Lk) with extreme groundwater vulnerability as per mapping produced from the Geological Survey of Ireland. The site has an R21 Protection Response which is acceptable subject to normal good practice.

The site characterisation form pertaining to this development (as prepared by Coyle Environmental) has concluded that a tertiary treatment system and infiltration / treatment area will be suitable for the conditions on the site. With a total daily demand of 900L/day a PE 6 proprietary treatment system with discharge to a Ter3 packaged tertiary unit with a 100m<sup>2</sup> attenuation layer has been recommended. The Percolation Area is designed in accordance with the EPA Code of Practice Wastewater Treatment and Disposal Systems serving Single Houses 2021. The treatment efficiency of the BAF system is 94% COD, 96.1% BOD, 99.1% NH<sub>4</sub>-N and 96.2% suspended solids. This will be constructed and operated in accordance with the EPA 2021 Guidelines.

#### 4.1.2. Surface Water Treatment Plan

Surface water is discharged via a green roof which absorbs the rainwater by buffering it in the plants, substrate and drainage layer. This delays the discharge of rainwater to the proposed soak pits. A green roof also helps purify rainwater and rainwater would also evaporate through the plants. This helps stabilize the groundwater level, reduce the peak load in the soak pits and reduces the risk of flooding.

#### 4.2. Site Location and Surrounding Environment

The site in question is approximately 0.79 hectares and is located in the village of Rosses Point in the townland of Rosses Upper, a coastal settlement located approx. 8km northwest of Sligo city, Grid Ref 54°18'39.3"N 8°33'08.6"W. The site is located on the northern part of the Plan Limit (as set out in the Rosses Mini-Plan and County Development Plan 2017-2023. The zoning of the subject site is Green Belt as set out in the Rosses Point Mini-Plan.

Surrounding land use is primarily a large (97.88ha) golf course to the northwest of the site (County Sligo Golf Course), also there is agricultural fields, scrub and a more concentrated area of dwellings to the south southwest of the site within Rosses Point Village. The landscape at and in the vicinity of the proposed works is rural in nature. The land use classification within the site, as defined by the 2018 CORINE landcover dataset, is classified as 'Land principally occupied by agriculture with significant areas of natural vegetation' while the bedrock of the site is 'Ballyshannon Limestone Formation'.

Site location maps are shown in Figures 2 and 3, whilst an aerial photograph of the site and its surrounding habitats are shown in Figures 4 and 5.



Figure 2 – Site Location Map with Site Pinned (NPWS)

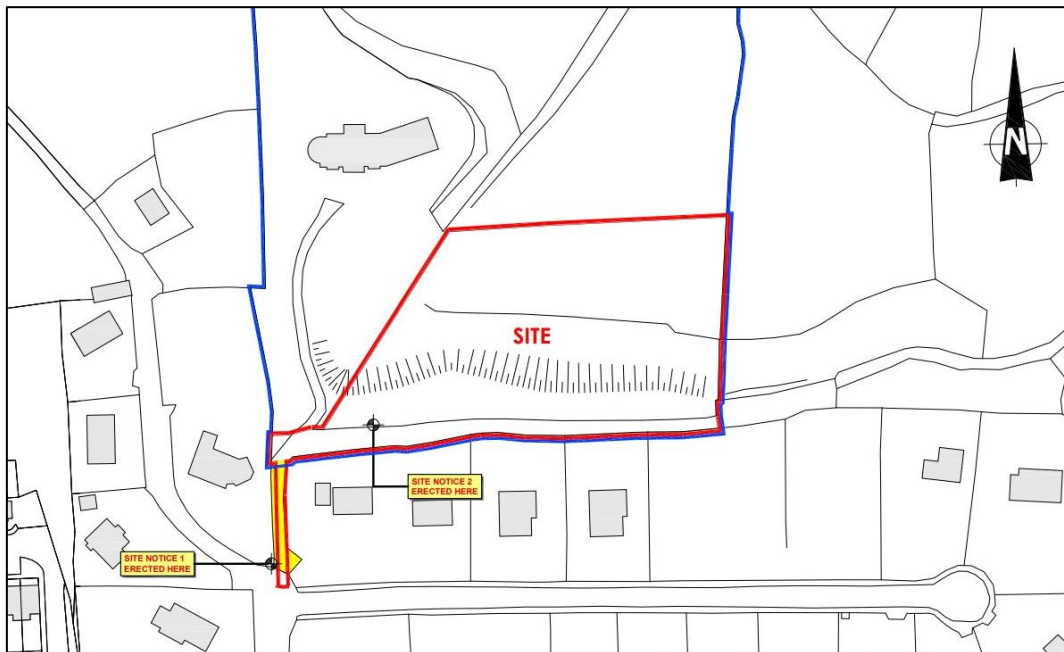


Figure 3 – Site Location Map Scale 1:1000 with Site Outlined in Red (James Lohan Engineers)





**Figure 4 – Aerial Photograph of the Site (Outlined in Red) and its Surrounding Habitats.**



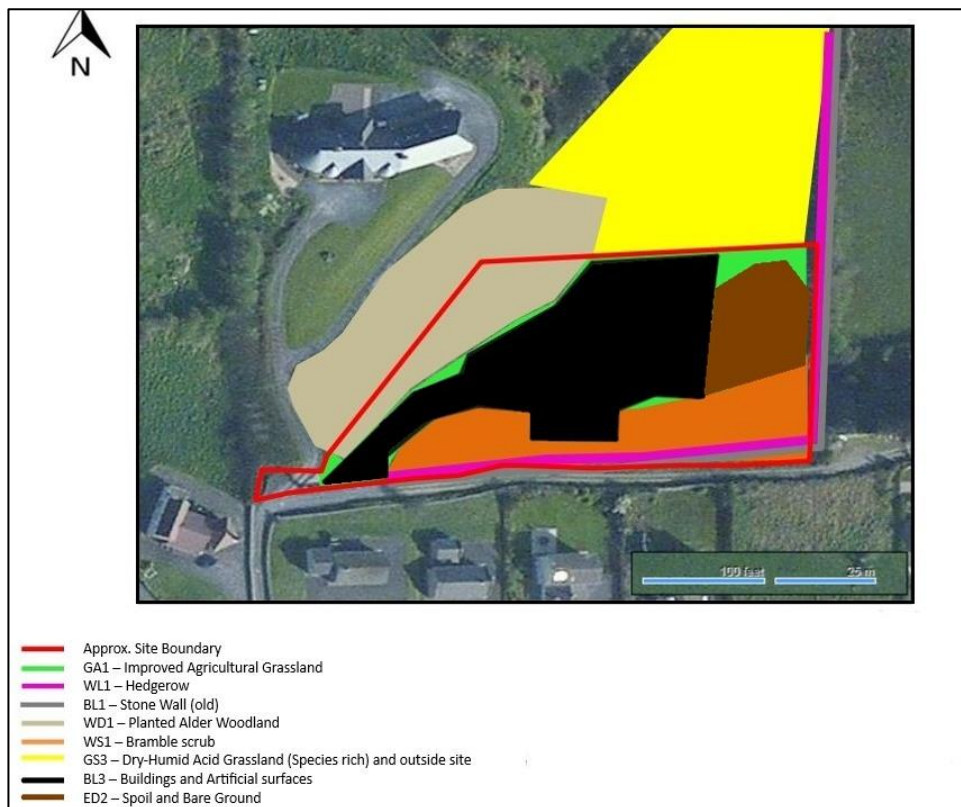
**Figure 5 – Aerial Photograph with WWTS location indicated with red arrow and its Surrounding Habitats.**

### 4.3. Habitats within the Site

No part of the site lies within nor is it immediately adjacent to any area that has been designated for nature conservation purposes. The habitats within the site are described in greater detail below.

The main habitat on the site is now 'Buildings and Artificial Surfaces' (BL3) due to the construction on what was previously a field of 'Improved Agricultural Grassland' (GA1). The east and south site boundaries are comprised of hedgerows (WL1) growing adjacent to an old stonewall (BL1). The hedgerows were dominated by mature ash (*Fraxinus excelsior*) and hawthorn (*Crataegus monogyna*) with dense ivy (*Hedera helix*) covering these. An area of bramble scrub (WS1) is inside the southern boundary. The WWTS will be on an area of artificial surface (BL3) and bare ground (ED2).

There is planted woodland on the site of Alder (*Alnus glutinosa*) which will be retained to the northwest of site. An area of Dry-Humid Acid Grassland (GS3) lies outside the site boundary and has a species rich flora. All habitats were mapped and are shown on the accompanying habitat map 6.



**Figure 6 – Habitat Map from Ash Ecology & Environmental, updated by Coyle Env.**

### 4.4. Water Features and Quality

The application site is located within the Sligo Bay Catchment (35), and the Drumcliff Sub-Catchment (35\_13). The site is within the Rosses Point Groundwater Body and the status of this



groundwater body is good. The closest watercourse is Rosses Lower Stream, which is 100m northwest of the site and flows into the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC. The site is less than 600m from the coastline of Garavogue Estuary which has moderate WFD Status and 1km from Sligo Bay which has good WFD status.

#### 4.5. 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 synopses, qualifying interests and conservation objectives. In addition, any other sites further than this, but potentially within its 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 proposed works are within 15km of eight SACs and eight SPAs that have been designated under the EU Habitats Directive and the EU Birds Directive. Maps and aerial photographs showing the locations of Natura 2000 sites relative to the application site are shown in Figures 7 and 8. These designated areas, their closest points to the development and QIs are outlined in Table 1. A full description of these sites can be read on the website of the National Parks and Wildlife Service (npws.ie).

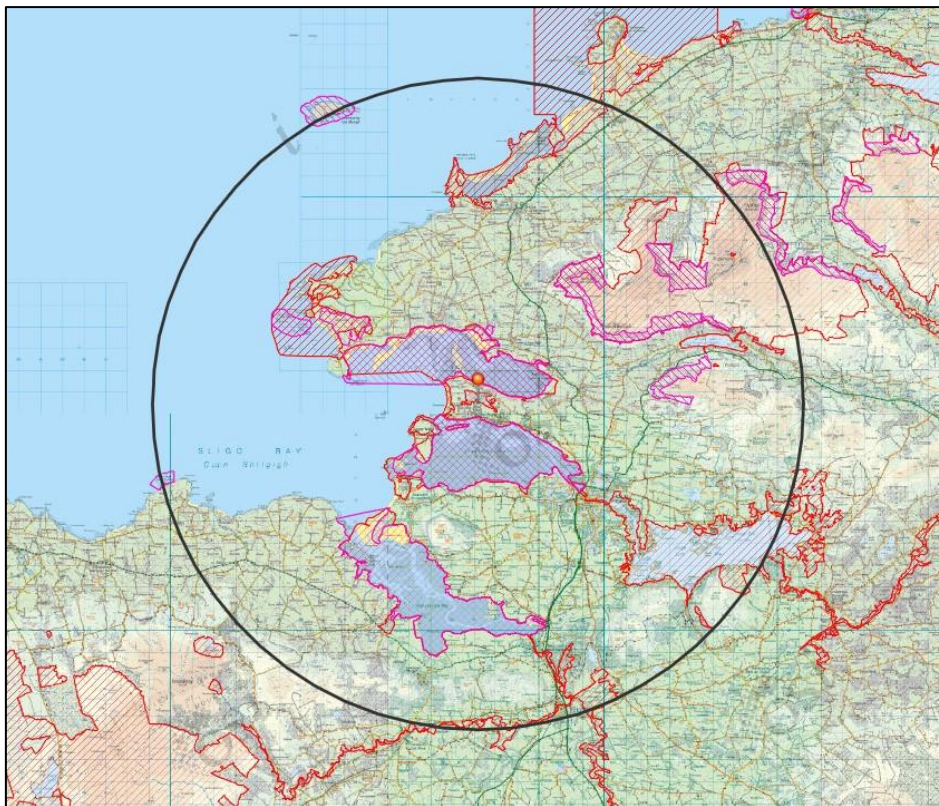


Figure 7 – The Application Site in relation to the Natura 2000 Sites within 15km (Red/Pink Hatching)



**Figure 8 – The Application Site in relation to SACs and SPAs (Red/Pink Hatching)**



Table 1 – Natura 2000 sites within 15km of the site.

Site Name & Code	Distance	Qualifying Interests	Screened In / Out
<b>Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC</b> SAC 000627	0.12km N, W, E	<b>Habitats</b> 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 5130 <i>Juniperus communis</i> formations on heaths or calcareous grasslands 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (* important orchid sites) 7220 Petrifying springs with tufa formation ( <i>Cratoneurion</i> )* <b>Species</b> 1014 Narrow-mouthed Whorl Snail ( <i>Vertigo angustior</i> ) 1095 Sea Lamprey ( <i>Petromyzon marinus</i> ) 1099 River Lamprey ( <i>Lampetra fluviatilis</i> ) 1365 Harbour Seal ( <i>Phoca vitulina</i> )	<b>Screened In</b> – There is no direct source-pathway-receptor linkage between the application site and this SAC, however given the proximity of the SAC to the application site the potential for significant effects upon this SAC and its QIs arising from constructional and operational impacts cannot be ruled out and further assessment is required.
<b>Cummeen Strand SPA</b> SPA 004035	0.57km S, SW, SE	<b>Birds</b> A046 Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) A130 Oystercatcher ( <i>Haematopus ostralegus</i> ) A162 Redshank ( <i>Tringa totanus</i> ) <b>Habitats</b> A999 Wetlands	<b>Screened Out</b> – Despite the close proximity of this SAC to the application site. There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.
<b>Drumcliff Bay SPA</b> SPA 004013	0.97km N, NE, NW	<b>Birds</b> A144 Sanderling ( <i>Calidris alba</i> ) A157 Bar-tailed Godwit ( <i>Limosa lapponica</i> )	<b>Screened Out</b> – Despite the close proximity of this SAC to the application site. There is no hydrological or ecological connectivity between

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		<p><b>Habitats</b> A999 Wetlands</p>	<p>the application site and this SAC, and significant effects upon this SAC will not arise.</p>
<p><b>Ballintemple and Ballygilgan SPA</b> SPA 004234</p>	<p>2.98km NW</p>	<p><b>Birds</b> A045 Barnacle Goose (<i>Branta leucopsis</i>)</p>	<p><b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.</p>
<p><b>Ben Bulbin, Gleniff and Glenade Complex SAC</b> SAC 000623</p>	<p>6.16km E, NE</p>	<p><b>Habitats</b> 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation 4010 Northern Atlantic wet heaths with Erica tetralix 4030 European dry heaths 4060 Alpine and Boreal heaths 5130 Juniperus communis formations on heaths or calcareous grasslands 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) 6230 Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 7130 Blanket bogs (* if active bog) 7140 Transition mires and quaking bogs 7220 Petrifying springs with tufa formation (Cratoneurion)* 7230 Alkaline fens 8110 Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) 8120 Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) 8210 Calcareous rocky slopes with chasmophytic vegetation <b>Species</b></p>	<p><b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.</p>

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		1013 Geyer's Whorl Snail ( <i>Vertigo geyeri</i> ) 1355 Otter ( <i>Lutra lutra</i> )	
<b>Sligo/Leitrim Uplands SPA</b> SPA 004187	6.17km E, NE	<b>Birds</b> A103 Peregrine ( <i>Falco peregrinus</i> ) A346 Chough ( <i>Pyrrhocorax pyrrhocorax</i> )	<b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.
<b>Ballysadare Bay SPA</b> SPA 004129	6.24km SW	<b>Birds</b> A046 Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) A141 Grey Plover ( <i>Pluvialis squatarola</i> ) A149 Dunlin ( <i>Calidris alpina</i> ) A157 Bar-tailed Godwit ( <i>Limosa lapponica</i> ) A162 Redshank ( <i>Tringa totanus</i> ) <b>Habitats</b> A999 Wetlands	<b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.
<b>Ballysadare Bay SAC</b> SAC 000622	6.32km SW, S	<b>Habitats</b> 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 2190 Humid dune slacks <b>Species</b> 1014 Narrow-mouthed Whorl Snail ( <i>Vertigo angustior</i> ) 1365 Harbour Seal ( <i>Phoca vitulina</i> )	<b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.
<b>Lough Gill SAC</b> SAC 001976	6.59km SE	<b>Habitats</b> 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (* important orchid	<b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.

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		<p>sites)</p> <p>91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles</p> <p>91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)*</p> <p><b>Species</b></p> <p>1092 White-clawed Crayfish (Austropotamobius pallipes)</p> <p>1095 Sea Lamprey (Petromyzon marinus)</p> <p>1096 Brook Lamprey (Lampetra planeri)</p> <p>1099 River Lamprey (Lampetra fluviatilis)</p> <p>1106 Salmon (Salmo salar)</p> <p>1355 Otter (Lutra lutra)</p>	
<p><b>Ardboline Island and Horse Island SPA</b></p> <p>SPA 004135</p>	<p>8.52km NW</p>	<p><b>Birds</b></p> <p>A017 Cormorant (Phalacrocorax carbo)</p> <p>A045 Barnacle Goose (Branta leucopsis)</p>	<p><b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.</p>
<p><b>Streedagh Point Dunes SAC</b></p> <p>SAC 001680</p>	<p>9.06km N</p>	<p><b>Habitats</b></p> <p>1140 Mudflats and sandflats not covered by seawater at low tide</p> <p>1220 Perennial vegetation of stony banks</p> <p>1330 Atlantic salt meadows (GlaucoPuccinellietalia maritimae)</p> <p>1410 Mediterranean salt meadows (Juncetalia maritimi)</p> <p>2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes)</p> <p>2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*</p> <p><b>Species</b></p> <p>1014 Narrowmouthed Whorl Snail (Vertigo angustior)</p>	<p><b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.</p>
<p><b>Unshin River SAC</b></p> <p>SAC 001898</p>	<p>11.05km SE</p>	<p><b>Habitats</b></p> <p>3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation</p> <p>6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid</p>	<p><b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.</p>

		<p>sites) 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* <b>Species</b> 1106 Salmon (<i>Salmo salar</i>) 1355 Otter (<i>Lutra lutra</i>)</p>	<p style="color: red; transform: rotate(-45deg); font-weight: bold;">RECEIVED: 02/10/2024</p>
<p><b>Union Wood SAC</b> SAC 000638</p>	<p>11.8km SE</p>	<p><b>Habitats</b> 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles</p>	<p><b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC.</p>
<p><b>Bunduff Lough and Machair/Trawalua/Mullaghmore SAC</b> SAC 000625</p>	<p>11.95km NE</p>	<p><b>Habitats</b> 1140 Mudflats and sandflats not covered by seawater at low tide 1160 Large shallow inlets and bays 1170 Reefs 2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (greydunes)* 2190 Humid dune slacks 21A0 Machairs (* in Ireland) 5130 Juniperus communis formations on heaths or calcareous grasslands 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (FestucoBrometalia) (* important orchid sites) 7230 Alkaline fens <b>Species</b> 1065 Marsh Fritillary (Euphydryas aurinia) 1395 Petalwort (Petalophyllum ralfsii)</p>	<p><b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC, and significant effects upon this SAC will not arise.</p>
<p><b>Aughris Head SPA</b> SPA 004133</p>	<p>14.35km SW</p>	<p><b>Birds</b> A188 Kittiwake (Rissa tridactyla)</p>	<p><b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC.</p>

<p><b>Inishmurray SPA</b> SPA 004068</p>	<p>14.62km NW</p>	<p><b>Birds</b> A018 Shag (<i>Phalacrocorax aristotelis</i>) A045 Barnacle Goose (<i>Branta leucopsis</i>) A184 Herring Gull (<i>Larus argentatus</i>) A194 Arctic Tern (<i>Sterna paradisaea</i>)</p>	<p><b>Screened Out</b> - There is no hydrological or ecological connectivity between the application site and this SAC and significant effects upon this SAC will not arise.</p>
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#### 4.6. Identification of Potential Impacts

The proposed development at Rosses Upper is 0.121km upstream of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC and is uphill from a drainage ditch currently forms a hydrological connection to the SAC. In this regard the potential impacts regarding water quality, affecting the Rosses Lower Stream, part of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, given its close proximity will be addressed in detail in Section 5.

There are no expected impacts from the proposed works on the other designated sites listed in Table 1 as there are no direct hydrological connection or the distance is deemed far enough away that any disturbance emanating from the proposed works would be both temporary and on a negligible scale so as not to have an impact. Accordingly, these sites will not be discussed regarding potential impact.

The development is not directly connected with or necessary for the management of the designated site. In the absence of any mitigation, impacts upon these designated sites arising from the operation of this proposed development cannot be ruled out. Therefore, taking a conservative approach, in a worst-case scenario and in the absence of mitigation, an accidental pollution event of a sufficient magnitude during construction or operation, either alone or in combination with other pollution sources, could potentially affect the surface water quality in these local watercourses to an extent that undermines the conservation objectives of certain qualifying interests of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC. A reduction in water quality locally has the potential to affect the aquatic habitats and natural conditions that are required to maintain or achieve the specific attributes and targets of the qualifying interests associated with Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC and the conservation objectives that have been set for these QIs.

Therefore, following an evaluation of the relevant information including the characteristics of the proposed development and the likelihood of significant effects on the sites and with regards to the tenets of the precautionary principal, it is considered in the opinion of this author that, on the basis of objective information, it is not possible to exclude that the proposed development, either individually or in combination with other plans or projects, will have a likely significant effect on the above European sites.

Only those features of the development that have the potential to affect the integrity and conservation objectives of the identified Natura sites and protected species have been considered. Several factors were examined at this stage and dismissed or carried forward for Appropriate Assessment as relevant. The following areas were examined in relation to potential impacts and subsequent effects from the proposed development on the Natura 2000 sites identified:

- Deterioration of water quality in designated areas resulting from pollution from surface water run-off during site preparation and WWTS installation.
- Deterioration of water quality in designated areas arising from pollution during the operation of the site.
- Cumulative impacts with other proposed/existing developments.

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#### 4.7. Screening Conclusions

This section considers the list of sites identified in Section 3.3. It can be considered that all sites, except for the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC can be excluded from the remainder of the Appropriate Assessment process. This is based on their distance from the proposed development and the fact that it is outside of the Zone of Influence of these sites and that no impacts are likely to arise. The remaining concerns will therefore focus upon the protected habitats and species of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC.

The proposed development is not directly connected with or necessary to the nature conservation management of the designated site. Therefore, following consideration of the location of Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC in relation to the proposed development at Rosses Upper and the potential impacts that may occur, this project must proceed to the next stage of Appropriate Assessment, the Natura Impact Assessment.

### 5. Stage II – Appropriate Assessment

#### 5.1. Introduction

The main objective of this stage (Stage 2, Natura Impact Statement) in the Appropriate Assessment process is to determine whether the development of the proposed planning application at Rosses Upper (either alone or in combination with other plans, programmes and projects) will result in significant adverse impacts to the integrity of the Natura 2000 sites identified with respect to these site's structures, species, functions and/or conservation objectives. This stage also outlines the mitigation measures that should be taken to avoid any negative impacts of this application, should it receive consent.

#### 5.2. Site Specific Conservation Objectives

For the site that has been screened in the Site Specific Conservation Objectives (SSCOs) were reviewed considering the proposed development and the potential impacts that might occur. These SSCO's aim to define the favourable conservation condition for the habitats or species at that site. They outline certain attributes such as distribution, population structure, water



quality for different species and habitats with targets, which define favourable condition for a habitat or species at a particular site. The maintenance of habitats and species within the Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at national level. Where available, these SSCOs can be downloaded on the NPWS website. Any potential threats to the attributes and targets as defined in these SSCOs were assessed and where necessary, mitigated for.

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. Natura 2000 Sites Identified

A summary of the site screened in is presented below. Full details of these sites are available on the website of the National Parks and Wildlife Service.

#### 5.3.1. Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC (000627)

This large coastal site extends from Cullamore in the north-west to Killaspug in the south-west, and from Sligo town in the south-east to Drumcliff village in the northeast. It encompasses two large, shallow bays, Drumcliff Bay and Sligo Harbour, and both Ardboline and Horse Island. Sand dunes and sand hills at Rosses Point, Killaspug, Yellow Strand and Coney Island are included, as are grasslands at Ballintemple and Ballygilgan (Lissadell), along with a variety of other habitats such as woodland, saltmarsh, sandy beaches, boulder beaches, shingle, fen, freshwater marshes, rocky sea cliffs and lakes. The site is largely underlain by Carboniferous limestone, but acidic rocks are also found on the Rosses Point peninsula. At Serpent Rock in the northwestern section of the site the most complete section of the northwestern Carboniferous strata is exposed. Here are found an excellent series of fossilised corals which, in some strata, stand out from the rock matrix. Cummeen Strand/Drumcliff Bay (Sligo Bay) is an important site of high conservation significance, which includes a wide variety of habitat types, including several listed on Annex I of the E.U. Habitats Directive, several species listed on Annex II of this Directive, large and important populations of waterfowl and seabirds, and several rare plant species.

In 2024, the NPWS published Site Specific Conservation Objectives (SSCOs) for the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC. These SSCO's can be downloaded on the NPWS website. Any potential threats to the attributes and targets as defined in these SSCO's were assessed and where necessary, mitigated for.

5.4. Qualifying Interests of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC – Screened Out  
 Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC is a large, complex and varied site. Certain qualifying interests of these sites will not be potentially impacted upon from this proposed development, either due to the distance involved or because they are features that are outside of the Zone of Influence of the site. These features and the reason for their screening out are listed in Table 2. In considering these QI features, the SSCO's of the site were referred to, along with the most recent Article 17 Reports on the status of protected habitats and species in Ireland (NPWS, 2019).

**Table 2 – The Qualifying Interests of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC (Screened Out)**

Designated Feature & Code	Rationale for Screening Out
Estuaries 1130	The Habitat covers around 14% of the SAC. This habitat is not present within or adjacent to the proposed application site, with the Lower Rosses Stream discharging downstream of the estuarine habitat. There will be no loss or fragmentation of this habitat within the SAC, and significant effects upon it can be ruled out.
Embryonic shifting dunes 2110	This habitat is not present within or adjacent to the proposed application site. There will be no loss or fragmentation of this habitat within the SAC, and significant effects upon it can be ruled out.
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2120	This habitat is not present within or adjacent to the proposed application site. There will be no loss or fragmentation of this habitat within the SAC, and significant effects upon it can be ruled out.
Fixed coastal dunes with herbaceous vegetation (grey dunes) * 2130	This habitat is not present within or adjacent to the proposed application site. There will be no loss or fragmentation of this habitat within the SAC, and significant effects upon it can be ruled out.
<i>Juniperus communis</i> formations on heaths or calcareous grasslands 5130	This habitat is not present within or adjacent to the proposed application site. There will be no loss or fragmentation of this habitat within the SAC, and significant effects upon it can be ruled out.
Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco Brometalia</i> )	This habitat is not present within or adjacent to the proposed application site. There will be no loss or fragmentation of this habitat within the SAC, and significant effects upon it can be ruled out.

6210	
Petrifying springs with tufa formation (Cratoneurion)* 7220	This habitat is not present within or adjacent to the proposed application site. There will be no loss or fragmentation of this habitat within the SAC, and significant effects upon it can be ruled out.
Narrow-mouthed Whorl Snail <i>Vertigo angustior</i> 1014	This species is not present within or adjacent to the proposed application site. There will be no loss or fragmentation of this species habitat within the SAC, and significant effects upon it can be ruled out.
Sea Lamprey <i>Petromyzon marinus</i> 1095	This SAC only covers the marine/estuarine habitat, and it is not anticipated that it contains suitable spawning or nursery habitat. There will be no loss or fragmentation of this species habitat within the SAC, and significant effects upon it can be ruled out.
River Lamprey <i>Lampetra fluviatilis</i> 1099	This SAC only covers the marine/estuarine habitat, and it is not anticipated that it contains suitable spawning or nursery habitat. There will be no loss or fragmentation of this species habitat within the SAC, and significant effects upon it can be ruled out.
Harbour Seal <i>Phoca vitulina</i> 1365	This species breeding and resting sites are not present within or adjacent to the proposed application site. There will be no loss or fragmentation of this species habitat within the SAC, and significant effects upon it can be ruled out.

5.5. Qualifying Interests of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC – Screened In

Table 3 describes the qualifying interest of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC that have the potential to be impacted upon from the proposed development, i.e., these QIs have been screened in and potential effects have been considered in terms of the SSCOs that have been set.

**Table 3 – The Qualifying Interests of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC (Screened In)**

Designated Feature & Code	Rationale for Screening In
Mudflats and sandflats not covered by seawater at low tide 1140	The Habitat covers around 46% of the SAC, a section of which is downstream of the Rosses Lower Stream. Species dependent on this habitat could be influenced by a reduction in water quality.

5.6. SSCOS of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC QI (Screened In)

**Mudflats and sandflats not covered by seawater at low tide (1140)**

To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, which is defined by the following list of attributes and targets:

**Table 4 – Mudflats and sandflats not covered by seawater at low tide (1140)**

Attribute	Measure	Target
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes
Community extent	Hectares	Maintain the extent of the Zostera-dominated community and the Mytilidae-dominated community complex, subject to natural processes
Community structure: Zostera density	Shoots/m <sup>2</sup>	Conserve the high quality of the Zostera-dominated community, subject to natural processes
Community structure: Mytilus edulis density	Individuals/m <sup>2</sup>	Conserve the high quality of the Mytilidae-dominated community complex, subject to natural processes
Community distribution	Hectares	Conserve the following community types in a natural condition: Intertidal fine sand with Peringia ulvae and Pygospio elegans community complex; Estuarine mixed sediment to sandy mud with Hediste diversicolor and oligochaetes community complex; Fine sand with crustaceans and Scololepis (Scololepis) squamata community complex; Fine sand with Angulus spp. and Nephtys spp. community complex

5.7. Potential Significant Effects

5.7.1. Introduction

This section will establish whether the impacts of the proposed WWTS at the Rosses Upper site that were identified in the previous section, are likely to occur and whether they are significant. The identification of potential impacts and the assessment of their significance typically requires the identification of the type and magnitude of the impacts; whether impacts will be short term or long term, direct, indirect or cumulative and will they occur during construction or operation. 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 impacts on the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, were listed. These concerns are again listed below, and they will be dealt with in more detail in this section.

1. Deterioration of water quality in designated areas resulting from pollution from surface water run-off during site preparation and installation of the WWTS.
2. Deterioration of water quality in designated areas arising from pollution during the operation of the site.
3. Cumulative impacts with other proposed/existing developments.

#### 5.7.2. Deterioration in Water Quality in the SAC/SPA During Installation

The proposed development will involve the excavation of soil. Any additional surface water run-off, due to the construction works of the proposed works, to receiving watercourses have some limited potential to have a negative impact on the water quality the Rosses Lower Stream which is located downhill of the site and is part of the Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC. The WWTS must be constructed and operated in accordance with the EPA 2021 Guidelines.

#### 5.7.3. Deterioration in Water Quality in the SAC Post Construction / Operation

Negative impacts upon water quality in the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC arising from the operation of this proposed WWTS have also been considered. The WWTS system installed must be capable of appropriately filtering and treating all wastewater from the site. The proposed development will have a maximum design population of 6. no persons. The Environmental Protection Agency's Code of Practice 2021 states that each person produces 150 litres of water per day. This gives us a total daily usage of 900 litres at the proposed dwelling house. Results from the percolation test yields a Subsurface Value of 45.00 min/25mm and a Surface Value of 37.67 min/25mm.

With a total daily demand of 900L/day a PE 6 proprietary treatment system is proposed with discharge to a Ter3 packaged tertiary unit with a 100m<sup>2</sup> attenuation layer. The Percolation Area is designed in accordance with the EPA Code of Practice Wastewater Treatment and Disposal Systems serving Single Houses 2021. The installation of the correct WWTS should eliminate any threat of pollution of groundwater from foul waste or sewerage.

#### 5.7.4. Cumulative impacts with other proposed/existing developments

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

In-combination effects may arise from the development of other projects in the vicinity of the site, such as construction of housing, roads, rail, water and wastewater infrastructure, gas, electricity, provision of tourism facilities and telecommunications infrastructure, however, the in-combination effects of other developments would depend on factors such as the distance in relation to the site, the scale and the characteristics e.g. the types and quantities of emissions.

In the past 5 years there have been over 70 applications for planning permission with 'Rosses Point' in the address to Sligo County Council including the current application.

Finally, the following plans were reviewed and considered for possible in-combination effects with the proposed project:

- Sligo County Development Plan, 2017-2023;
- County Development Plan 2017-2023 Consolidated Draft + Adopted Amendments – August 2017 Volume 2, Chapter 31
- Rosses Point Mini-Plan
- County Sligo Heritage Plan 2016-2020
- Irish Water Interim Revenue Control 2017
- 2018 Investment Plan 2017 - 2021
- River Basin Management Plan (RBMP) 2018-2021
- Natura Impact Statement of the RBMP 2018-2021

With the implementation of the mitigation measures that are included as part of this NIS, the proposed development will not lead to cumulative impacts upon any designated site when considered in combination with other developments that have been properly screened for AA, or where an NIS was submitted.

Any future application in the area that has the potential to impact upon these Natura 2000 sites will be subjected to Appropriate Assessment as required under Articles 6(3) of the Habitats Directive. Following mitigation, this current development will have no cumulative impacts upon the SAC identified when considered in combination with any other development that has been screened for no impacts themselves (Stage 1) or where potential impacts have been mitigated against (Stage 2 AA / NIS).

## 6. Mitigation Measures

To protect Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC and to avoid any reductions in water quality in the area surrounding the proposed development site, several site-specific mitigation measures have been recommended and these must be implemented and followed.

The implementation of these measures will ensure the protection of Natura 2000 habitats and species, and the local non-designated ecological receptors. The primary parties responsible for the implementation of these measures include the applicants, the project manager and the construction contractors.

#### General Good Practice and Initial Works

- Upon appointment of the construction contractor, this team will also be made aware of the sensitivity of the site and the mitigation measures required to protect habitats, groundwater and surface water quality. All measures will be undertaken from initial site works until the completion of all construction and landscaping works on site.
- Prior to the commencement of developments on site, the site engineer and the contractors must be made aware of the ecological sensitivity of the site and its proximity and connection to the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC.

#### Management of Construction Waste and Soil

- All construction waste must be removed from site by a registered contractor to a registered site. Evidence of the movement and safe disposal of the construction waste must be retained and presented to Local Authority upon request.
- The applicants and construction contractors will be responsible for the safe removal of any construction waste generated on site. There must be no disposal of construction waste or topsoil in any designated site.
- All topsoil generated from site works should be stored within the application site until it is required for landscaping. It must not be stored outside the site boundaries, and it must not be used for the infilling of any area outside of the site. It must be stored at appropriate locations within the site, away from the river.
- If there is more topsoil than is needed for landscaping, it must be removed from site by a registered contractor for appropriate use elsewhere. The end location of the topsoil must be identified, and records presented to the local authority if requested.

#### Protection of Water Quality and Management of Pollutants

- Efficient construction practices and sequences should be employed on site, and this will minimise soil erosion and potential pollution of local watercourses with soil and sediment.
- The site of the WWTS has already been cleared for the current building works; however, any additional unnecessary clearance of vegetation should be avoided. The retention of these boundary areas will also help retain storm water run-off from the site during installation and operation.
- Works within the site should be avoided during periods of heavy rainfall.
- It is vital that there is no deterioration in water quality in the nearby watercourses. This will protect both habitats and species that are sensitive to pollution. Therefore, strict



controls of erosion, sediment generation and other pollutants associated with the installation process should be implemented, including the provision of attenuation measures, silt traps or geotextile curtains to reduce and intercept sediment release into any local watercourses.

- Guidelines in the following best practice documents should be adhered to:
  - Construction Industry Research and Information Association (CIRIA) (2005) *Environmental Good Practice on Site (C692)*
  - Construction Industry Research and Information Association (2001) *Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors (C532)*
  - Construction Industry Research and Information Association (2000) *Environmental Handbook for Building and Civil Engineering Projects (C512)*
  - Environmental Protection Agency (2015) *List of Waste and Determining if Waste is Hazardous or Non-Hazardous*
  - Environment Agency *et al.* (2015) *Guidance on the Classification and Assessment of Waste, Technical Guidance WM3*
- Silt fences and berms should be installed prior to the commencement of construction on site.
- The silt fences should be monitored daily to ensure that they remain functional throughout the construction of the proposed development. Maintenance of the fences should be carried out regularly. Fences should be inspected thoroughly after periods of heavy rainfall.
- Daily plant inspections must be completed by all plant operators on site to ensure that all plant is maintained in good working order. Where leaks are noted on these inspection sheets, the plant must be removed from operations for repairs as pollution control measures.

## 7. Appropriate Assessment Conclusion

This current NIS has been undertaken to evaluate the potential impacts of the proposed development regarding the effects upon the conservation objectives and qualifying interests (including the habitats and species) of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC. It is considered that following mitigation, that the proposed project does not have the potential to significantly affect the conservation objectives of these Natura 2000 sites and the integrity of these sites will not be adversely impacted.

The qualifying interests of the site and their potential to be impacted upon from the potential development were listed in Section 5.5. It is considered that these potential impacts can be 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 integrity of these sites will not be adversely



affected. Table 16 follows the integrity of the SAC / SPA checklist, which shows that the integrity of the site would not be affected by the proposed development.

**Table 5 – Integrity of Site 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

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Considering the above, it is deemed that with the implementation of the mitigation measures, that the proposed works do not have the potential to significantly affect the conservation objectives or qualifying interests of the Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC or any other Nature 2000 site.



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Consultant Ecologist.

## Appendix I - References and Further Reading

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**NPWS (2019)** *The Status of EU Protected Habitats and Species in Ireland. Species Assessments Volume 3. Version 1.0. Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Meath, Ireland.*

**NPWS (various)** – Documents relating to all Natura 2000 sites of Sligo Bay. All available online.