
MAYO COUNTY COUNCIL

PROVISION OF RENOVATION AND UPGRADE WORKS TO THE EXISTING BELMULLET PIER AND ASSOCIATED CARPARKING AND PUBLIC REALM AREAS AT BELMULLET CO. MAYO

SCREENING FOR APPROPRIATE ASSESSMENT

OCTOBER 2022

Mayo County Council,
Aras an Contae,
The Mall,
Castlebar
Co. Mayo
Ireland



Jennings O'Donovan & Partners Ltd.,

Consulting Engineers,
Finisklin Business Park,
Sligo.

Tel.: 071 – 9161416

Fax: 071 – 9161080

e mail: info@jodireland.com

web: www.jodireland.com



JENNINGS O'DONOVAN & PARTNERS LIMITED.

Project, Civil and Structural Consulting Engineers,
 FINISKLIN BUSINESS PARK,
 SLIGO,
 IRELAND.





Telephone (071) 91 61416
 Fax (071) 91 61080

Email info@jodireland.com
 Web Site www.jodireland.com

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Prepared by**Reviewed / Approved by**

Document FINAL	Name Dr. Monica Sullivan	Name Conor McCarthy
Date October 2022	Signature 	Signature 

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Directors: D. Kiely, C. McCarthy

Regional Director: A. Phelan

Consultants: C. Birney, R. Gillan

Senior R. Davis, S. Gilmartin, J. Healy, S. Lee,

Associates: J. McElvaney, T. McGloin, S. Molloy

Associates: B. Coyle, M. Forbes, D. Guilfoyle,
 L. McCormack, M. Sullivan

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MAYO COUNTY COUNCIL**PROVISION OF RENOVATION AND UPGRADE WORKS TO THE EXISTING BELMULLET PIER AND ASSOCIATED CARPARKING AND PUBLIC REALM AREAS AT BELMULLET****CO. MAYO****SCREENING FOR APPROPRIATE ASSESSMENT****CONTENTS**

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S0-Site Location Map

15524-C-007 Network Drawings Sheet 1

15524-C-011 Network Drawings Sheet 5

15524-C-020 Quay Road Pump Station Site Layout Plan Underground Services (Civil)

15524-C-021 Quay Road Pump Station General Arrangement

1. INTRODUCTION

1.1 BACKGROUND

Jennings O'Donovan & Partners Limited have been commissioned by Mayo County Council to carry out a Stage I Appropriate Assessment Screening under Article 6(3) of Council Directive 92/43/EEC (Habitats Directive) for the Proposed Renovation and Upgrade Works at Belmullet Pier, Co. Mayo. In general, the Council wish to provide/construct new footpaths, new landscaped areas, line markings, a social area on existing paving consisting of picnic tables, parasols etc. and the provision of an 'Aire de Service' type electricity/water/drainage connection points to camper vans.

The purpose of this report is to assess the various elements of the project in terms of potential impacts to European Sites within the Zone of Influence (Zol) of the project site. Potential cumulative impacts of the overall Proposed Renovation and Upgrade Works, individually and in-combination with other plans and projects within the area of the waterbody catchment were also assessed in relation to existing, or proposed elements of the project. Locations where works will be carried out were surveyed for the presence of protected habitats and species as set out in the Birds and Habitats Directives.

This proposal is not necessary for the conservation management of a European site.

1.2 AUTHOR'S QUALIFICATION AND EXPERTISE

This Stage I Appropriate Assessment Screening has been prepared by Dr. Monica Sullivan, Principal Environmental Scientist and Lead Ecologist at Jennings O'Donovan & Partners Limited. She is a full member of the Chartered Institute of Ecology and the Environmental Management and a chartered Environmentalist. Dr. Sullivan has over 35 years' experience in the natural sciences, specialising in fisheries management, aquatic ecology and freshwater invertebrate taxonomy. She has lectured since the mid 1990's – 2017 in invertebrate zoology, ecology and environmental pollution control to both masters and degree students. She was the examiner for the freshwater biology module for the Institute of Fisheries Management, England. Monica's experience includes invasive species surveys, management plans, ecological studies, Environmental Impact Assessment (EIA) screenings, Appropriate Assessment (AA) screenings, Natura Impact Statements (NIS), otter surveys, badger surveys, freshwater macroinvertebrate and instream flora surveys.

Qualified to doctorate level, Monica previously worked as a partner in an environmental consultancy, undertaking fieldwork and specialising in Environmental Assessments of medium to large scale infrastructural projects and the coordination and management of AA and Environmental Impact Assessment processes. She has a clear understanding of the legislative framework governing the extent of environmental investigations, assessments and reports required to secure the necessary approvals on all types of projects. She has extensive experience in management of specialist sub-consultants and working in a team environment and a history of collaborating with participants on research projects. Dr. Sullivan was author and researcher on an Environmental Government Program on invasive species. She is chief author of a chapter in the book Zebra Mussels in Europe and has published many papers

on the topic. She spent several years working as both English and Scientific editor for international scientific journals. In 2017, she was expert advisor for 'horizon scan' invasive species workshop.

1.3 REGULATORY CONTEXT

Under Section 177U (1) of the Planning Acts, a Screening for AA of the Proposed Renovation and Upgrade Works shall be carried out by the competent authority (in this case, Mayo County Council) to assess in view of best scientific knowledge, if that Proposed Renovation and Upgrade Works, individually or in combination with other plans or projects, is likely to have a significant effect(s) on any European sites.

Collectively, Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are referred to as the Natura 2000 Sites. The legal basis on which SACs are selected and designated is the EU Habitats Directive, 92/43/EEC transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended. The designation features of SACs are referred to as Qualifying Interests (QI) and include both species (excluding birds) and habitats. Similarly, Special Protection Areas (SPA's) are legislated in the Birds Directive 2009/147/EC. The designation features of SPAs are referred to as Special Conservation Interests (SCIs) which comprise bird species as well as wetland bird habitats.

In general terms, SACs and SPAs are considered to be of exceptional importance in terms of rare, endangered or vulnerable habitats and species within the European Community.

Article 6, paragraph 3 of the Habitats Directive states that:

"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".

The statutory agency responsible for the European sites is the National Parks and Wildlife Service of the Department of Culture, Heritage and the Gaeltacht.

This report has been prepared in accordance with current guideline documents:

- Assessment of plans and projects significantly effecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2001)
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DEHLG 2009, Revised February 2010)
- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government (DoEHLG, 2009, revised 2010)
- OPR Practice Note PN01: Appropriate Assessment Screening for Development Management, March 2021, Office of the Planning Regulator

- Communication from the Commission on the Precautionary Principle. Office for Official Publications of the European Communities, Luxembourg, (EC, 2000a)
- European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. No.477 of 2011).
- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission (EC, 2013).
- EU Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC (EC, 2007)
- Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018)
- Strict Protection of Animal Species, NPWS, 2021

The following European Court and Irish High Court rulings have been considered:

- C-127/02 Waddenzee v Staatssecretaris
- C-258/11 Sweetman v An Bord Pleanála
- C-512/12 Briels
- C-387/12 & C388/15 Orleans and others v Vlaams Gewest
- C-142/15 Moorbug
- C-323/17 People Over Wind and Peter Sweetman v Coillte
- C-162/17 Grace and Sweetman
- C-883/18 Holohan and others v An Bord Pleanála
- IEHC 84 (2019) - Kelly v An Bord Pleanála

Relevant plans from national to local scales are critical to inform a robust assessment of in-combination impacts; these are listed below:

- National Biodiversity Action Plan, for the period 2017-2021
- River Basin Management Plan for Ireland 2018-2021
- Mayo County Development Plan 2021-2027

1.4 THE STAGES IN AN APPROPRIATE ASSESSMENT

There are 4 stages in an Appropriate Assessment as outlined in the European Commission Guidance document (2001). The following is a brief summary of these steps:

Stage 1 - Screening: This stage examines the likely effects of a project either alone or in-combination with other projects upon a European site and considers whether it can be objectively concluded that these effects will not be significant.

Stage 2 - Appropriate Assessment: In this stage, the impact of the project on the integrity of the European site is considered, with respect to the conservation objectives of the site and to its structure and function.

Stage 3 - Assessment of Alternative Solutions: Should the Appropriate Assessment determine that adverse impacts are likely upon the European site, this stage examines alternative ways of implementing the project that, where possible, avoid these adverse impacts.

Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain: Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the European site will be necessary.

As part of this Screening for Appropriate Assessment, a desk-based study of the European site within the zone of influence (ZoI) of the Proposed Renovation and Upgrade Works are required.

1.5 SCREENING METHODOLOGY

The function of the Screening Assessment is to identify whether or not the proposal will have a likely significant effect on any European Site. In this context “likely” refers to the presence of doubt with regard to the absence of significant effects (ECJ case C-127/02) and “significant” means not trivial or inconsequential but an effect that has the potential to undermine the site’s conservation objectives (ECJ case C-127/02). In other words, any effect that compromises the functioning and viability of a site and interferes with achieving the conservation objectives for the site would constitute a significant effect.

The nature of the likely interactions between the project and the integrity of a European Site will depend upon the sensitivity of the European Site’s qualifying features to potential impacts arising from the project; the current conservation status of the European Site and its qualifying features; and any likely changes to key environmental indicators (e.g. water quality) that underpin the conservation status of European Sites and their qualifying features, in-combination with other plans and projects.

The European Commission (2018) Guidelines outline the stages involved in undertaking a Screening Assessment of a project that has the potential to have likely significant effects on European Sites. The methodology adopted for this Screening Assessment is informed by these guidelines and was undertaken in the following steps:

1. Define the project and determine whether it is directly connected with or necessary for the conservation management of European Sites
2. Identify other plans or projects that, in-combination with the project, have the potential to effect European Sites
3. Assess whether or not the project is likely to have significant effects on European Sites in the view of its conservation objectives.

1.6 DESK STUDY

A desk study was carried out to collate the available information on the ecological environment of the proposed site. The National Parks and Wildlife Service (NPWS) database was consulted concerning designated conservation areas and records of rare and protected plant and animal species in the vicinity of the Proposed Renovation and Upgrade Works. The EPA Geoportal website was used when researching European designated sites and watercourses. The National Biodiversity Data Centre (NBDC) website was also consulted. One kilometre Grid square ‘F7032’ incorporates the entire project site (Figure 1.1); fifteen birds on the BOCCI4 2020-2026 list of medium and high conservation concern have been recorded within this grid: six Red Listed Birds (BoCCI4, 2021), namely Kittiwake (*Rissa*

tridactyla), Eurasian Oystercatcher (*Haematopus ostralegus*), European Turtle Dove (*Streptopelia turtur*), Curlew Sandpiper (*Calidris ferruginea*), Grey Wagtail (*Motacilla cinerea*) and the Snowy Owl (*Bubo scandiaca*) and nine Amber Listed Birds including the Herring Gull (*Larus argentatus*), Black-headed Gull (*Larus ridibundus*), Cormorant (*Phalacrocorax carbo*), Common Tern (*Sterna hirundo*), Turnstone (*Arenaria interpres*), Common Starling (*Sturnus vulgaris*), Barn Swallow (*Hirundo rustica*), Tree Sparrow (*Passer montanus*) and House Sparrow (*Passer domesticus*). None of the 15 birds listed on the NBDC site are species of Special Conservation Interest for the adjacent Blacksod Bay/Broadhaven SPA.



Figure 1.1: Location of the NBDC 1km² grid at Belmullet, Co. Mayo

In relation to the Red Listed Birds, the kittiwake is a summer visitor to Irish coasts (NBDC record from May, 2018) and feeds on fish and invertebrates and waste from commercial fishing (possibly recorded associated with incoming fishing boats into Belmullet harbour). The oystercatcher is both a resident and winter visitor (from Iceland and the Faeroes) in Ireland. The NBDC record is from July 2018 thus reflecting the resident Irish population. The 1km² grid includes coastal grasslands to the north and northeast of Belmullet pier and mudflats and sandflats extending both east /southeast of Belmullet Pier and also west of Belmullet town along the coastline (Figure 1.1). Birdwatch Ireland note that the oystercatcher's main food resource includes the larger invertebrates, particularly mussels and cockles that proliferate along sandy coasts. They also occasionally feed on grasslands where they prey on tipulid larvae and earthworms. They feed by both sight (for polychaete worms) and touch (bivalve mussels)¹.

¹ Oystercatcher - BirdWatch Ireland. Accessed 11/07/2022

The turtle dove is a scarce passage migrant to Ireland in the spring (NBDC record from March 2018) and autumn. Since its main diet is cereal grain, seeds and fruits of herbs and grasses, sometimes green parts and invertebrates, it is likely to be utilising the agricultural lands and town environs within this 1km² grid.

The curlew sandpiper feeds mainly on the mudflats on invertebrates while the grey wagtail feeds mainly on insects caught on the ground or in flight.

The snowy owl was recorded in December of 1951. This is a rare record. Since it is known to hunt various small to medium sized mammals (mainly rabbits) and birds, it is likely to have been recorded proximate to nearby fields.

The nine Amber Listed Birds include five birds (Black-headed Gull (*Larus ridibundus*), Herring Gull (*Larus argentatus*), Cormorant (*Phalacrocorax carbo*) Common Tern (*Sterna hirundo*) and Turnstone (*Arenaria interpres*)) which are closely associated with the estuarine aquatic environment proximate to the site. The herring gull is a resident along our coasts and is both a predator and scavenger and will also often follow fishing boats. The black-headed gull recorded in the 1km² reflects the resident population (NBDC record 08/2018) and while largely feeds on insects especially in arable fields, it can exploit domestic and fisheries waste². The turnstone feeds largely on sandhoppers and other marine invertebrates while the cormorant and common tern chiefly feed on fish.

The remaining Amber listed birds within the 1km² include two sparrow species that feed mainly on seeds, split grains, buds and come insects, and also the swallow which feeds almost exclusively on insects caught in flight. The remaining Amber Listed Bird, namely the starling, forages in a variety of situations including scraps on the streets (on both plant and animal material).

The EU Annex V Species, the common frog (*Rana temporaria*) was recorded within the 1km² grid. The site of works does not include any area of habitat suitable for the common frog. Marsh Fritillary (*Euphydryas aurinia*), Common Seal (*Phoca vitulina*), Common Lizard (*Zootoca vivipara*) and the European Hedgehog (*Erinaceus europaeus*) were also noted on the NBDC dataset. The ecologist will determine if the main food source Devil's-bit-Scabious (*Succisa pratensis*) of the marsh fritillary is available within the proposed development footprint area or close environs.

The Mayo County Development Plan 2021-2027 and the Mayo County Council planning enquiry website were reviewed to identify any proposed plans or projects which may have a direct, indirect or cumulative impact with this project.

² Black-headed Gull - BirdWatch Ireland. Accessed 11/07/2022

Several Third Schedule (Part 1) invasive floral species have been recorded within the 1km² grid. The ecologist was particularly aware of these species and all other Third Schedule species and species of Union Concern and associated habitats during the site walkover in July 2022.

1.7 FIELD STUDY

A Site visit was carried out in July 2022. The initial survey involved walking all aspects of the site and identifying habitats and surveying for small mammals along any treeline/hedgerows or suitable habitat present and also for the presence of the foodplant of the marsh fritillary. Habitat classification followed Fossitt (2000) and the floral nomenclature used followed Parnell and Curtis (2012) and Scannell and Synnott (1987). The locations where works will be carried out were also surveyed for the presence of invasive species (as listed in the Third Schedule of S.I. No. 477 of 2011, EC (Birds and Natural Habitats) Regulations 2011), particularly those already noted in the NBDC 1km² grid F7032.

1.8 FLOODING

Office of Public Works (OPW) website and the CFRAM study were accessed (June, 2022) to determine flood areas within and near the Proposed Renovation and Upgrade Works. **Figure 1.2** shows the probability of flooding at the site, along with records of past flood events. There are no flood events (recurring or otherwise) recorded within the locality of the Proposed Renovation and Upgrade Works.

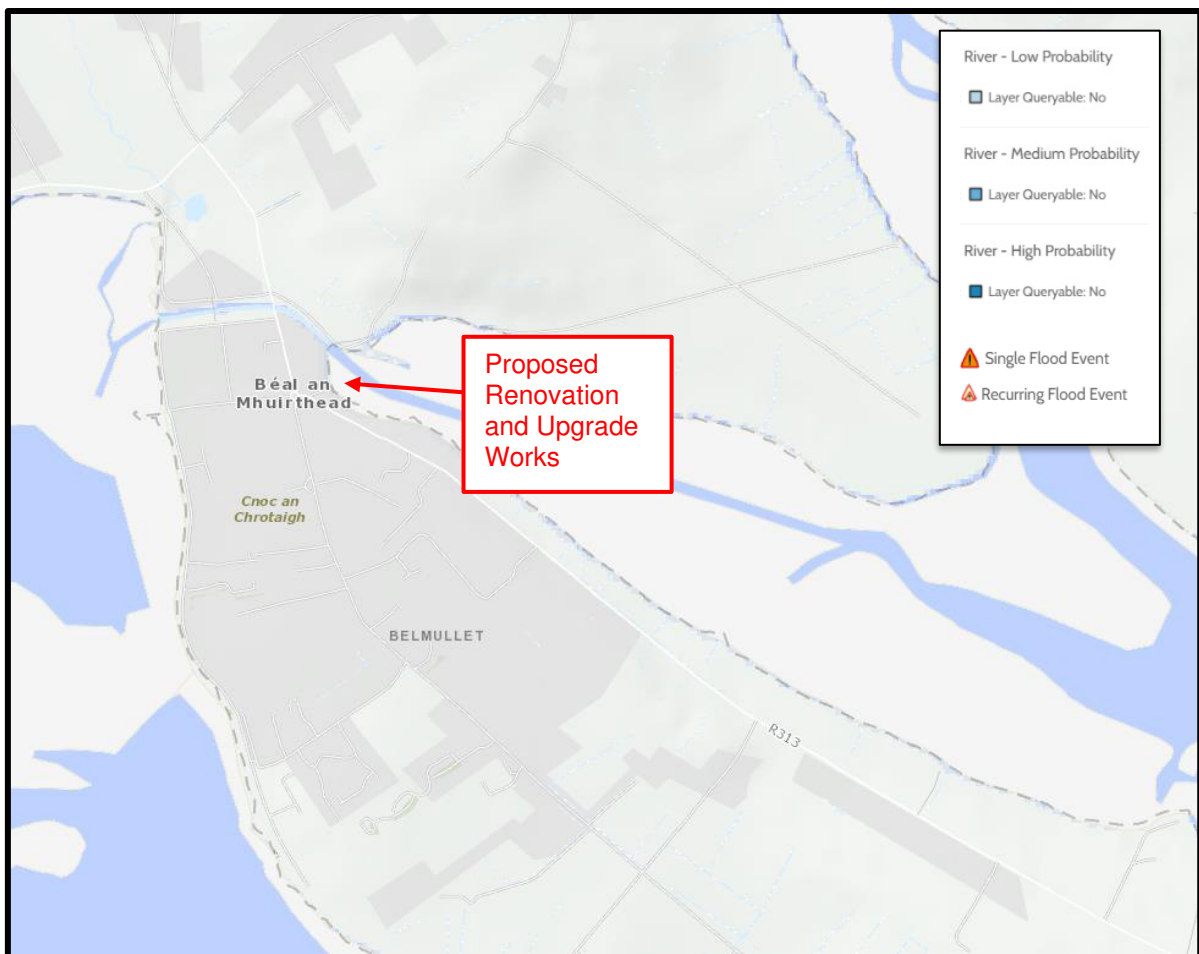


Figure 1.2: Flood Map for the Proposed Renovation and Upgrade Works (Source: FloodInfo.ie, 2022)

The Geological Survey Ireland (GSI) groundwater flood mapping was examined to determine if there was an existing risk from groundwater flooding at the site. Given that the main bedrock is Inver Schist Formation described as graphitic, semi-pelitic schists and marble there is little or no risk from groundwater flooding. The groundwater flood mapping confirmed that the site is not at risk from groundwater flooding. The site is in an area poor aquifer – Bedrock which is Generally Unproductive except for Local Zones and is ‘Moderate in vulnerability’.

2. PROJECT DESCRIPTION

2.1 SITE LOCATION

The Proposed Renovation and Upgrade Works will be carried out at Belmullet Docks and the connecting short road between the docks and Carter Square in Belmullet, Co. Mayo.

Belmullet or Béal an Mhuirthead (Irish for “mouth of the Mullet Peninsula”) is a coastal Gaeltacht town with a population of around 1,000 on the Mullet Peninsula in the barony of Erris, County Mayo, Ireland. Belmullet has two bays, Blacksod Bay and Broadhaven Bay, linked by Belmullet (Carter’s) Canal running through the town. The area is popular for fishing with both fresh-water and sea-angling off Broadhaven Bay.

The Proposed Renovation and Upgrade Works are immediately bordered by amenities and residential dwellings to the west and south, Broadhaven Bay to the east, and Belmullet (Carter’s) Canal to the northwest (Figure 2.1).

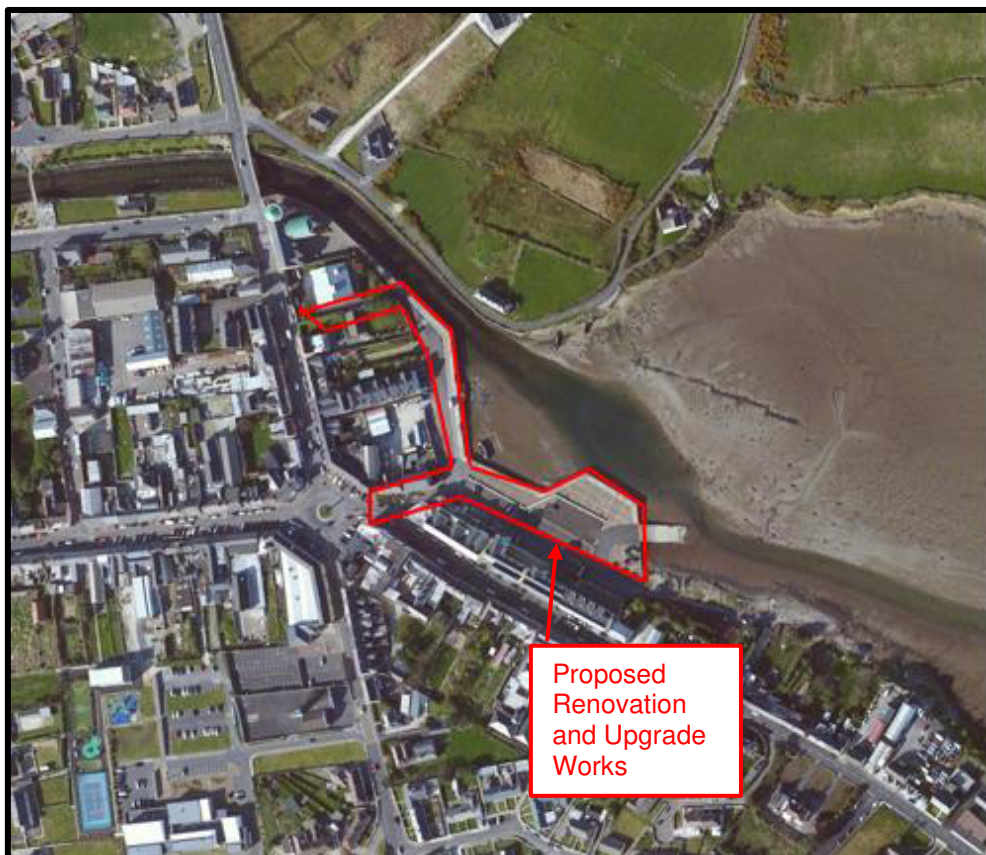


Figure 2.1: Approximate location of the Proposed Renovation and Upgrade Works, Belmullet, Co. Mayo

2.2 PROPOSED WORKS

A Method Statement (MS) has been developed for the Site works and is attached as Appendix A.

3. RECEIVING ENVIRONMENT

3.1 GEOLOGY AND SOILS

The quaternary sediments at the site of the Proposed Renovation and Upgrade Works are classified as 'Urban' and '*till derived from Metamorphic rocks*'.

The Proposed Renovation and Upgrade Works are located within the Inver Schist Formation: This bedrock formation is described by the Geological Survey of Ireland as '*psammitic and pelitic schist and marble*'. The Site however is a currently within an urban location and is a brownfield site with artificial surfaces.

3.2 HYDROLOGY AND HYDROGEOLOGY

The Proposed Renovation and Upgrade Works site is located within the Water Framework Directive (WFD) wider catchment area of Blacksod-Broadhaven covering an area of 1,298km². It is also within the smaller Glencastle _SC_010 WFD sub catchment covering an area of approximately 102.24km². The area of the docks does not have a designated WFD River sub basin, but all other areas of the worksite fall under the Rinn na Sionnach_010 RSB which covers an extended area of approximately 34km². Proposed works will be located within the Blacksod-Broadhaven Hydrometric Area 33 (1,302 km²).

There is no direct hydrological connection between the Proposed Renovation and Upgrade Works and / or any waterbody. All proposed works are terrestrial based and will not occur within any waterbody. The nearest waterbody is Broadhaven Bay which is part of the Broadhaven Bay SAC (000472) and Blacksod Bay/ Broadhaven SPA (004037) and located adjacent to Belmullet Docks.

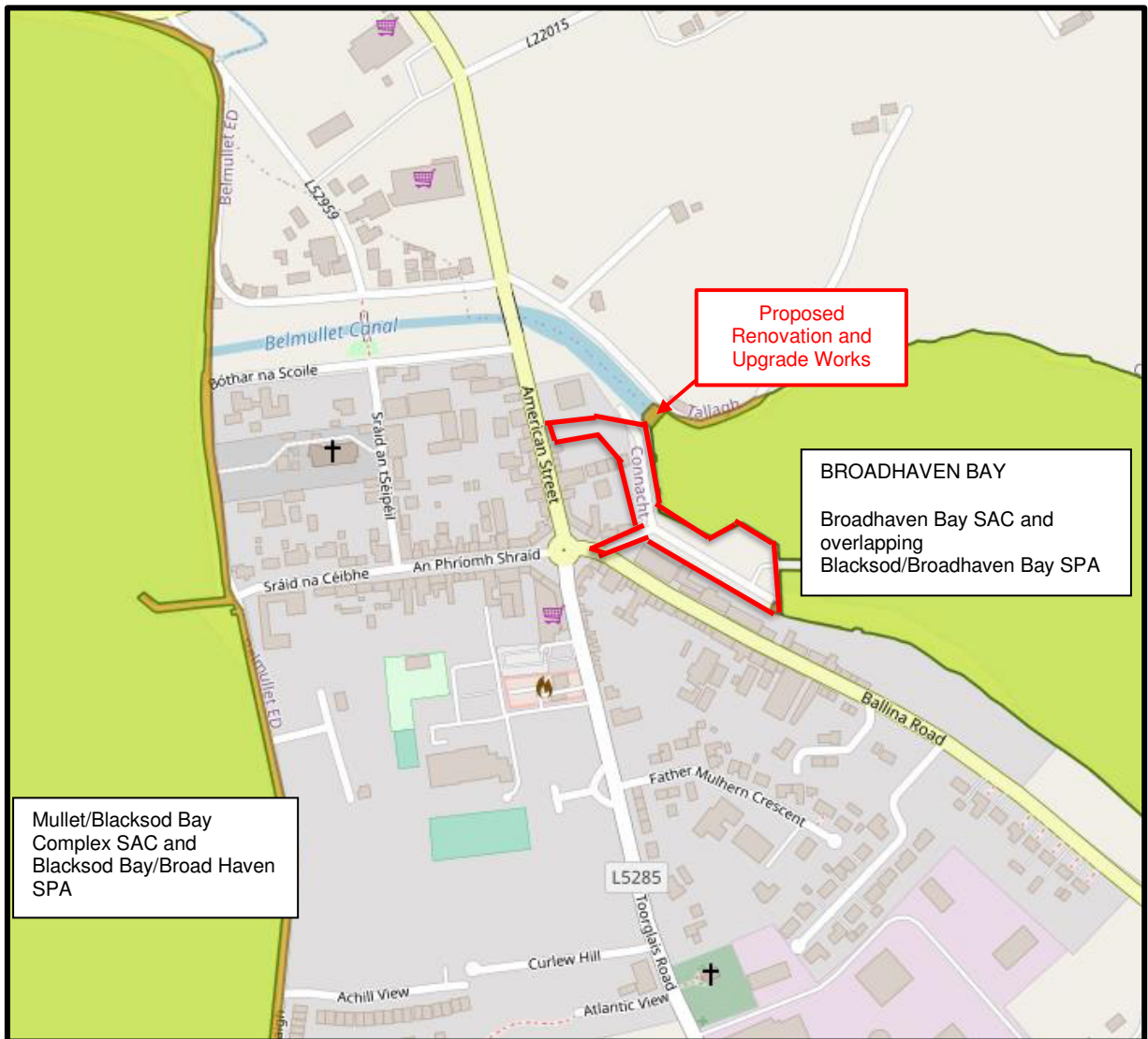


Figure 3.1: Local waterbody and European Sites proximate to the site of the Proposed Renovation and Upgrade Works

The site overlies bedrock which is classified as ‘Poor Aquifer – Bedrock which is Generally Unproductive except for Local Zones’. The Belmullet Waterbody (IE_WE_G_0057) which underlies the Proposed Renovation and Upgrade Works currently has a water quality classification of ‘Good’. There are no springs or wells within the vicinity of the site.

Currently, the groundwater in the area has no significant underlying pressures, including waste abstraction, agriculture, anthropogenic, aquaculture, atmospheric, extractive industry, hydromorphology, invasive species, urban runoff or otherwise (EPA Water Maps, accessed June 21st 2022). EPA Maps (Water) was accessed (June 2022) to examine the maintenance work site and local area for nitrate and phosphorus loading and Pollutant Impact Potential (PIP). PIP maps for Nitrogen (N) and Phosphorus (P) have been generated by the EPA to show the highest risk areas in the landscape for losses of N and P to waters (1 being the highest ranking and 7 being the lowest ranking). The PIP model estimates the annual nutrient losses from agricultural land at specific locations, using

spatial data from farm management, soils and hydrogeology. This model estimates loads at an annual temporal resolution.

The Proposed Renovation and Upgrade Works are located in a largely urban landscape, given to amenities and residential dwellings and currently has no Phosphorus ranking. The land to the north and south surrounding the Proposed Renovation and Upgrade Works are ranked at 1, 2, 4, and 5. The ranking range likely reflects the varied use of fertiliser used on the land currently or in the past. Adjacent lands due south have no ranking as it incorporates the urban area of Belmullet town. There is a general consistency of a 1, 2, 4 and 5 ranking moving outward from the Proposed Renovation and Upgrade Works and into the more agricultural-based surrounding landscape.

Similarly, PIP Nitrogen Proposed Renovation and Upgrade Work Site has no ranking. Adjacent lands moving southward also have no ranking as the land incorporates the urban area of Belmullet town. The wider surrounding lands rank low, at 7.

Not unexpectedly then, the Critical Source Areas Maps for the Proposed Renovation and Upgrade Works and adjacent lands do not indicate a site where either phosphorus or nitrates are a significant issue in this largely urban landscape.

As noted earlier, the Proposed Renovation and Upgrade Work Site is within the WFD River Sub Basin Rinn Na Sionnach_010 WFD. Currently, there are no significant pressures from the Proposed Renovation and Upgrade Work Site on this River Sub Basin.

3.3 HABITATS

A site visit was carried out in July, 2022. Three habitats (according to Fossitt, 2000) were noted in the survey area, namely BC4: Flower beds and borders, ED3: Recolonising Bare ground and BL3: Building and Artificial Surfaces. There is no Annex I habitat occurring within the area of proposed works.

No rare, threatened, or protected species of plants as per the Red Data Book (Curtis and McGough, 1988) were recorded onsite. No species listed in the Flora Protection Order (2022) were found to be growing within the proposed site of works or adjoining lands. No habitats suitable for protected mammals were noted within the proposed project development site.

Flower Beds and Borders (BC4)

There are a variety of flowerbeds in the proposed works area. At the northwest end of the proposed site, along the base of a boundary wall (approximately 2.7m tall), a series of flowerbeds approximately 1m wide and 15m long were developed. They were faced with 4 rows of brick and planted with cultivars which are now overgrown and unmanaged. The cultivars are growing out over the brick boundary for the most part, rendering the bed margin invisible. The cultivar shrubs are also overgrowing the supporting wall and reaching out onto the road in places. This dense shrubbery is providing support for climbers such as bramble (*Rubus fruticosus*), rose (*Rosa* sp.) and hedge bindweed (*Calystegia sepium*). The prodigious growth of the latter perennial is almost completely covering much of the planted shrubbery in its immediate environment. The fallen leaf litter from these beds onto the adjacent gravel

road surface is providing tilth and a foundation for root systems of other broad-leaved ruderals to develop; this limited habitat is categorised under ED3: recolonising bare ground below.



Plate 3.1 Unmanaged flower beds (BC4) with recolonising bare ground (ED3) at the base

Planted flower beds are also a feature on both the north and south sides of the short steep road leading down to the docks. These beds are approximately 2-3m wide at the west end narrowing to a point as the bed tapers downhill. The beds are bordered by kerbing with gravel interior and isolated planting of cultivars flowers and shrubs such as Hydrangea. Common fennel (*Foeniculum vulgare*) also features. Common centaury (*Centaureum erythraea*), the low-growing biennial was noted in the lower regions of these beds. Further isolated beds are planted adjacent to the southern wall along this road (footpath broken to provide soil bed; there is no apparent edging) and support the root system of shrubs that have grown close to the wall and reach approximately 2m tall and 1 m wide.

Discrete cuboid (approximately 1m²) planter boxes also feature along the dock. They are planted with a variety of flowers and small shrubs on occasion.

ED3: Recolonising Bare ground

A narrow belt of ground, covered in gravel has become colonised by herbaceous plants at the base of the flowerbed shown in Plate 3.1. Since this narrow linear strip (up to 75cm wide) has greater than 50% vegetative cover, it can be categorised as recolonising bare ground habitat. Ruderals such as nettles (*Urtica dioica*), dandelions (*Taraxacum* sp.), willowherbs (*Epilobium* spp.), common figwort (*Scrophularia nodosa*), common field-speedwell (*Veronica persica*), prickly sow thistle (*Sonchus asper*), and ragworts (*Senecio* spp.) are common in this habitat amongst low-growing grasses.

BL3: Building and Artificial Surfaces

This broad category incorporates the majority of the site, as it includes all the areas of the site that are covered with artificial surfaces including tarmac (roads), cement (dock front and footpaths), paving (herringbone paving at dock area) and buildings (adjacent to the site). Where vehicular or foot-traffic is reduced and habitats are suitable, some broad-leaved herbs have gained a foothold, particularly in the narrow spacing between pavers along the dock area. Plants colonising these limited opportunities include the low-growing grass *Poa annua*, red fescue (*Festuca rubra*), dandelion (*Taraxacum* spp.), common chickweed (*Stellaria media*), common ragwort (*Senecio jacobea*), daisy (*Bellis perennis*), creeping buttercup (*Ranunculus repens*), willowherb (*Epilobium* sp.), curled dock (*Rumex crispus*), common figwort (*Scrophularia nodosa*), shepherd's purse (*Capsella bursa-pastoris*), pineapple weed (*Matricaria discoidea*), bittercress (*Cardamine* sp.), clover (*Trifolium* sp.), germander speedwell (*Veronica chamaedrys*), procumbent pearlwort (*Sagina procumbens*) and other mosses and horsetail (*Equisetum* sp.).

Ox-eye daisy (*Leucanthemum vulgare*) and yarrow (*Achillea millefolium*) were noted near the edge of the dock, close to the water. A split in the herring-bone paving has provided a wider area for plants to colonise; a young sycamore (*Acer pseudoplatanus*) sapling has gained a foothold here amongst other common herbs such as narrow-leaved plantain (*Plantago lanceolata*), broad-leaved plantain (*Plantago major*), sea plantain (*Plantago maritima*), curled dock (*Rumex crispus*).



Plate 3.2: Artificial surfaces (BL3) habitat at the dock, Belmullet, Co. Mayo

The scrambling annual, robin-run-the-hedge (*Galium aparine*) with its branched roots, was noted utilising the dividing wall at the dock to climb. One young stand of Buddleja, a non-native, was also noted amongst the paving. A further non-native plant includes the new Zealand willowherb (*Epilobium brunnescens*).

While plants (particularly grasses) are sometimes clustered at the base of light posts or wall edges, overall plant cover of this habitat is <5% (Plant 3.2).

It was noted that the food source of the marsh fritillary, namely Devil's-bit-Scabious (*Succisa pratensis*) is not available within the proposed development footprint area or any adjacent site.

3.4 INVASIVE SPECIES

No invasive alien species as listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. No. 477 of 2011) Part 1 or 2 were recorded within the site under survey.

4. SCREENING FOR APPROPRIATE ASSESSMENT

This AA Screening examined the likely significant effects of the Proposed Renovation and Upgrade Works, either alone or in-combination with other projects or plans on European Sites, that were situated within a ZoI, or a distance that has a potential source-pathway-receptor (SPR), both direct and indirect with the Renovation and Works.

A total of thirteen European Sites (SAC and SPA) occurring within a wider 15km radius of the project site are listed in Table 4.1.

Table 4.1: European Sites within a 15km radius

No.	European Sites within 15km radius	Distance between Proposed Renovation and Upgrade Works and European Sites
	SAC	
1	Broadhaven Bay SAC (000472)	adjacent
2	Mullet/Blacksod Bay Complex SAC (000470)	0.3km
3	West Connacht Coast SAC (002998)	4.6km
4	Erris Head SAC (001501)	5.5km
5	Carrowmore Lake Complex SAC (000476)	10.7km
6	Glenamoy Bog Complex SAC (000500)	11.6km
7	Inishkea Islands SAC (000507)	14.4km
	SPA	
1	Blacksod Bay/Broad Haven SPA (004037)	adjacent
2	Mullet Peninsula SPA (004227)	2.0km
3	Termoncarragh Lake and Annagh Machair SPA (004093)	4.0km
4	Inishglora and Inishkeeragh SPA (004084)	8.5km
5	Carrowmore Lake SPA (004052)	10.7km
6	Inishkea Islands SPA (004004)	14.5km

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
SPECIAL AREAS OF CONSERVATION (SACs)			
Broadhaven Bay SAC (000472)	<p>Habitats</p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Large shallow inlets and bays [1160]</p> <p>Reefs [1170]</p> <p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</p> <p>Submerged or partially submerged sea caves [8330]</p> <p>According to this SAC's site Conservation Objectives document (Version 1. Department of Housing, Local Government and Heritage, 2014), for the listed QI, the Conservation Objective is to maintain the favourable conservation condition of the Annex I habitats for which the SAC has been selected.</p>	the project site lies adjacent to this SAC	<p>This SAC is designated for its role in supporting five water dependent habitats. There is no possibility for significant effects due to:</p> <ul style="list-style-type: none"> • no hydrological connection • the coastal nature of the habitat • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares <p>No works will be undertaken in the SAC, therefore no direct impacts are anticipated on any of the QI in this SAC.</p> <p>Indirect pathways have the potential to establish a connection between the project site and these water dependent habitats.</p> <p>While there is potential for indirect potential pathways, all works will follow the direct outline of the Method Statement attached.</p> <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
Mullet/Blacksod Bay Complex SAC (000470)	<p>Species</p> <p>1355 Otter(<i>Lutra lutra</i>)</p> <p>1395 Petalwort(<i>Petalophyllum ralfsii</i>)</p> <p>Habitats</p> <p>1140 Mudflats and sandflats not covered by seawater at low tide</p> <p>1160 Large shallow inlets and bays</p> <p>1170 Reefs</p> <p>1310 Salicornia and other annuals colonising mud and sand</p>	approximately 0.3km to this SAC	<p>[1355] There is no possibility for significant effects on Otter due to:</p> <ul style="list-style-type: none"> no potential for water quality impacts that may affect prey availability while there is potential for indirect potential pathways via the Belmullet canal, all works will follow the direct outline of the Method Statement attached in Appendix A a terrestrial separation distance of 0.3km between the project site and this SAC no potential for disturbance effects proposed works will be contained within the project site the size and scale of the works within a project area of 0.64 hectares
	<p>2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)</p> <p>2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*</p> <p>2150 Atlantic decalcified fixed dunes (Calluno-Ulicetea)*</p>		<p>[1395] There is no possibility for significant effects on Petalwort due to:</p> <ul style="list-style-type: none"> unsuitability of the site to support this species a terrestrial separation distance of 0.3km between the project site and this SAC proposed works will be contained within the project site the size and scale of the project works within a project area of 0.64 hectares
	<p>21A0 Machairs (* in Ireland)</p> <p>3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation</p> <p>7230 Alkaline fens</p>		<p>[1140] There is no possibility for significant effects on Mudflats and sandflats not covered by seawater at low tide, large shallow inlets and bays, reefs and Salicornia and other annuals colonising mud and sand due to:</p> <ul style="list-style-type: none"> while there is potential for indirect potential pathways via the Belmullet canal, all works will follow the direct outline of

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
	<p>According to this SAC's site Conservation Objectives document (Version 1. Department of Housing, Local Government and Heritage, 2014), for the listed QI, the Conservation Objective is to maintain the favourable conservation condition of the Annex I habitats and Annex II species for which the SAC has been selected.</p>		<p>the Method Statement attached in Appendix A</p> <ul style="list-style-type: none"> • the coastal nature of the habitat • a terrestrial separation distance of 0.3km between the project site and this SAC • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares <p>[2120] There is no possibility for significant effects on Shifting dunes (white dunes), fixed coastal dunes, Atlantic decalcified fixed dunes, machairs and natural eutrophic lakes due to:</p> <ul style="list-style-type: none"> • a terrestrial separation distance of 0.3km between the project site and this SAC • the coastal nature of the habitat • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares <p>[7230] There is no possibility for significant effects on Alkaline fens due to:</p> <ul style="list-style-type: none"> • no hydrological connection • no modification to existing drainage networks • no potential for diffuse groundwater pollution from forestry activities • no infilling of ditches, dykes, ponds, pools, marshes or pits • a terrestrial separation distance of 0.3km between the project site and this SAC • no depletion of habitat or threat from natural regeneration of conifers or invasive species • proposed works will be contained within the project site

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
			<ul style="list-style-type: none"> the size and scale of the works within a project area of 0.64 hectares <p>No works will be undertaken in the SAC, therefore no direct impacts are anticipated on any of the QI in this SAC.</p> <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>
West Connacht Coast SAC (002998)	<p>Species</p> <p>1349 Common Bottlenose Dolphin (<i>Tursiops truncatus</i>)</p> <p>According to this SAC's site Conservation Objectives document (Version 1. Department of Housing, Local Government and Heritage, 2015), for the listed QI, the Conservation Objective is to maintain the favourable conservation condition of the Annex II species for which the SAC has been selected.</p>	approximately 4.6km to this SAC	<p>[1349] There is no possibility for significant effects on Common Bottlenose Dolphin due to:</p> <ul style="list-style-type: none"> the mobile, marine and coastal nature of this QI proposed works will be contained within the project site the size and scale of the works within a project area of 0.64 hectares <p>No works will be undertaken in the SAC, therefore no direct impacts are anticipated on any of the QI in this SAC.</p> <p>While there is limited potential for indirect potential pathways, all works will follow the direct outline of the Method Statement attached in Appendix A for all Renovation and Upgrade Works</p> <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p>

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
Erris Head SAC (001501)	<p>Habitats</p> <p>1230 Vegetated sea cliffs of the Atlantic and Baltic coasts</p> <p>4060 Alpine and Boreal heaths</p> <p>According to this SAC's site Conservation Objectives document (Version 1. Department of Housing, Local Government and Heritage, 2016), for the listed QI, the Conservation Objective is to maintain the favourable conservation condition of the Annex I habitats for which the SAC has been selected.</p>	approximately 5.5km to this SAC	<p>[1230] There is no possibility for significant effects on Vegetated sea cliffs of the Atlantic and Baltic coasts due to:</p> <ul style="list-style-type: none"> the coastal and terrestrial nature of this QI a terrestrial separation distance of 5.5km between the project site and this SAC proposed works will be contained within the project site the size and scale of the works within a project area of 0.64 hectares
			<p>[4060] There is no possibility for significant effects on Alpine and Boreal heaths due to:</p> <ul style="list-style-type: none"> a terrestrial separation distance of 5.5km between the project site and this SAC the terrestrial nature of the habitat no potential loss of habitat or threat from natural regeneration of conifers proposed works will be contained within the project site the size and scale of the project works within a project area of 0.64 hectares <p>No works will be undertaken in the SAC, therefore no direct impacts are anticipated on any of the QI in this SAC.</p> <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
Carrowmore Lake Complex SAC (000476)	<p>Species</p> <p>1528 Marsh Saxifrage(<i>Saxifraga hirculus</i>)</p> <p>6216 Slender Green Feather-moss(<i>Hamatocaulis vernicosus</i>)</p> <p>Habitats</p> <p>7130 Blanket bogs (* if active bog)</p> <p>7150 Depressions on peat substrates of the <i>Rhynchosporion</i></p> <p>According to this SAC's site Conservation Objectives document (Version 1. Department of Housing, Local Government and Heritage, 2017), for the listed QI, the Conservation Objective is to maintain the favourable conservation condition of the Annex I habitats and Annex II species for which the SAC has been selected.</p>	approximately 10.7km to this SAC	<p>[1528] There is no possibility for significant effects on Marsh Saxifrage due to:</p> <ul style="list-style-type: none"> • unsuitability of the site to support Marsh Saxifrage • no hydrological connection • a terrestrial separation distance of 10.7km between the project site and this SAC • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares
			<p>[6216] There is no possibility for significant effects on Slender Green Feather moss due to:</p> <ul style="list-style-type: none"> • unsuitability of the site to support this species • no hydrological connection • a terrestrial separation distance of 10.7km between the project site and this SAC • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares
			<p>[7130] There is no possibility for significant effects on Blanket bogs (* if active bog) due to:</p> <ul style="list-style-type: none"> • a terrestrial separation distance of 10.7km between the project site and this SAC • no infringement on blanket bog habitat • no potential for loss of blanket bog habitat or habitat fragmentation • no depletion of habitat or threat from natural regeneration of conifers or invasive native or non-native species (e.g.

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
			<p>Rhododendron ponticum and the moss Campylopus inflexus)</p> <ul style="list-style-type: none"> proposed works will be contained within the project site the size and scale of the works within a project area of 0.64 hectares <p>[7150] There is no possibility for significant effects on Rhynchosporion depressions due to:</p> <ul style="list-style-type: none"> a terrestrial separation distance of 10.7km between the project site and this SAC no impacts on existing hydrological conditions supporting the bog proposed works will be contained within the project site the size and scale of the project works within a project area of 0.64 hectares <p>No works will be undertaken in the SAC, therefore no direct impacts are anticipated on any of the QI in this SAC.</p> <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>
Glenamoy Bog Complex SAC (000500)	<p>Species</p> <p>1528 Marsh Saxifrage (<i>Saxifraga hirculus</i>)</p> <p>1395 Petalwort (<i>Petalophyllum ralfsii</i>)</p> <p>6216 Slender Green Feather-</p>	approximately 11.6km to this SAC	<p>[1528] There is no possibility for significant effects on Marsh Saxifrage due to:</p> <ul style="list-style-type: none"> unsuitability of the site to support Marsh Saxifrage a terrestrial separation distance of 11.6km between the project site and this SAC proposed works will be contained within the project site

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
	moss(<i>Hamatocaulis vernicosus</i>) 1106 Salmon(<i>Salmo salar</i>) Habitats 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 21A0 Machairs (* in Ireland) 3160 Natural dystrophic lakes and ponds 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> 5130 <i>Juniperus communis</i> formations on heaths or calcareous grasslands 7130 Blanket bogs (* if active bog) 7140 Transition mires and quaking bogs 7150 Depressions on peat substrates of the <i>Rhynchosporion</i> According to this SAC's site Conservation Objectives document (Version 1. Department of Housing, Local Government and Heritage, 2017), for the listed QI, the		<ul style="list-style-type: none"> the size and scale of the project works within a project area of 0.64 hectares <p>[1395] There is no possibility for significant effects on Petalwort due to:</p> <ul style="list-style-type: none"> unsuitability of the site to support this species a terrestrial separation distance of 11.6km between the project site and this SAC proposed works will be contained within the project site the size and scale of the project works within a project area of 11.6km between the project site and this SAC <p>[6216] There is no possibility for significant effects on Slender Green Feather moss due to:</p> <ul style="list-style-type: none"> unsuitability of the site to support this species no hydrological connection a terrestrial separation distance of 11.6km between the project site and this SAC proposed works will be contained within the project site the size and scale of the project works within a project area of 0.64 hectares <p>[1106] There is no possibility for significant effects on Salmon due to:</p> <ul style="list-style-type: none"> no hydrological connection proposed works will be contained within the project site

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
	<p>Conservation Objective is to maintain the favourable conservation condition of the Annex I habitats and Annex II species for which the SAC has been selected.</p>		<ul style="list-style-type: none"> • the size and scale of the works within a project area of 0.64 hectares <p>[1230] There is no possibility for significant effects on Vegetated sea cliffs of the Atlantic and Baltic coasts due to:</p> <ul style="list-style-type: none"> • the coastal nature of this QI • proposed works will be contained within the project site • the size and scale of the works within a project area of 0.64 hectares <p>[21A0] There is no possibility for significant effects on Machairs due to:</p> <ul style="list-style-type: none"> • a terrestrial separation distance of 11.6km between the project site and this SAC • the coastal nature of the habitat • no potential for habitat loss or degradation • no potential for colonisation by invasive species as a result of site project works • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares <p>[3160] There is no possibility for significant effects on Natural dystrophic lakes and ponds due to:</p> <ul style="list-style-type: none"> • no hydrological connection • no potential for impact on the hydrological regime supporting the habitat • no potential for diffuse groundwater or hydrologically-

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
			<p>linked surface water pollution due to project works</p> <ul style="list-style-type: none"> • a terrestrial separation distance of 11.6km between the project site and this SAC • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares <p>[4010] There is no possibility for significant effects on Wet heath due to:</p> <ul style="list-style-type: none"> • a terrestrial separation distance of 11.6km between the project site and this SAC • no infringement on this habitat or threat from trampling as a result of the project works • no potential for loss of habitat or habitat fragmentation • no threat from natural regeneration of conifers or invasive native or non-native species (<i>e.g. Rhododendron ponticum</i>) • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares <p>[5130] There is no possibility for significant effects on Juniper scrub due to:</p> <ul style="list-style-type: none"> • a terrestrial separation distance of 11.6km between the project site and this SAC • the terrestrial nature of this habitat • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
			<p>[7130] There is no possibility for significant effects on Blanket bogs (* if active bog) due to:</p> <ul style="list-style-type: none"> • a terrestrial separation distance of 11.6km between the project site and this SAC • no infringement on blanket bog habitat • no potential for loss of blanket bog habitat or habitat fragmentation • no depletion of habitat or threat from natural regeneration of conifers or invasive native or non-native species (e.g. <i>Rhododendron ponticum</i> and the moss <i>Campylopus inflexus</i>) • proposed works will be contained within the project site • the size and scale of the works within a project area of 0.64 hectares <p>[7140] There is no possibility for significant effects on Transition mires and quaking bogs due to:</p> <ul style="list-style-type: none"> • no hydrological connection • a terrestrial separation distance of 11.6km between the project site and this SAC • no infringement on this habitat • no potential for impact on the hydrological regime supporting the habitat • no potential for diffuse groundwater or hydrologically-linked surface water pollution due to project works • no potential for loss of habitat or habitat fragmentation • no depletion of habitat or threat from invasive native or non-native species • proposed works will be contained within the project site

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
			<ul style="list-style-type: none"> • the size and scale of the project works within a project area of 0.64 hectares <p>[7150] There is no possibility for significant effects on Rhynchosporion depressions due to:</p> <ul style="list-style-type: none"> • a terrestrial separation distance of 11.6km between the project site and this SAC • no impacts on existing hydrological conditions supporting the bog • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares • No works will be undertaken in the SAC, therefore no direct impacts are anticipated on any of the QI in this SAC. <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>
Inishkea Islands SAC (000507)	<p>Species</p> <p>1395 Petalwort (<i>Petalophyllum ralfsii</i>)</p> <p>1364 Grey Seal (<i>Halichoerus grypus</i>)</p> <p>Habitats</p> <p>21A0 Machairs (* in Ireland)</p> <p>According to this SAC's site</p>	approximately 14.4km to this SAC	<p>[1395] There is no possibility for significant effects on Petalwort due to:</p> <ul style="list-style-type: none"> • unsuitability of the site to support this species • a terrestrial separation distance of 14.4km between the project site and this SAC • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
	<p>Conservation Objectives document (Version 1. Department of Housing, Local Government and Heritage, 2015), for the listed QI, the Conservation Objective is to maintain the favourable conservation condition of the Annex I habitats and Annex II species for which the SAC has been selected.</p>		<p>[1364] There is no possibility for significant effects on Grey Seal due to:</p> <ul style="list-style-type: none"> • the marine/coastal/mobile nature of this species • proposed works will be contained within the project site • the size and scale of the works within a project area of 0.64 hectares <p>[21A0] There is no possibility for significant effects on Machairs due to:</p> <ul style="list-style-type: none"> • a terrestrial separation distance of 14.4km between the project site and this SAC • the coastal nature of the habitat • no potential for habitat loss or degradation • no potential for colonisation by invasive species as a result of site project works • proposed works will be contained within the project site • the size and scale of the project works within a project area of 0.64 hectares <p>No works will be undertaken in the SAC, therefore no direct impacts are anticipated on any of the QI in this SAC.</p> <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>
SPECIAL PROTECTION AREAS (SPAs)			

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
Blacksod Bay/Broadhaven SPA (004037)	<p>Birds</p> <p>Red-throated Diver (<i>Gavia stellata</i>) [A001]</p> <p>Great Northern Diver (<i>Gavia immer</i>) [A003]</p> <p>Slavonian Grebe (<i>Podiceps auritus</i>) [A007]</p> <p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</p> <p>Common Scoter (<i>Melanitta nigra</i>) [A065]</p> <p>Red-breasted Merganser (<i>Mergus serrator</i>) [A069]</p> <p>Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</p> <p>Sanderling (<i>Calidris alba</i>) [A144]</p> <p>Dunlin (<i>Calidris alpina</i>) [A149]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p> <p>Curlew (<i>Numenius arquata</i>) [A160]</p> <p>Sandwich Tern (<i>Sterna sandvicensis</i>) [A191]</p>	the project site lies adjacent to this SPA	<p>This SPA is designated for its role in supporting protected bird species.</p> <p>No works will be undertaken in the SPA, therefore no direct impacts are envisaged on any of the QI of this SPA.</p> <p>Indirect potential pathways have the potential to establish a connection between the project site and the special conservation interest bird species and wetland birds of this SPA.</p> <p>While there is potential for indirect hydrological pathways to foraging grounds, all works will follow the direct outline of the Method Statement attached (Appendix A).</p> <p>The SPA covers an extensive wetland area of approx. 8,539 hectares (NPWS, 2014).</p> <p>While the wetlands are adjacent (Map 3 NPWS, 2014) to the Site, this habitat extends for 8,539 ha east / southeast of the site, providing extensive suitable foraging opportunities for waders.</p> <p>Belmullet pier is adjacent to the western tip of a wider wetland area. The adjacent south, north and west landscape is urban and wetland birds foraging in the area are likely to be used to human disturbance and habituated to noise and visual disturbance.</p> <p>Significant disturbance/displacement impacts to any of the SCI species for which Blacksod Bay/Broadhaven SPA is designated, are not reasonably foreseeable.</p> <p>No birds were noted foraging within 100m of the Site on the day of the Site visit at low tide, when mudflat/sandflat habitat was exposed.</p>

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
	<p>Dunlin (<i>Calidris alpina schinzii</i>) [A466]</p> <p>Habitats</p> <p>Wetland and Waterbirds [A999]</p> <p>According to this SPA's site Version 1 Conservation Objectives document (Department of Arts, Heritage and the Gaeltacht, 2014) for the listed SCI, the Conservation Objective is to maintain or restore the favourable conservation condition of the bird species and Annex 1 habitats for which the SPA has been selected.</p>		<p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>
Mullet Peninsula SPA (004227)	<p>Birds</p> <p>A122 Corncrake (<i>Crex crex</i>)</p> <p>According to this SPA's site Generic Version 9.0 Conservation Objectives document (Department of Arts, Heritage and the Gaeltacht, 2022) for the listed SCI, the Conservation Objective is to maintain or restore the favourable conservation</p>	approximately 2.0km to this SPA	<p>This SPA is designated for its role in supporting the protected corncrake bird.</p> <p>No works will be undertaken in the SPA, therefore no direct impacts are envisaged on any of the QI of this SPA.</p> <p>While there is potential for an indirect hydrological potential pathway to foraging grounds, this SPA would be considered upstream of all works.</p> <p>No suitable habitat (hay meadows) for corncrake on the site.</p> <p>The intervening distance between the site and this SPA includes residential and commercial buildings within Belmullet town and also the shallow waters of Blacksod Bay,</p>

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
	condition of the bird species for which the SPA has been selected		therefore there is unlikely to be any visual or noise disturbance on Corncrake
Termoncarragh Lake and Annagh Machair SPA (004093)	<p>Habitats</p> <p>Wetlands</p> <p>Birds</p> <p>A045 Barnacle Goose (<i>Branta leucopsis</i>)</p> <p>A038 Whooper Swan (<i>Cygnus cygnus</i>)</p> <p>A142 Lapwing (<i>Vanellus vanellus</i>)</p> <p>A395 Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</p> <p>A122 Corncrake (<i>Crex crex</i>)</p> <p>A466 Dunlin (<i>Calidris alpina schinzii</i>)</p> <p>A346 Chough (<i>Pyrrhocorax pyrrhocorax</i>)</p> <p>According to this SPA's site Generic Version 9.0 Conservation Objectives document (Department of Arts, Heritage and the Gaeltacht, 2022) for the listed SCI, the</p>	approximately 4km to this SPA	<p>There is no possibility for significant effects on these birds or wetlands habitat due to:</p> <p>No hydrological connection between the project site and this SPA.</p> <p>No works will be undertaken in the SPA, therefore no direct impacts are envisaged on any of the QI of this SPA.</p> <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
	Conservation Objective is to maintain or restore the favourable conservation condition of the bird species and Annex 1 habitats for which the SPA has been selected		
Inishglora and Inishkeeragh SPA (004084)	<p>Birds</p> <p>A184 Herring Gull(<i>Larus argentatus</i>)</p> <p>A018 Shag(<i>Phalacrocorax aristotelis</i>)</p> <p>A014 Storm Petrel(<i>Hydrobates pelagicus</i>)</p> <p>A183 Lesser Black-backed Gull(<i>Larus fuscus</i>)</p> <p>A017 Cormorant(<i>Phalacrocorax carbo</i>)</p> <p>A194 Arctic Tern(<i>Sterna paradisaea</i>)</p> <p>A045 Barnacle Goose(<i>Branta leucopsis</i>)</p> <p>According to this SPA's site Generic Version 9.0 Conservation Objectives document (Department of Arts, Heritage and the Gaeltacht, 2022) for the listed SCI, the Conservation</p>	approximately 8.5km to this SPA	<p>There is no possibility for significant effects on these birds or wetlands habitat due to:</p> <p>No hydrological connection between the project site and this SPA.</p> <p>No works will be undertaken in the SPA, therefore no direct impacts are envisaged on any of the QI of this SPA.</p> <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
	Objective is to maintain or restore the favourable conservation condition of the bird species for which the SPA has been selected		
Carrowmore Lake SPA (004052)	<p>Birds</p> <p>A191 Sandwich Tern (<i>Sterna sandvicensis</i>)</p> <p>According to this SPA's site Generic Version 9.0 Conservation Objectives document (Department of Arts, Heritage and the Gaeltacht, 2022) for the listed SCI, the Conservation Objective is to maintain or restore the favourable conservation condition of the bird species for which the SPA has been selected</p>	approximately 10.7km to this SPA	<p>There is no possibility for significant effects on these birds or wetlands habitat due to:</p> <p>No hydrological connection between the project site and this SPA.</p> <p>No works will be undertaken in the SPA, therefore no direct impacts are envisaged on any of the QI of this SPA.</p> <p>All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>
Inishkea Islands SPA (004004)	<p>Birds</p> <p>A195 Little Tern (<i>Sterna albifrons</i>)</p> <p>A194 Arctic Tern (<i>Sterna paradisaea</i>)</p> <p>A466 Dunlin (<i>Calidris alpina schinzii</i>)</p>	approximately 14.5km to this SPA	<p>There is no possibility for significant effects on these birds or wetlands habitat due to:</p> <p>No hydrological connection between the project site and this SPA.</p> <p>No works will be undertaken in the SPA, therefore no direct impacts are envisaged on any of the QI of this SPA.</p> <p>All Renovation and Upgrade Works will only be undertaken under the</p>

Table 4.2 Relevant European Sites, reason for designation and SPR linkage

Designated Site	Reasons for designation (information correct as of 12 th May 2021) (*denotes a priority habitat)	Distance from Proposed Development (km)	Potential adverse effect: Source-Pathway-Receptor Linkage
	<p>A137 Ringed Plover (<i>Charadrius hiaticula</i>)</p> <p>A182 Common Gull (<i>Larus canus</i>)</p> <p>A018 Shag (<i>Phalacrocorax aristotelis</i>)</p> <p>A148 Purple Sandpiper (<i>Calidris maritima</i>)</p> <p>A169 Turnstone (<i>Arenaria interpres</i>)</p> <p>A144 Sanderling (<i>Calidris alba</i>)</p> <p>A045 Barnacle Goose (<i>Branta leucopsis</i>)</p> <p>A184 Herring Gull (<i>Larus argentatus</i>)</p> <p>According to this SPA's site Generic Version 9.0 Conservation Objectives document (Department of Arts, Heritage and the Gaeltacht, 2022) for the listed SCI, the Conservation Objective is to maintain or restore the favourable conservation condition of the bird species for which the SPA has been selected</p>		<p>guidance of an Ecological Clerk of Works.</p> <p>Method Statement for all Renovation and Upgrade Works is provided in Appendix A.</p>

4.1 EUROPEAN SITES WITHIN THE ZONE OF INFLUENCE (ZOI) OF THE PROPOSED RENOVATION AND UPGRADE WORKS

The European Sites identified as being within the Proposed Renovation and Upgrade Works Zone of Influence (Zoi) using the Source Pathway Receptor (SPR) principle, will be assessed to examine the likelihood of significant effects of the Proposed Renovation and Upgrade Works either alone or in combination with other plans or projects, on any European Sites.

The Environmental Protection Agency (EPA) maps were used to identify European Sites that could potentially be located within the Zoi and possibly be connected to the project site via pathways. In this instance, given the temporary nature of the project, the small size and scale of the Proposed Renovation and Upgrade Works, the location of the works within an urban area, a distance of 15km from the Works has been identified as the Zoi for any European SAC and SPA.

In relation to mobile species listed as qualifying features of European Sites, the following guidance was used to identify whether it recommends the European Site is located within the Zoi of the project:

- SPAs with mobile bird species: "Assessing connectivity with Special Protection Areas (SPAs)" (2016) guidance document was used to identify connectivity between the project site and SPAs in the wider surrounding area (SNH, now Natural Scotland) as applicable.
- SACs with bats as a qualifying feature were included when the project occurred within the core sustenance zone of the qualifying bat population. No SACs occurred within a 15km radius designated for this qualifying feature.
- SACs with marsh fritillary as a qualifying feature are included where suitable marsh fritillary habitat occurs within the project site footprint and where the project site is located within a 10km radius of a marsh fritillary population. As no suitable habitat was detected during the multi-disciplinary site walkover, no SACs designated for this qualifying feature were included. It is also noted that no SACs occurred within a 10km radius designation for this qualifying feature.

All other European Sites were considered to occur outside of the Zoi of the project.

Nonetheless, further investigation of a SPR is assessed in Section 4.2 to confidently determine if there will be any potential effect on any European Site during the proposed construction or operation of this project. European Sites closest to the proposed works are outlined in Figures 4.1 and 4.2 and include the Broadhaven Bay SAC and Blacksod Bay/Broad Haven SPA.

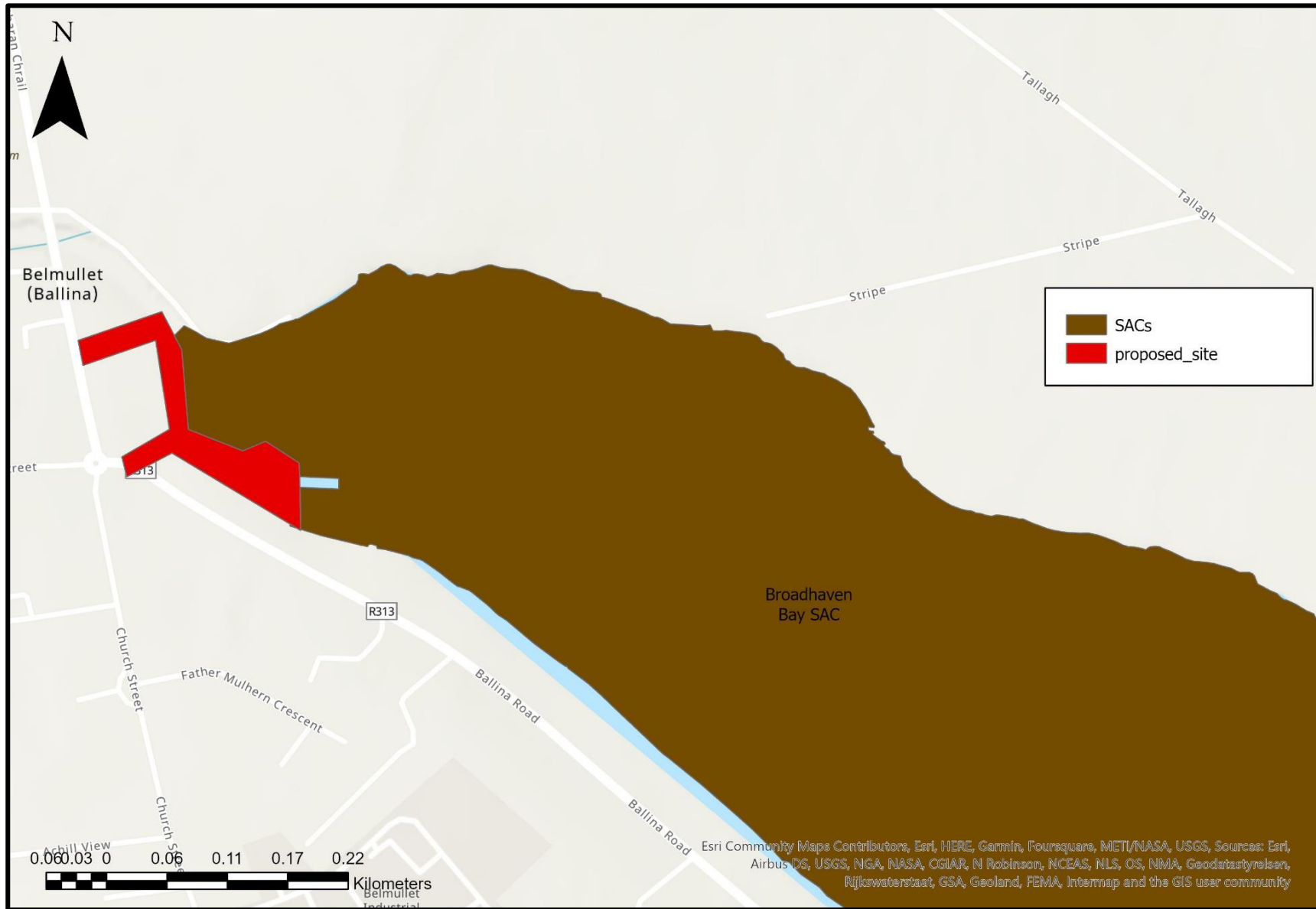


Figure 4.1: Broadhaven Bay SAC within the potential Zone of Influence of the Proposed Renovation and Upgrade Works at Belmullet, Co. Mayo

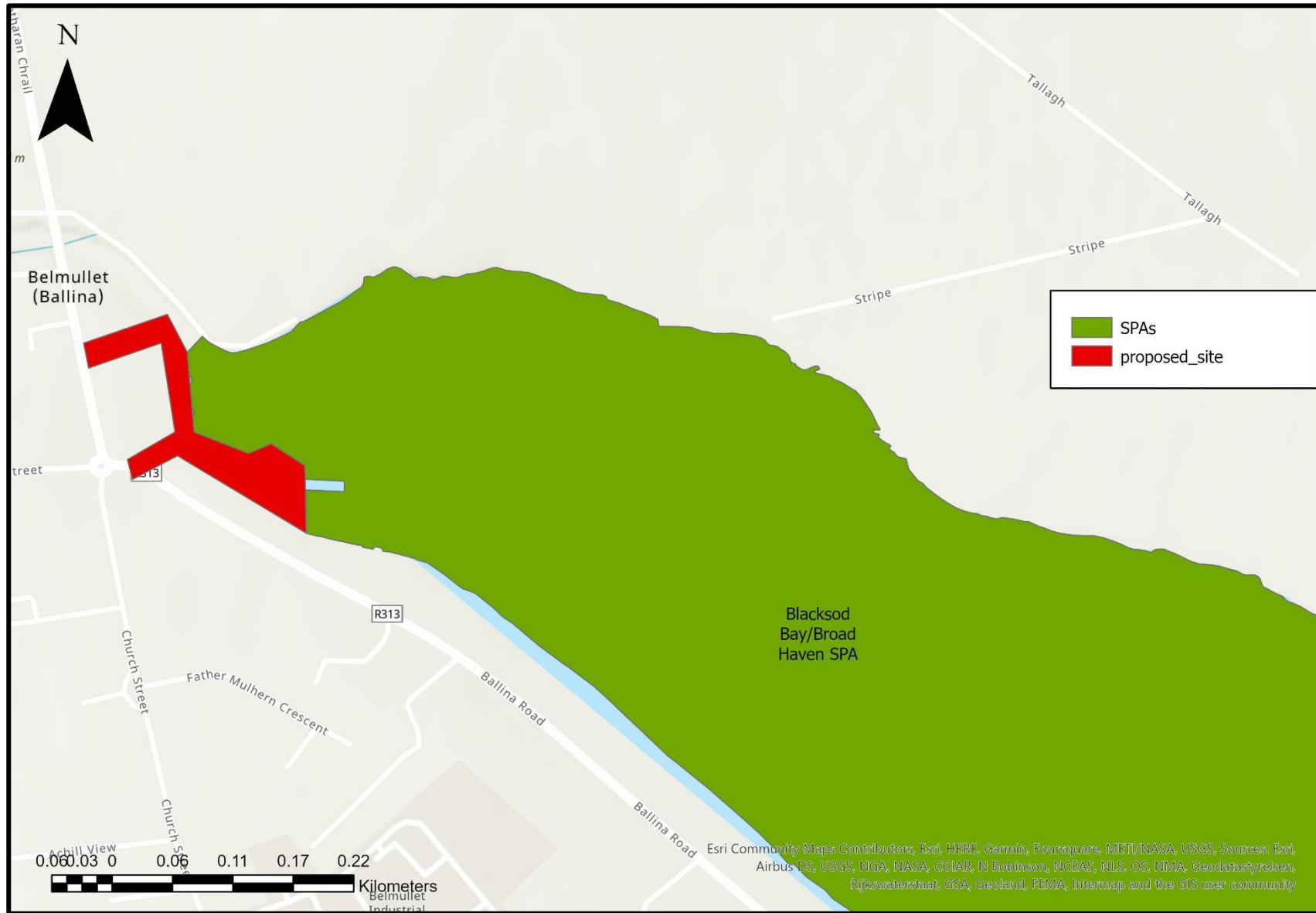


Figure 4.2: Blacksod Bay /Broadhaven SPA within the potential Zone of Influence of the Proposed Renovation and Upgrade Works at Belmullet, Co. Mayo

5. IDENTIFICATION OF SOURCE PATHWAY RECEPTOR (SPR) MODEL PATHWAYS

Under the SPR model, the works associated with the construction and operation of the Proposed Renovation and Upgrade Works represent the source of potential impacts.

Pathways that could arise as a result of project works and lead to offsite/downstream impacts are listed below and an appraisal of these pathways potential to connect this renovation and upgrade project to European Sites and their qualifying features of interest (which represent the receptors under the SPR model) is also provided:

- Emissions to surface water during construction and operation: There is potential for a surface water pathway to arise and result in the emissions to the Rinn na Sionnach_010 RSB. All surface water will discharge to the existing urban drainage system which has silt traps and will be emptied before the works and monitored on a daily basis during the works (See Method Statement, Appendix A). There will be a maintenance programme for the silt- traps onsite during the operation of the works.

As outlined in Section 3.2 above, indirect potential pathways have the potential to establish a connection between the project site and water dependent habitats. While there is potential for indirect potential pathways, all works will follow the direct outline of the Method Statement attached in Appendix A. All Renovation and Upgrade Works will only be undertaken under the guidance of an Ecological Clerk of Works. Works are localised and will occur in an urban environment.

- Emissions to groundwater: The groundwater flood mapping confirmed that the site is not at risk from groundwater flooding with no historic record of GW flooding to the Proposed Renovation and Upgrade Works. Given that the entirety of bedrock at the proposed work area is of Inver Schist Formation there is little risk of groundwater flooding. In addition, there is no risk of tidal or pluvial flooding at this site. Also, given that works will be carried out according to the Method Statement outlined in Appendix A, there is no risk to groundwater.
- Noise and vibration emissions and visual disturbance: given that the birds utilising the adjacent SPA and SAC are habituated to urban noise, the expanse of SAC / SPA habitats available to birds, the mobility of the birds to choose alternate sites in the wider surrounding area, significant effects are not considered likely to any bird species.
- Emissions to air: the project site will not result in perceptible emissions to air that could significantly effect any European Site.
- Light emissions: the project site is located in an urban setting. Project works will only be carried out during daylight hours. Bat species are not qualifying features of the surrounding European Sites and will therefore have no impact from any lighting issue as a result of this project during construction or operation.
- Visual emissions: The project works are not predicted to have the potential to result in visual emissions that could generate disturbance to qualifying species of any European Sites. Birds utilising the adjacent European Sites are habituated to general visual disturbance of vehicular traffic and human disturbance.
- Mobile Species Pathway: Project works that are located outside of European Sites can impact mobile qualifying species of European Sites if species rely on habitats occurring within the project site. No Annex 2 or bird species listed as qualifying features of surrounding European Sites rely on

the project site. As such there is no mobile species pathway connecting the project to European Sites.

5.1 IN-COMBINATION EFFECTS

Planning Permission Applications

While effects on European Sites were not expected as a result of the construction and operation of the Proposed Renovation and Upgrade Works, the potential for cumulative effects on these designated sites due to other plans and projects acting in-combination with the Development were considered. The Mayo County Council on-line planning application portal was used to search planning applications close to the Proposed Renovation and Upgrade Works. A five-year search timeframe was assessed. Retention, refused and withdrawn planning applications were excluded. **Table 5.1** shows the planning applications in close proximity to the Proposed Renovation and Upgrade Works (circa 1000m).

Table 5.1 Planning applications in close proximity to the Proposed Renovation and Upgrade Works.

Planning Reference	Description of Development	Site Address	Decision Date	Distance from Site
19103	Demolish existing 2 storey retail unit and vacant residence and construct new 3 storey development comprising 1 no. Retail unit and 6 no. Apartments and associated site development works	Carter Square/The Docks, Belmullet, Co. Mayo	18/07/2019	adjacent to south end of the Proposed Renovation and Upgrade Works
19709	Partial change of use at ground floor level from commercial to residential accommodation, including the change of use of the entire first floor area from office space to residential accommodation, extending to five no. Bedrooms in total over ground and first floor, all of which are for letting (air b & b). Permission also sought for an extension to the retained and existing commercial unit at ground floor including permission for minor modifications to the front elevation and to include all	American Street, Belmullet, Co. Mayo	03/12/2019	approximately 60m south of the Proposed Renovation and Upgrade Works

Planning Reference	Description of Development	Site Address	Decision Date	Distance from Site
	other ancillary site services and development works associated with this permission			
19616	Change of use at ground floor level from a commercial floor space to a restaurant. New ground floor layout shall consist of restaurant area, kitchen, public toilets and ancillary support areas. Minor elevation change to incorporate new rear access door into building, new signage provisions and to include all other ancillary site services and development works associated	Main St., Belmullet, Co. Mayo	10/01/2020	approximately 165 metres south of the Proposed Renovation and Upgrade Works
208	Modifications to p08/304 the parent application and subsequent planning under p09/779- planning retention for two no. Window sections inserted upon the existing western elevation at ground floor level. Planning permission is sought at first floor level, for a change of use to convert the existing dining room, bar area, stairs shaft, five female and male toilet facilities, part of the existing external terrace and change their use into sleeping accommodation. The sleeping accommodation extends to providing an additional ten no. Bedrooms to the existing development. Permission is	Barrack Street, Belmullet, Co. Mayo	06/03/2020	approximately 82 metres south of the Proposed Renovation and Upgrade Works

Planning Reference	Description of Development	Site Address	Decision Date	Distance from Site
	also sought for alterations to existing western elevation all at first floor level to accommodate bedroom window openings and to include all other ancillary site services and development works associated			
19210	Retain 27.9 sqm and 25.5 sqm rear and side extensions as constructed. Permission for construction of new gable end window and removal of stone cladding to front elevation	No. 9 Broadhaven Heights, Ballina Road, Belmullet	14/05/2019	approximately 311 metres south of the Proposed Renovation and Upgrade Works
18286	Demolition of the remnants of a shed (2,13sqm gross floor area) and part of the existing eastern boundary wall, and construction of a single storey discount foodstore, 1,724sqm gross floor area (1,254sqm net) including the sale of alcohol for consumption off the premises 99 no. Car parking spaces, 4 no. Bicycle stands, loading bay, external plant, bin store, esb substation, trolley bay, signage, new vehicular entrance and pedestrian accesses off the r313, new pedestrian access from bridge street, all associated site development, boundary treatment, drainage, including attenuation, and landscaping works at this c. 0.681 ha(c.1,685 acres)	Tallagh, Belmullet, Co. Mayo	07/02/2019	approximately 234 metres from the Proposed Renovation and Upgrade Works

Planning Reference	Description of Development	Site Address	Decision Date	Distance from Site
18647	Construction of a proposed new single storey funeral home building, together with internal access road and car parking spaces, connections to all services and all associated site development works	Hospital Road , Tallagh, Belmullet	10/11/2018	approximately 394 metres from the Proposed Renovation and Upgrade Works

There were no other planning applications in the area at the time of writing. The AA Screening assessment has shown there will be no likely significant effects to any European Site during the construction or operations phases of the Proposed Renovation and Upgrade Works. Therefore, there will be no in-combination effects with local planning applications.

6. SCREENING ASSESSMENT – CONCLUSION

It can be objectively concluded that there are not likely to be significant effects on any European Site as a result of the Proposed Renovation and Upgrade Works at Belmullet, Co. Mayo. Therefore, an Appropriate Assessment is not required.

7. REFERENCES

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APPENDIX A

METHOD STATEMENT

**FAILTE IRELAND DESTINATION TOWNS PROJECT BELMULLET
WORKS TO PROVIDE CAMPER VAN FACILITIES AND AMENITIES, IMPROVE PEDESTRAIN ACCESS AND
GENERALLY ENHANCE APPEARANCE OF DOCKS AREA**

PHASE 1 WORKS AREA

REV A 7.7.22

- DOCK ROAD FOOTPATHS AREA A
- CAMPERVAN FACILITIES SERVICES CONNECTIONS AND INSTALLATION AREA B
- CAR PARK GREEN AREAS
- REPAIRS TO EXISTING PAVING

GENERAL

Supervision, Consultation & Personnel

Prior to works commencement an Appropriate Assessment Screening shall be carried out by a suitably qualified ecologist. During the project, the works will be monitored by an ecologist / Ecological Clerk of Works (ECOW) to ensure that the measures to protect flora and habitats are fully implemented by Mayo County Council.

Liaison with Inland Fisheries Ireland and the National Parks and Wildlife Services shall take place prior to works commencement.

An initial toolbox talk/briefing to the site staff will be provided by a suitably qualified ecologist / ECoW. An initial site visit will be carried out by the ecologist to ensure all necessary procedures as outlined in this Method Statement are in place, prior to works commencing.

The ecologist will be present during the progression of the works to ensure works are carried out in adherence with best practice. Regular audits of the works outlined in this Method Statement will be undertaken to ensure that the prescribed Site Methods are employed. Any deviance from the agreed methodology will be highlighted and if necessary rectified. Any environmental incident or non-compliance issues will immediately be reported to Mayo District Engineer.

In addition, the following best practice shall be adhered to by Mayo County Council:

- Mayo County Councils General Services Supervisor will maintain a checklist identifying maintenance and compliance with this Method Statement.
- The General Service Supervisor will be responsible for recording attendance at toolbox talks and making sure all operators have access to the required reference material, including drawings of any restricted areas.
- The General Service Supervisor will be responsible for the scheduling of activities.
- All operatives working on the site will be made fully aware of the environmental responsibilities, conditions and requirements along with a full description of the methods to be employed. This information will be imparted at a dedicated site induction prior to the commencement of works on the site.

SITE SET UP

A machinery compound and storage area will be located close to the works area /machinery compound and positioned a minimum of 25m away from all waterbodies.

Chainsaws, fuel and oils will be stored in the compound storage area.

Refueling of chainsaws will be carried out within the compound storage area. Spill-kit will be on site at all times.

STANDARD POLLUTION PREVENTION MEASURES

Machinery will only be refilled within the machinery compound.

Mobile storage such as fuel bowsers will be used.

When not in use, all valves and fuel trigger guns from fuel storage containers will be locked.

All plant refueling will take place within the machinery compound using mobile fuel bowsers. Only dedicated trained and competent personnel will carry out refueling operations. Plant refueling will take place as far as practicable from any waterbody. A spill kit and drip tray shall be on site at all times and be available for all refueling operations. Equipment shall not be left unattended during refueling. All pipework from containers to pump nozzles will have a anti-siphon valve fitted.

Oil booms and oil soakage pads will be kept on site to deal with any accidental spillage.

Strict procedures for plant inspection, maintenance and repair shall be detailed in the plant hire contractors daily inspection sheets and machinery shall be checked for leaks before arrival on site.

All site plant will be inspected at the beginning of each day prior to use. Defective plant shall not be used until the defect is satisfactorily fixed.

All major repair and maintenance operations will take place off site.

Care will be taken at all times to avoid contamination of the environment with contaminants.

Plant refuelling procedures outlined above shall be detailed in the contractor's Method Statement.

AREA A

UPGRADE OF EXISTING FOOTPATHS ON DOCKS ROAD

Demolitions:

The following materials will be broken up, immediately loaded onto lorries and removed by a licenced haulier to a licenced landfill site

- Existing concrete footpaths and steps, natural stone surfacing, drainage channels and planted areas.
- Tarmacadam only to accommodate widening of footpath.
- Base materials (stone) to approximately 300mm below existing levels.

Reinstatement:

The following works will take place:

- Placing and compacting of c.250mm certified contaminant free base stone and sand.
- Setting of stone kerbs in cement haunching
- Installation of Aco or equivalent surface water drainage channels and connection to existing drains in immediate vicinity.
- Plywood shuttering, steel reinforcement and pouring of concrete to create retaining wall for steps
- Placing of steel mesh and pouring and raking of c. 200 concrete for footpaths and steps
- Manual laying of concrete pavements on clean sand base
- Tarmacadam to tidy up road edge against kerbing.
- Installation of Stainless-steel handrails to steps.
- Installation of terram layer, high quality topsoil, and selected shrubs to planted area.

AREA B

PROVISION OF CAMPER VAN FACILITIES

Demolitions:

The following materials will be broken up, immediately loaded onto lorries and removed by a licenced haulier to a licenced landfill site

- X metre length x 450mm wide of raised concrete kerbing paving to create caravan parking bays
- Slit trenches of tarmacadam and base materials below to facilitate services connections.
- Bays of tarmacadam and base materials to a depth of 1 metre below to create planted swales.

Other works

- Power washing of existing concrete surfaces along building edges.

Preparation Works

- Sand bags to be used to enclose / delineate the works boundary.
- Silt trap to be emptied before and monitored on a daily basis during the works and emptied when/if required.

Reinstatement:

The following Services works will take place:

- Services Connections: Install service ducts for water, drainage, and power. Once ducts are in place trenches will be backfilled with compacted stone and refinished in new tarmacadam.
- Installation and connect of Air de service units as indicated on the drawings and connect to water, power, and sewers.



- solar powered parking meter machine and CCTV.
- Additional decorative public lighting bollard connecting to existing public lighting power supply. Lighting to be Dark Skies Friendly.

Provision of Planted 'Swales'

The following works will take place in 1 metre deep swales

- Installation of stone kerbing with drainage inlets. Bedding in concrete mortar.
- Installation of terram type membrane, land drain and overflow pipe connected to drainage system, suitable topsoil and selected planting.

Preparation Works

- Sand bags to be used to enclose/delineate the works boundary.
- Silt trap to be emptied before and monitored on a daily basis during the works and emptied when/if required.



Street furniture in Amenity Area

- No Demolitions are required.
- Street furniture will be surface fixed into existing paving.
- Protective bollards shall be root fixed to a depth of up to 450, and surrounding surfaces made good with insitu concrete.
- Existing paving will be made good locally.

PHASE 2 WORKS AREA

- DOCKS ROAD NORTH IN 2 SUB PHASES.
- CREATION OF KERBED PLANTED AREAS IN NORTH DOCKS AREA D

AREAS C&D

UPGRADE OF EXISTING FOOTPATHS ON DOCKS ROAD AND NORTH DOCKS

Demolitions:

The following materials will be broken up, immediately loaded onto lorries and removed by a licenced haulier to a licenced landfill site

- Existing concrete footpaths and steps, natural stone surfacing, drainage channels and planted areas.
- Tarmacadam only to accommodate widening of footpath.
- Base materials (stone) to approximately 300mm below existing levels.
- Base materials to a depth of 1 metre to proposed planted area.
- Loose plaster from adjacent boundary wall.

Preparation Works

- Sand bags to be used to enclose /delineate the works boundary.
- Silt trap to be emptied before and monitored on a daily basis during the works and emptied when/if required.

Reinstatement:

The following works will take place:

- Placing and compacting of c.250mm certified contaminant free base stone and sand.
- Setting of stone kerbs in cement haunching
- Installation of Aco or equivalent surface water drainage channels and connection to existing drains in immediate vicinity.
- Plywood shuttering, steel reinforcement and pouring of concrete to create retaining wall for steps
- Placing of steel mesh and pouring and raking of c. 200 concrete for footpaths and steps
- Manual laying of concrete pavements on clean sand base
- Tarmacadam to tidy up road edge against kerbing.
- Installation of Stainless-steel handrails to steps.
- Installation of terram layer, high quality topsoil, and selected shrubs to planted area.
- Provision of concrete base in planted area and installation of feature signage indicating docks and campervan facilities.

Boundary wall upgrade works

- Existing block wall will be capped with a precast concrete capping bedded on cement, plastered and painted

PHASE 3 WORKS AREA

- NORTH DOCKS AREA
- LINEMARKING TO ALL TARMACADAM THROUGHOUT.

AREA D

NEW TARMACADAM SURFACING IN NORTH DOCKS AND LINEMARKING

Demolitions:

The following materials will be broken up, immediately loaded onto lorries and removed by a licenced haulier to a licenced landfill site

- Existing broken concrete slabs, tarmacadam and maintenance stone.
- Base materials (stone) to approximately 200mm below existing levels.

Preparation Works

- Sand bags to be used to enclose / delineate the works boundary.
- Silt trap to be emptied before and monitored on a daily basis during the works and emptied when/if required.

Reinstatement:

The following works will take place:

- Placing and compacting of c.150mm certified contaminant free base stone and sand.
- New Tarmacadam surface throughout.
- Areas A and D, Line marking on new and existing tarmacadam to delineate road crossings, car and camper van parking spaces.
- Bitumen adhesive and Bauxite sand to identify pedestrian crossing areas.

PHASE 4 WORKS AREA

- INTREO OFFICE GROUNDS ON AMERICAN STREET BACKING ONTO THE NORTH DOCKS.

AREA E

CREATION OF LEVEL ACCESS TO DOCKS VIA INTREO OFFICE GARDEN

Demolitions.

The following materials will be broken up, immediately loaded onto lorries and removed by a licenced haulier to a licenced landfill site:

- Existing concrete block wall and foundations along American street.
- Grass area within Intreo site to a width of 3-4 metres. Topsoil will be set aside for reuse elsewhere in vicinity.
- 1.2-metre-wide x 1 metre deep trench for foundations
- Base materials (stone) to approximately 500mm below existing levels.

Preparation Works

- Sand bags to be used to enclose / delineate the works boundary.
- Silt trap to be emptied before and monitored on a daily basis during the works and emptied when/if required.

Reinstatement:

The following works will take place:

- Construction of local stone boundary wall, 1.8 metres high as new boundary to Intreo office and to define new pedestrian path.
- Installation and compaction of hardcore and sand base for concrete block paving and perimeter concrete kerbing.
- Tree and decorative shrub planting in existing grass areas.

REFERENCES

National Parks and Wildlife Services guidance Series (2021) Strict Protection of Animal Species. Guidance for Public authorities on the Application of Articles 12 and 16 of the EU Habitats Directive to development/ works undertaken by or on behalf of public authority.

National Roads Authority (2006). Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes. The National Roads Authority, Dublin.

National Roads Authority (2008). Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes. The National Roads Authority, Dublin.

National Roads Authority Guidelines on The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads (2010).

CONFIRMATION AND COMMUNICATION

I have received the information from this task specific Method Statement, and I confirm that I understand the contents, together with my responsibility with regards to Health & Safety. I confirm that I shall comply with any instruction given to me in accordance with and in compliance with this document.

	Print Name	Signature	Employer	Date of Briefing
1				00/00/2022
2				00/00/2022
3				00/00/2022
4				00/00/2022
5				00/00/2022
6				00/00/2022
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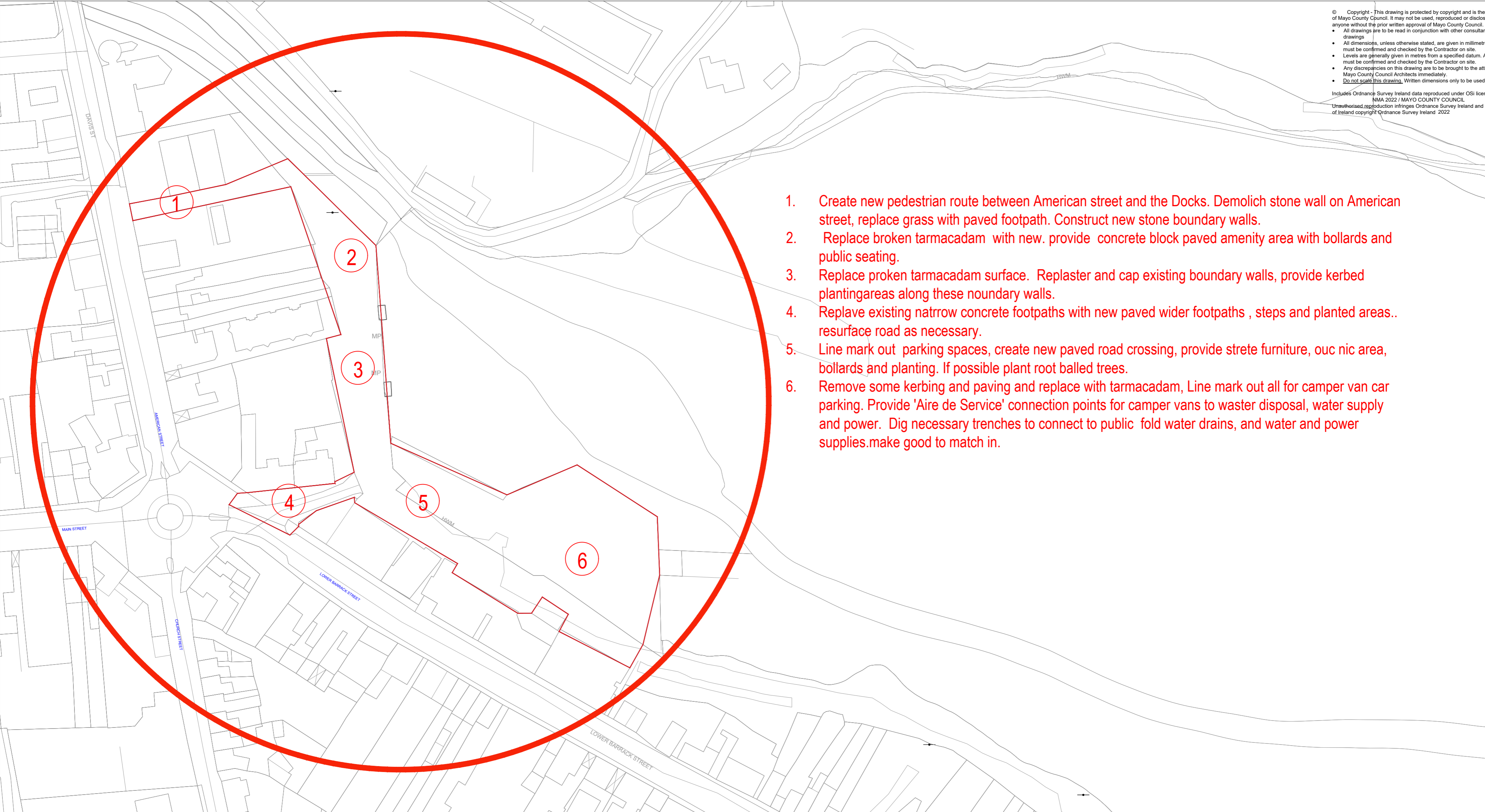
APPENDIX B

DRAWINGS

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- All drawings are to be read in conjunction with other consultants drawings
- All dimensions, unless otherwise stated, are given in millimetres and must be confirmed and checked by the Contractor on site.
- Levels are generally given in metres from a specified datum. All Levels must be confirmed and checked by the Contractor on site.
- Any discrepancies on this drawing are to be brought to the attention of Mayo County Council Architects immediately.
- Do not scale this drawing. Written dimensions only to be used.

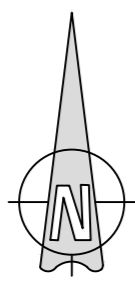
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1. Create new pedestrian route between American street and the Docks. Demolish stone wall on American street, replace grass with paved footpath. Construct new stone boundary walls.
2. Replace broken tarmacadam with new. provide concrete block paved amenity area with bollards and public seating.
3. Replace broken tarmacadam surface. Replaster and cap existing boundary walls, provide kerbed planting areas along these boundary walls.
4. Replave existing narrow concrete footpaths with new paved wider footpaths, steps and planted areas.. resurface road as necessary.
5. Line mark out parking spaces, create new paved road crossing, provide street furniture, outdoor area, bollards and planting. If possible plant root balled trees.
6. Remove some kerbing and paving and replace with tarmacadam, Line mark out all for camper van car parking. Provide 'Aire de Service' connection points for camper vans to waste disposal, water supply and power. Dig necessary trenches to connect to public foul water drains, and water and power supplies. make good to match in.

SITE LOCATION MAP
Scale 1:1000

LEGEND - SITE LOCATION MAP	
SITE LOCATION (INDICATIVE)	
ITM CENTRE POINT CO-ORDS: X: 470502 Y: 832385	



Status Key		Rev. No.	Date:	Comment
SHARED / FOR INFORMATION				
S0	WORK IN PROGRESS			
S1	COORDINATION			
S2	INFORMATION			
S3	REVIEW / COMMENT			
S4	CONST. APPROVAL			
D1	COSTING			
D2	TENDER			
D3	CONTRACTOR DESIGN			
PUBLISHED				
A1	PT8 / FSC / DAC			
A2	CONSTRUCTION			
A3	AS-BUILT			

Mayo County Council, Architects Department, The Mall, Castlebar, Co. Mayo 094 9047695



ARCHITECTS DEPARTMENT

MAYO COUNTY COUNCIL



Project No:	Project Title:	Dwg Type:	Status:
		DR/SC	S0
Drawing Title:		Drawing No.:	Revision:
Drawn By:	Proj No - Orig - Cat - Lvl - Type - Role - No. - Status	Scale:	First Issue:
Checked By:	A-123 - MCC - - DesignA - - Design		XX.XX.201X





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 - ALL LEVELS SHOWN ARE IN M O.D.
 - READ ALL DRAWINGS IN CONJUNCTION WITH OTHER CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, AND FABRICATORS DRAWINGS.
 - ALL CONSTRUCTION LEVELS AND CONTOURS ON THE INCLUDED DRAWINGS RELATE TO THE POOLBEG ORDINANCE DATUM

LEGEND:

	200mm# RISING MAIN
	600mm# FOUL
	300mm# FOUL CONCRETE
	225mm# FOUL
	225mm# STORM TWINWALL
	375mm# FOUL CONCRETE
	450mm# FOUL CONCRETE
	REDUNDANT PIPE

NOTE:
REFER TO DRAWING 15524-C-011 FOR DETAILS ON NETWORK & 15524-C-070-071-072 FOR LONGITUDINAL SECTIONS.

No.	DATE	REVISION	BY	CHK'D
0	05.07.18	ISSUE FOR AS BUILT	SOC	AMcC
F	09.12.16	ISSUE FOR REVIEW	AOS	AMcC
E	14.11.16	ISSUE FOR REVIEW	AOS	AMcC
D	08.07.16	ISSUE FOR REVIEW	AOS	CG
C	28.06.16	ISSUE FOR REVIEW	AOS	CG
B	27.06.16	ISSUE FOR REVIEW	AOS	CG
A	11.11.15	ISSUE FOR TENDER	AOS	CG

DRAWING STATUS
AS BUILT

CLIENT
IRISH WATER

PROJECT
BELMULLET SEWERAGE SCHEME - COLLECTION NETWORK AND WWTP

DRAWING TITLE
NETWORK DRAWINGS SHEET 1

FINBARR GANNON & CO. LTD.
CONSULTING ENGINEERS
2a RIVER HOUSE, BLACKPOOL PARK, BLACKPOOL, CORK.
TEL: 021-4396960 FAX: 021-4396966 E-MAIL: office@fgcl.ie WEB: www.fgcl.ie



PREPARED	AOS	FGCL FILE No.	15-524
CHECKED	CG	OTHERS FILE No.	
APPROVED	CG	OTHERS FILE No.	
DATE	NOVEMBER 2015	CLIENT PROJECT No.	
SCALE	VARIABLES	CLIENT APPROVAL	
CAD FILE NAME	15524-C-007.dwg		
DRAWING NUMBER	15524-C-007		REV. 0

PLAN
Scale 1: 1000

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 - ALL CONSTRUCTION LEVELS AND CONTOURS ON THE INCLUDED DRAWINGS RELATE TO THE FOOTING ORDNANCE DATUM

MH No.	Manhole Grid Reference	Location	Easting	Northing	Top of Lid	Manhole Dip	Invert Level	Backdrop Invert Level m AOD	Connections Etc
Sea Rd.Pumping Station	N/A	Sea Road	70133.583	332824.54	3.908	7.672	-3.764		No Manhole Here Just a dip taking to prove il of pipe enetering P5
C1.0	1701	Sea Road	70127.325	332731.265	2.985	6.58	-3.595		
C1.1	1601	Sea Road	70122.18	332634.519	2.774	6.2	-3.426		
C1.3	1507	Bridge Road (Green Area)	70136.488	332573.145	2.906	6.09	-3.184	-0.115	Backdrop(375mm Plastic)
C1.3A	1508	Bridge Road (Green Area)	70145.165	332576.743	3.108	3.2	-0.092		
F4.2.3	2510	Bridge Road (Green Area)	70230.365	332582.718	3.5	3.325	0.175		
F4.2.2A	2511	Bridge Road	70230.39	332595.85	3.994	3.79	0.204		
F4.2.2	2509	Bridge Road	70245.618	332565.987	4.138	3.85	0.288		225mm Dia Connection Left Out for future
F4.2.1A	2508	Bridge Road	70263.032	332596.24	4.151	3.8	0.351		150 Connection
F4.2.1	3514	Bridge Road	70315.191	332598.272	4.161	3.68	0.481		150 Connection Not Used
F4.2	3607	Ballyglass Road	70366.963	332606.721	5.365	4.78	0.585		
F4.3	3608	Ballyglass Road	70350.476	332689.266	4.159	3.345	0.814	2.786	150 Connection brought into property for future Aldi Connection
F4.4	3705	Ballyglass Road	70336.914	332769.846	3.954	2.83	1.124		150 Connection to Hospital & Brogans EuroSpar
F4.2A	4504	Stripehill	70438.273	332566.476	3.391	2.04	1.351		
C1.4	1506	School Road (Green Area)	70145.128	332540.382	3.051	6.19	-3.139	-1.095m / 0.698m	Backdrop 450mm Dia (Both Sides)
C1.5.1	2507	School Road (Green Area)	70226.146	332547.772	3.603	2.725	0.878		
C1.5.1B	2506	School Road	70227.084	332536.705	3.969	3.067	0.902		
C1.5.1A	2505	Pearse Street	70225.132	332538.427	4.213	3.24	0.973	2.763	150mm Connection from Church St
C1.5.2	3513	Pearse Street	70321.831	332541.956	4.285	2.97	1.315		
C1.5.3	3512	American Street	70379.333	332544.824	4.78	3.38	1.4	2.7	375 Backdrop taking in American St.
C1.5.4A	3413	American Street	70390.616	332493.268	5.768	2.215	3.553		
C1.5.4	3414	American Street	70399.474	332448.823	6.442	1.84	4.602	1.933	Connection picked up 300Dia from Co-Op
C1.5.5	4406	American Street	70409.288	332400.81	7.381	2.08	5.301	6.181	Connection picked up 225Dia Ballina Rd
C1.5.6	4325	American Street	70412.444	332385.52	8.085	2.52	5.565	5.785 / 7.005	Connection picked up 225 Dia Church Rd / Rising Main 150 Dia Inlet, 150 Pipe also to Ventstack on street
PS1	5305	Quays			2.800	3.816	-1.016		
PS2	5309	Quays			2.656	1.756	0.9		
PS3	5308	Quays	70564.748	332363.327	2.608	3.715	-1.107		
PS4	5306	Quays			2.800	3.825	-1.025	-0.600	
PS5	5312	Quays	70557.916	332360.335	2.69	3.92	-1.23		
S1	5307	Quays			2.401	2.000	0.407		
S1A	5311	Quays	70577.672	332352.133	2.552	1.88	0.672		Invert of Sump in Manhole
S2	5310	Quays	70567.955	332345.393	2.664	1.53	1.134		
S3	4326	Quays	70499.769	332382.534	3.537	1.645	1.892		
S4	4327	Quays	70481.252	332379.207	4.191	1.965	2.226		
S5	4328	Quays	70453.532	332371.461	7.452	2.15	5.302	6.282	Manhole picked up 300 Dia storm ballina rd
C1.4A	1506	School Road (Green Area)	70140.313	332539.37	3.184	4.26	-1.076		
C1.5	1505	School Road	70108.3	332526.337	3.218	4.17	-0.952		
F1.6	1410	School Road	70109.722	332465.405	3.205	3.97	-0.765		
F1.7	1409	School Road	70115.497	332419.216	3.269	3.95	-0.681		
F1.8	1308	School Road	70123.808	332342.321	3.085	3.55	-0.465	2.8	Connection 300 Dia Taking in Quay St.
F1.9	1307	Shore Road	70133.394	332328.578	3.172	3.62	-0.448		
F1.9A	1203	Shore Road	70139.969	332291.293	3.11	3.42	-0.31		
F1.10	1202	Shore Road	70149.749	332239.281	3.118	3.3	-0.182		
F1.11	1104	Shore Road	70162.44	332172.768	3.094	3.09	0.004	2.374	Connection 150Dia Taking in 1102F Existing
F1.12	1103	Shore Road	70172.324	332108.248	3.105	2.92	0.185		
F1.13	1002	Shore Road	70162.65	332031.264	3.046	2.6	0.446		
F1.14	1916	Shore Road	70158.345	331994.434	3.074	2.52	0.554	0.724	Futre 150 Dia Connection
F1.15	1915	Curlew Estate					0		
S6		Sea Road	70233.817	332594.565	4.011	1.405	2.606		Installed for mayo county council
S7		Sea Road	70151.183	332590.974	3.241	1.24	2.001		Installed for mayo county council
S8		Sea Road	70123.585	332617.05	2.927	1.1	1.827		Installed for mayo county council
S9		Sea Road	70128.331	332701.281	2.834	1.31	1.524		Outfall to sea
S10		Sea Road	70134.295	332766.422	2.816	0.89	1.926		Installed for mayo county council

0	05-07-18	ISSUE FOR AS BUILT	SOC	AMcC
F	30-11-16	ISSUE FOR REVIEW	AOS	AMcC
E	26-08-16	ISSUE FOR REVIEW	AOS	AMcC
D	28-07-16	ISSUE FOR REVIEW	AOS	AMcC
C	08-07-16	ISSUE FOR REVIEW	AOS	AMcC
B	27-06-16	ISSUE FOR REVIEW	AOS	AMcC
A	11-11-15	ISSUE FOR TENDER	AOS	CG
No.	DATE	REVISION	BY	CHK'D

DRAWING STATUS

AS BUILT

CLIENT

IRISH WATER

PROJECT

BELMULLET SEWERAGE SCHEME - COLLECTION NETWORK AND WWTP

DRAWING TITLE

NETWORK DRAWINGS SHEET 5

FINBARR GANNON & CO. LTD.
CONSULTING ENGINEERS

2a RIVER HOUSE, BLACKPOOL PARK, BLACKPOOL, CORK.
TEL: 021-4396960 FAX: 021-4396966 E-MAIL: office@fgcl.ie WEB: www.fgcl.ie



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CHECKED CG OTHERS FILE No.

APPROVED CG OTHERS FILE No.

DATE NOVEMBER 2015 CLIENT PROJECT No.

SCALE VARIES CLIENT APPROVAL

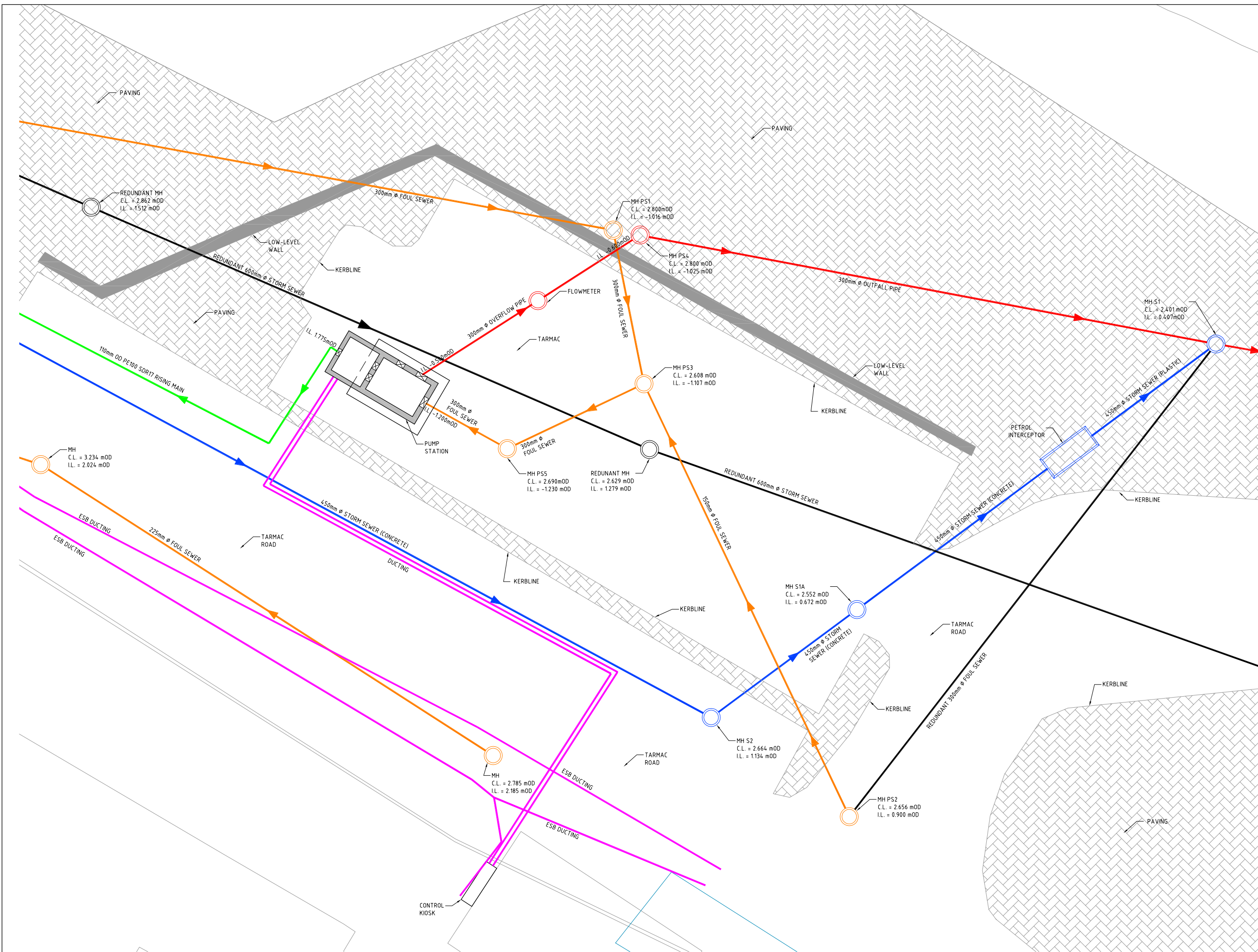
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DRAWING NUMBER

15524-C-011

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 - REFER TO EPS DRAWINGS FOR THE LOCATION, EXTENT AND SIZE OF ALL OPE PENETRATIONS.
 - ALL CONSTRUCTION LEVELS AND CONTOURS ON THE INCLUDED DRAWINGS RELATE TO THE MALIN ORDINANCE DATUM
 - ALL EXISTING PAVING, KERBLING, LIGHTING AND WALLS WERE REINSTATED TO PRE-WORKS CONDITION BY CONTRACTOR FOLLOWING COMPLETION OF WORKS.

LEGEND:

RISING MAIN	
STORM SEWER	
FOUL SEWER	
OUTFALL PIPE	
DUCTING	

0	05.07.18	ISSUE FOR AS BUILT	SOC	AMcC
D	27.03.17	ISSUE FOR REVIEW	SOC	AMcC
C	18-11-15	ISSUE FOR TENDER	AOS	AMcC
B	11-11-15	ISSUE FOR TENDER	AOS	AMcC
A	04-11-15	ISSUE FOR TENDER	AOS	AMcC
No.	DATE	REVISION	BY	CHK'D

DRAWING STATUS
AS BUILT

CLIENT
IRISH WATER

PROJECT
BELMULLET SEWERAGE SCHEME - COLLECTION NETWORK AND WWTP

DRAWING TITLE
**QUAY ROAD PUMP STATION
SITE LAYOUT PLAN
UNDERGROUND SERVICES (CIVIL)**

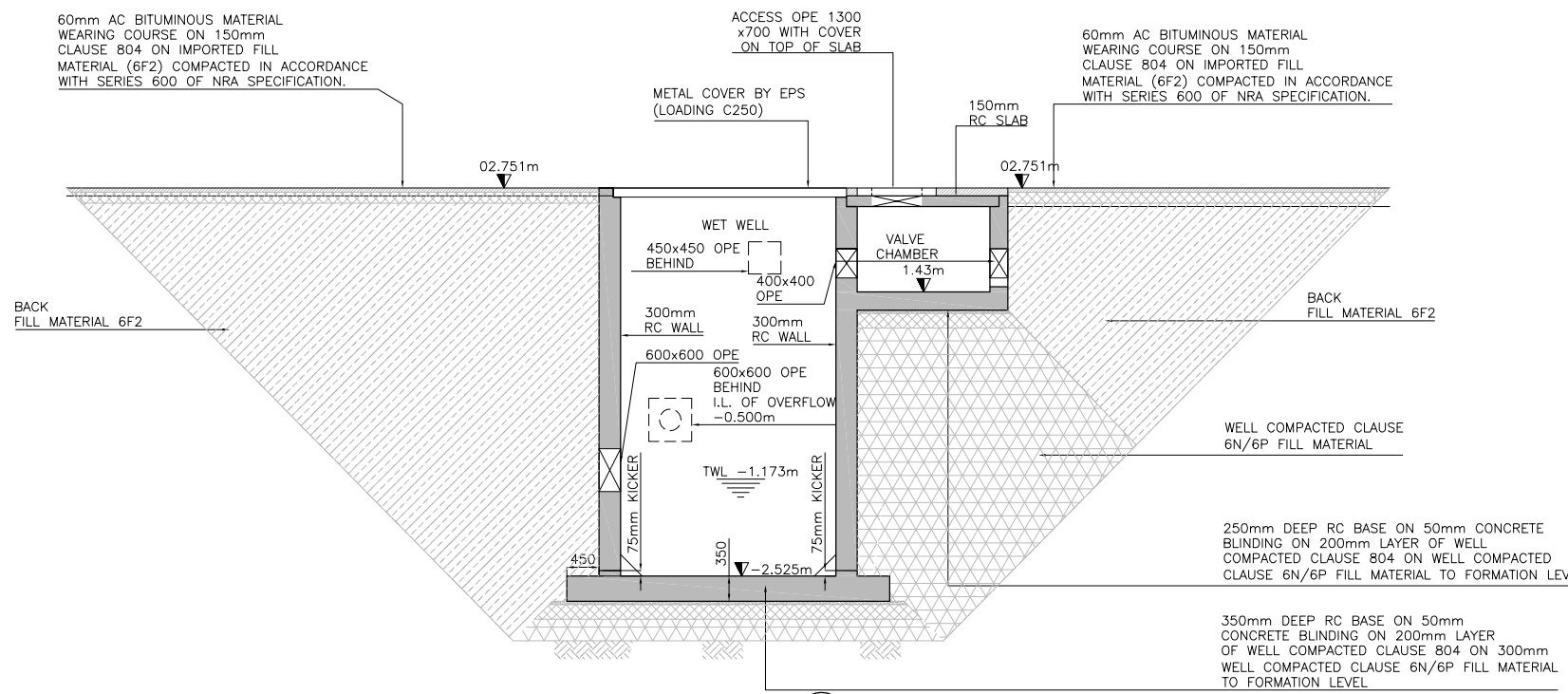
eps
Planning & Treatment Systems

ROADBRIDGE
CIVIL ENGINEERING & BUILDING CONTRACTORS

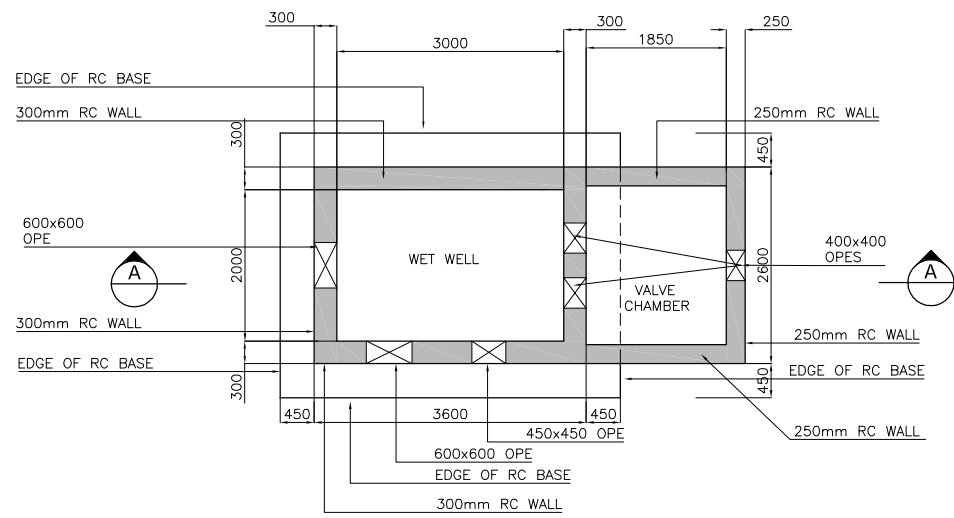
IN ASSOCIATION WITH
FINBARR GANNON & CO. LTD.
CONSULTING ENGINEERS
21 RIVER HOUSE, BELMULLEN PARK, BELMULLEN, CO. DU.
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CHECKED	AMc	OTHERS FILE No.	
APPROVED	AMc	OTHERS FILE No.	
DATE	NOVEMBER 2015	CLIENT PROJECT No.	
SCALE	1:100 (A1) 1:200 (A3)	CLIENT APPROVAL	
CAD FILE NAME	15524-C-020.dwg		
DRAWING NUMBER	15524-C-020		REV. 0

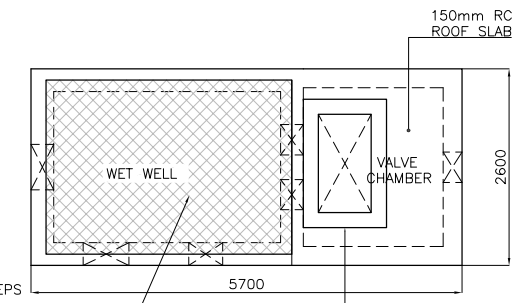
SITE LAYOUT PLAN - UNDERGROUND SERVICES (CIVIL)
SCALE 1:100 @ A1



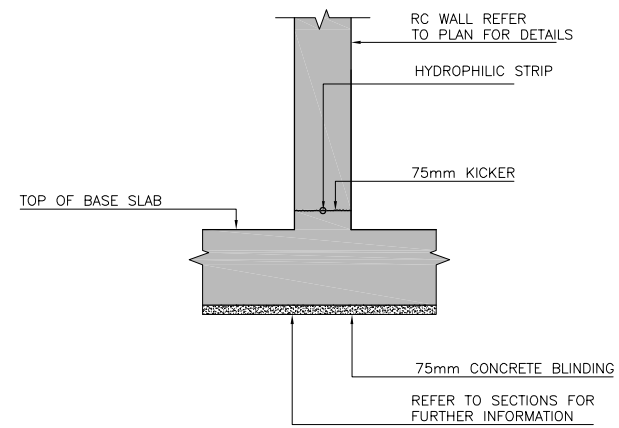
SECTION A-A
SCALE 1:50 @ A1



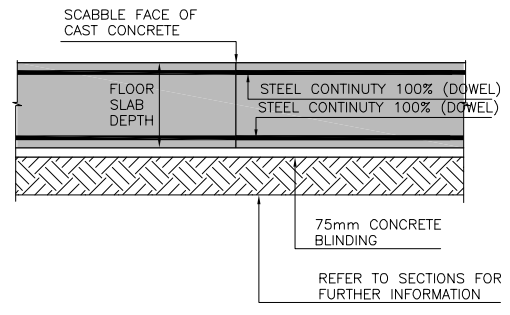
PLAN OF PUMP STATION TANK - BASE LEVEL
SCALE 1:50 @ A1



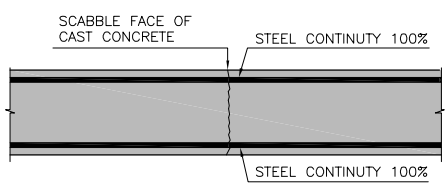
ROOF PLAN
SCALE 1:50 @ A1



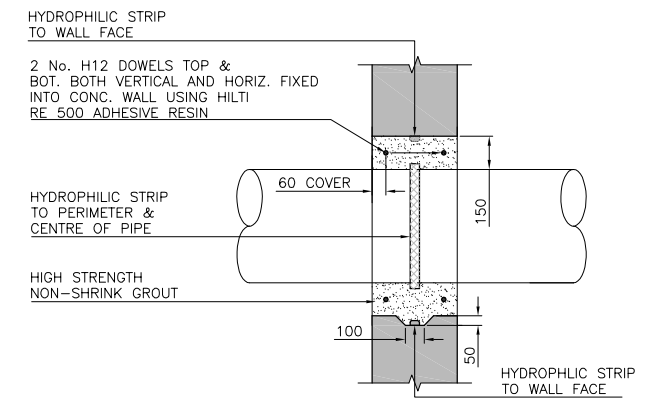
TYPICAL SECTION THROUGH PERIMETER
BASE SLAB & WALL
SCALE 1:20 @ A1



TYPICAL CONSTRUCTION DAY
JOINT DETAIL - WALL
SCALE 1:20 @ A1



TYPICAL CONSTRUCTION DAY
JOINT DETAIL - BASE SLAB
SCALE 1:20 @ A1



TYPICAL PIPE PENETRATION DETAIL
SCALE 1:20 @ A1

CONCRETE EXPOSURE CLASSES, COMPRESSIVE STRENGTHS & CHLORIDE CLASSES FOR VARIOUS CONCRETE ELEMENTS:
The following tables sets out the concrete design requirements in accordance with NA-A2 & T A.6 ISEN 206-1 for the various reinforced concrete elements:

TABLE A1: RC INSITU TANK BASE SLAB AND WALLS	
ALL WALLS (IN FULL) BELOW GROUND:	= XA1
- EXPOSURE CLASS	= C32/40
- COMPRESSIVE STRENGTH CLASS	= CL 0.4 (REINFORCED)
- CHLORIDE CLASS	= 300KG/M ³
- MIN. CEMENT CONTENT	= 0.50
- MAX. W/C RATIO	

TABLE B1: PIPE BEDDING, PIPE SURROUND, HAUNCHING:	
EXPOSURE CLASS	= X2 (WET, RARELY DRY)
COMPRESSIVE STRENGTH CLASS	= C12/15 (CYLINDER/CUBE)
CHLORIDE CLASS	= CL 1.0 (UNREINFORCED)

TABLE C1: CONCRETE LEANMIX & BLINDING:	
EXPOSURE CLASS	= X0 (FOR CONCRETE WITHOUT REINFORCEMENT)
COMPRESSIVE STRENGTH CLASS	= C12/15 (CYLINDER/CUBE)
CHLORIDE CLASS	= CL 1.0 (UNREINFORCED)

TABLE E1: REINFORCED CONCRETE FOOTPATHS & ALL HORIZONTAL CONCRETE SURFACES:	
EXPOSURE CLASS	= XF3
COMPRESSIVE STRENGTH CLASS	
CHLORIDE CLASS	
MIN. CEMENT CONTENT	(REFER TO OPTIONS AVAILABLE IN TABLE NA.6 OF IS EN 206:2013)
MAX. W/C RATIO	

TABLE F1: ALL OTHER ELEMENTS NOT COVERED ABOVE:	
EXPOSURE CLASS	= X2 (WET, RARELY DRY)
COMPRESSIVE STRENGTH CLASS	= C12/15 (CYLINDER/CUBE)
CHLORIDE CLASS	= CL 0.4 (REINFORCED)
MIN. CEMENT CONTENT	= 310 KG/M ³
MAX. W/C RATIO	= 0.55

- GENERAL NOTES:**
- DO NOT SCALE THIS DRAWING - IF IN DOUBT ASK.
 - ALL WORK ON THE SITE IS IN ACCORDANCE WITH THE SAFETY, HEALTH, AND WELFARE AT WORK (CONSTRUCTION) REGULATIONS 2015.
 - ALL DIMENSIONS ARE IN MILLIMETERS
 - ALL LEVELS SHOWN ARE IN M.O.D.
 - READ ALL DRAWINGS IN CONJUNCTION WITH OTHER CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, AND FABRICATORS DRAWINGS.
 - REFER TO EPS DRAWINGS FOR THE LOCATION, EXTENT AND SIZE OF ALL OPE PENETRATIONS.
 - ALL CONSTRUCTION LEVELS AND CONTOURS ON THE INCLUDED DRAWINGS RELATE TO THE MAIN ORDNANCE DATUM
- NOTE A - BASE SLAB DESIGN:**
350mm DEEP RC BASE SLAB ON 50mm CONCRETE BLINDING ON 200mm CLAUSE 804 IMPORTED GRANULAR FILL MATERIAL PLACED AND COMPACTED IN ACCORDANCE WITH 800 SERIES OF NRA SPECIFICATION ON 6N/6P IMPORTED GRANULAR FILL MATERIAL PLACED AND COMPACTED IN ACCORDANCE WITH 600 SERIES OF THE NRA SPECIFICATION ON FORMATION LEVEL. BASE SLAB HAS BEEN DESIGNED USING AN ASSUMED ALLOWABLE BEARING PRESSURE OF 150KN/m².
- NOTE: TEMPORARY PROPPING:**
THE CONTRACTOR ALLOWED FOR ALL NECESSARY PROPS AND TEMPORARY SUPPORT SYSTEMS REQUIRED FOR THE SUCCESSFUL EXECUTION OF THE WORKS. ALL TEMPORARY WORKS WERE DESIGNED BY MAIN CONTRACTORS TEMPORARY WORKS DESIGN ENGINEER.
- NOTE: KICKERS:**
75mm KICKERS AT ALL JUNCTIONS BETWEEN THE RC BASE SLAB AND RC CONCRETE WALLS (INCLUDING THOSE REQUIRED TO FORM ALL RC CHAMBERS AND OTHER ANCILLARY STRUCTURES. REFER TO TYPICAL DETAIL FOR FURTHER INFORMATION.
- NOTE:**
25x25mm CHAMFER ALONG THE TOP OF ALL RC WALLS UNLESS NOTED OTHERWISE.

No.	DATE	REVISION	BY	CHK'D
D	05.07.18	ISSUED FOR AS BUILT	SOC	AMcC
I	11.07.17	ISSUED FOR REVIEW	AMc	AMcC
H	15.05.17	ISSUED FOR REVIEW	SOC	AMcC
G	27.03.17	ISSUED FOR REVIEW	SOC	AMcC
F	15.02.17	ISSUED FOR REVIEW	SOC	AMcC
E	16-08-16	ISSUED FOR INFORMATION	AOS	AMcC
D	-	ISSUED FOR INFORMATION	SOC	AMcC
C	12-01-16	IL OF OVERFLOW REVISED	AMc	AMcC
B	18-12-15	ISSUE FOR TENDER	AOS	AMcC
A	04-11-15	ISSUE FOR TENDER	AOS	AMcC

DRAWING STATUS
AS BUILT

CLIENT
IRISH WATER

PROJECT
BELMULLET SEWERAGE SCHEME

DRAWING TITLE
**QUAY ROAD PUMP STATION
GENERAL ARRANGEMENT**



PREPARED	GOS	FGCL FILE No.	15524
CHECKED	AMc	OTHERS FILE No.	
APPROVED	AMc	OTHERS FILE No.	
DATE	NOVEMBER 2015	CLIENT PROJECT No.	
SCALE	1:50 (A1) 1:100 (A3)	CLIENT APPROVAL	
CAD FILE NAME	15524-C-021.dwg		
DRAWING NUMBER	15524-C-021		REV. 0