

NON-STATUTORY ENVIRONMENTAL REPORT (NSER)

RNLI Afloat Berth, Courtmacsherry

NI 2366
D01
RNLI Afloat Berth,
Courtmacsherry
February 2023

Document status

Version	Revision	Authored by	Reviewed by	Approved by	Review date
F01	Final	EM	SM	SM	24 February 2023

Approval for issue

Stephen McAfee	Senior Associate	S. McAfee	24 February 2023
----------------	------------------	-----------	------------------

The report has been prepared for the exclusive use and benefit of our client and solely for the purpose for which it is provided. Unless otherwise agreed in writing by RPS Group Plc, any of its subsidiaries, or a related entity (collectively 'RPS') no part of this report should be reproduced, distributed or communicated to any third party. RPS does not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report.

The report has been prepared using the information provided to RPS by its client, or others on behalf of its client. To the fullest extent permitted by law, RPS shall not be liable for any loss or damage suffered by the client arising from fraud, misrepresentation, withholding of information material relevant to the report or required by RPS, or other default relating to such information, whether on the client's part or that of the other information sources, unless such fraud, misrepresentation, withholding or such other default is evident to RPS without further enquiry. It is expressly stated that no independent verification of any documents or information supplied by the client or others on behalf of the client has been made. The report shall be used for general information only.

Prepared by:**RPS**

Stephen McAfee

Elmwood House
74 Boucher Road, Belfast
Co. Antrim BT12 6RZ

T +44 2890 667 914
E Stephen.mcafee@rpsgroup.com

Prepared for:**RNLI**

Contents

1	INTRODUCTION	4
1.1	Introduction.....	4
1.2	Proposed Project.....	4
2	NON-STATUTORY ENVIRONMENTAL REPORT.....	7
3	ENVIRONMENTAL TOPICS.....	8
3.1	People	8
3.1.1	Introduction	8
3.1.2	Assessment	8
3.1.3	Mitigation.....	8
3.1.4	Conclusion	8
3.2	Biodiversity	9
3.2.1	Introduction	9
3.2.2	Baseline Ecological Conditions.....	9
3.2.3	Assessment	9
3.2.4	Mitigation.....	10
3.2.5	Conclusion	10
3.3	Geology & Soil.....	11
3.3.1	Introduction	11
3.3.2	Baseline Geology & Soils	11
3.3.3	Assessment	13
3.3.4	Mitigation.....	13
3.3.5	Conclusion	13
3.4	Water Quality.....	14
3.4.1	Introduction	14
3.4.2	Baseline Water Quality	15
3.4.3	Assessment	15
3.4.4	Mitigation.....	16
3.4.5	Conclusion	16
3.5	Air Quality & Noise	17
3.5.1	Introduction	17
3.5.2	Baseline Air Quality & Noise.....	17
3.5.3	Assessment	18
3.5.4	Mitigation.....	18
3.5.5	Conclusion	18
3.6	Landscape.....	19
3.6.1	Introduction	19
3.6.2	Assessment	19
3.6.3	Mitigation.....	19
3.6.4	Conclusion	19
3.7	Navigation	20
3.7.1	Introduction	20
3.7.2	Assessment	20
3.7.3	Mitigation.....	20
3.7.4	Conclusion	20
3.8	Fishing and Heritage	21
3.8.1	Introduction	21
3.8.2	Assessment	22
3.8.3	Mitigation.....	22
3.8.4	Conclusion	22
3.9	Conclusion.....	23
	Design Drawings	25

Tables

Table 1: Protected Areas within Vicinity of Proposed Development Site **Error! Bookmark not defined.**

Figures

Figure 1: Site Location..... 4

Figure 2: Proposed Afloat Berth Concept Layout..... 5

Figure 3: Drift Geology and Recent Deposits..... 12

Figure 4: Site Location in the Context of the Wider Surface Water Environment 14

Figure 5: Archaeological Heritage 21

Appendices

Appendices

Appendix A

1 INTRODUCTION

1.1 Introduction

RPS was commissioned by Royal National Lifeboat Institution (RNLI) to undertake a Non-Statutory Environmental Report (NSER) of land at Courtmacsherry, Co. Cork. This NSER details the main environmental topics for consideration and also details some mitigation measures in relation to some aspects of the development. This NSER is supported by the following appendix:

- Appendix A Design Drawings

1.2 Proposed Project

The proposed development is limited to a proposed afloat berth development at Courtmacsherry Harbour, County Cork which is shown in Figure 1 below. The NSER will consider environmental topics to enable the design of a new jetty and berth.

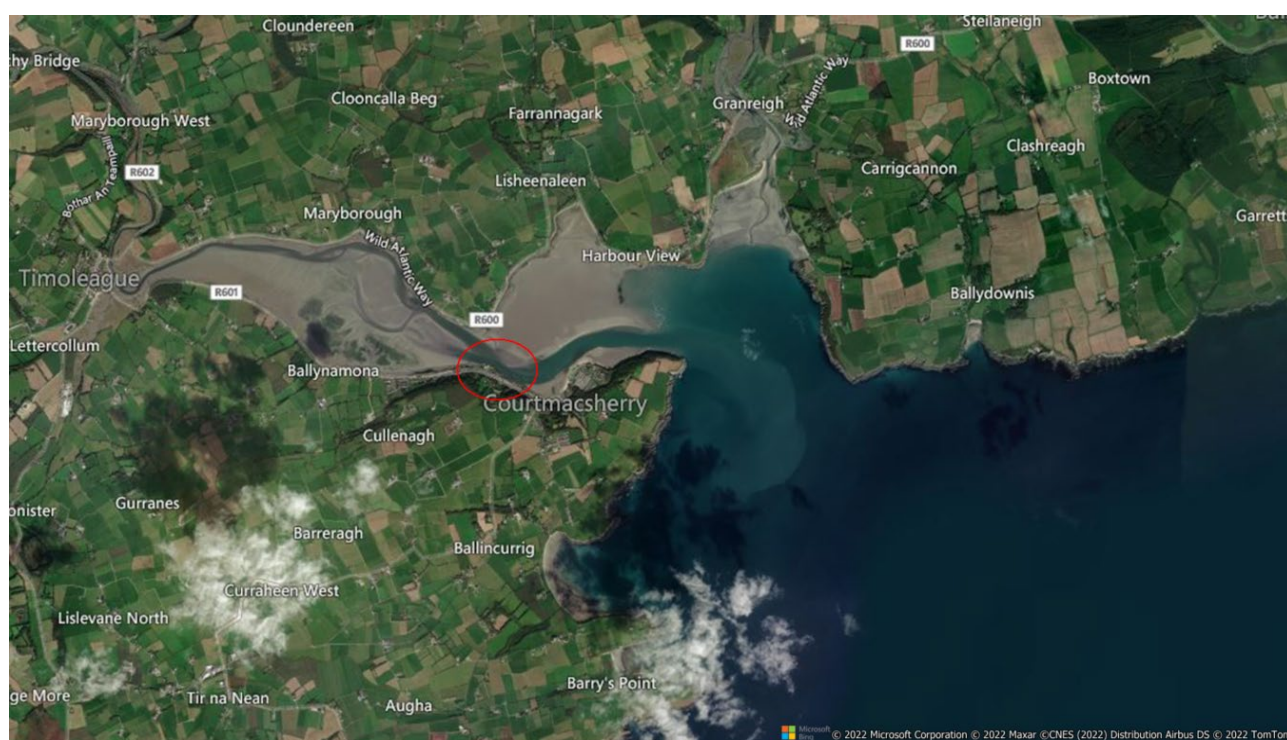


Figure 1: Site Location

Courtmacsherry is an extensive estuary which lies to the west of the Old Head of Kinsale on the south coast of Ireland. The estuary mainly runs east west and has extensive sand banks and shoals within the estuary. The village of Courtmacsherry lies on the southern shore of the estuary where there is a relatively deep-water channel, an existing pier and the RNLI station lifeboat house and mooring.

A Shannon Class lifeboat is due to come into service at Courtmacsherry and the RNLI prefers to moor 'All Weather Lifeboats' at an afloat / alongside berth, where possible, so that the power for these vessels can be shore connected. A concept layout of the proposed development has been provided in Figure 2. The site currently consists of the RNLI lifeboat house and existing slipway.

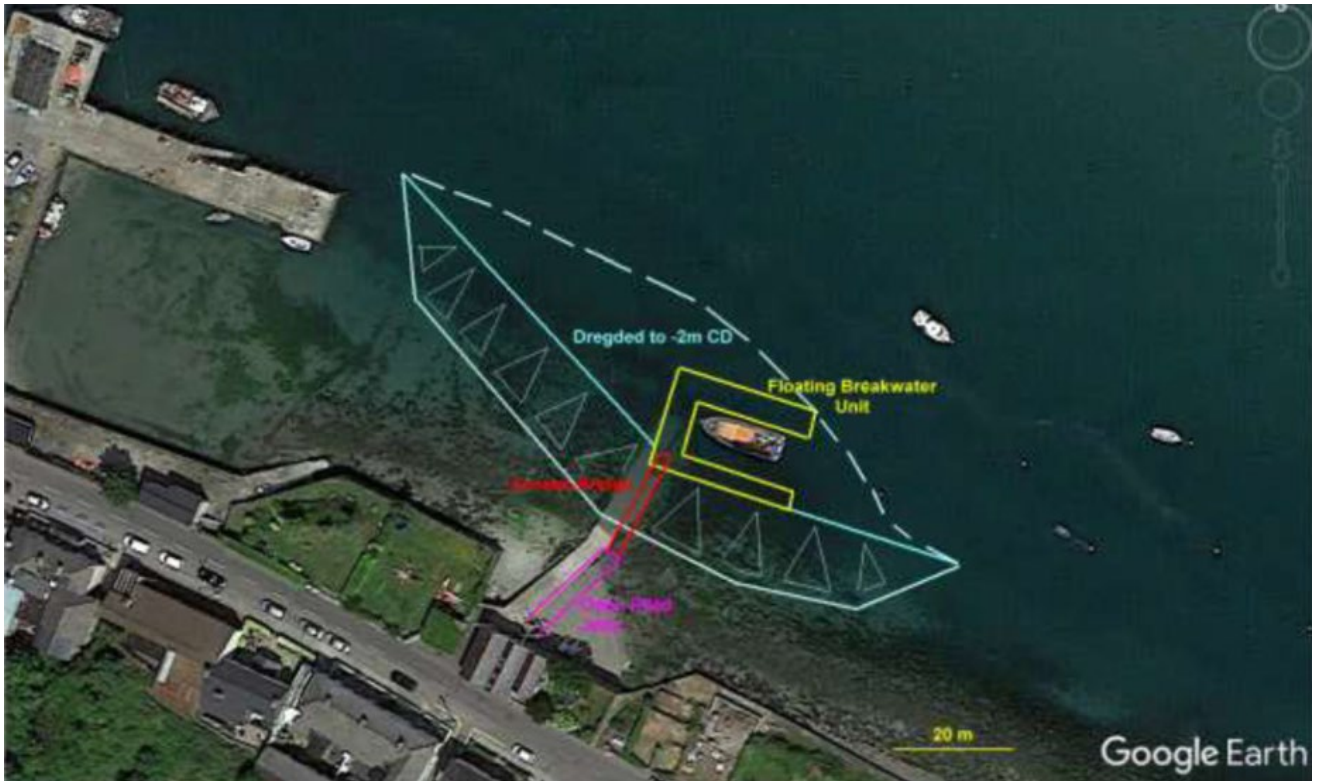


Figure 2: Proposed Afloat Berth Concept Layout

1.2.1 Description of Proposed Works/Activity

Site investigation works to inform the design of a new RNLI jetty and berth and to inform disposal options for dredged sediment material. Works will generally comprise of the following:

- Provision of hand-dig inspection pits at each land based exploratory hole location to avoid buried services to 1.2m below ground level.
- The Ground Investigation contractor shall use a Cable Avoidance Tool (CAT) and Genny scans to check for buried services prior to the commencement of each land based exploratory hole.
- Sampling of sediment from vibrocores for laboratory testing. Environmental samples shall be taken from the vibrocores at the surface, at 0.5m, then every metre, or every change in strata or when contamination is suspected.
- Three (3) boreholes advanced to a depth of 25.00m bgl. The boreholes will be undertaken within the marine/water environment. There may be existing concrete to break through associated with the existing jetty and allowance should be made for this within the Bill of Quantities.
- Logging of the soil and vibrocores by an experienced engineering geologist or geotechnical engineer.
- In-situ and laboratory geotechnical testing.
- Chemical testing of subsoils at a UKAS and MCERTS accredited laboratory.
- Geotechnical factual reporting compliant with Eurocode 7. This report shall include the contractor's interpretation of the ground conditions with regard to the proposed development's foundations.

It is envisaged that the fieldwork will be completed within 10 days followed by laboratory testing and reporting within 6 weeks of the completion of the field works. Overall the proposed timescale for the project will be 8 weeks from commencement to completion.

No structures will be erected on the foreshore; all works will be temporary in nature (a duration of 10 days).
Works have an estimated start date of April 2023 (subject to consenting) with an estimated duration of 10 days.

2 NON-STATUTORY ENVIRONMENTAL REPORT

A Non-statutory Environmental Report (NSER) for the proposed afloat berth development for Foreshore License application was requested, stating the following:

“Required for all applications not accompanied by an EIAR. The NSER must contain an analysis of the likely effects (positive and negative), of a proposed development on the environment. This analysis should include, but not limited to, the likely effects on:

People, Flora, Fauna, Soil, Water, Air, Landscape, Navigation, Fishing and Heritage.

The NSER also sets out how the applicant proposes to deal with any negative effects by way of mitigation. It shall include the rationale for the project not requiring an EIAR. The scale and complexity of the NSER should reflect the scale and complexity of the project.”

This report considers a range of environmental topics and presents a mitigation and control measures as required for the construction works.

3 ENVIRONMENTAL TOPICS

3.1 People

3.1.1 Introduction

Human health has the potential to be impacted upon by environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses for example.

These factors have been considered with regard to the description of the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan.

The contractor will strictly adhere to operational and health and safety best practice guidance. Assuming that all health and safety legislation and protocols are adhered to, significant risks to human health are unlikely to occur and no mitigation measures are considered necessary.

3.1.2 Assessment

The impact to people from the proposed works is considered to be Neutral.

3.1.3 Mitigation

Some specific construction phase mitigation measures with regard to people are detailed in this report. A range of mitigation measures are detailed for noise and air quality.

3.1.4 Conclusion

Due to the inter-relationship between population and health and the wider technical disciplines, potential effects have been considered within the technical disciplines on which the population and health assessment is derived, in this report those being air quality and noise. No further cumulative effects on population and health are considered likely.

Overall, it can therefore be concluded that in terms of population and health, the significant positive socio-economic effects outweigh the negligible effects relating to minor increases in environmental health determinants.

3.2 Biodiversity

3.2.1 Introduction

The following sources of information were used in the compilation of this assessment:

- National Biodiversity Data Centre (NBDC) (on-line map-viewer); and
- Environmental Protection Agency Map viewer - <https://gis.epa.ie/EPAMaps/>.

3.2.2 Baseline Ecological Conditions

3.2.2.1 Habitats

The proposed development is not within any habitats identified in the NBDC. The Courtmacsherry Ancient and Long-Established Woodland Area is located approximately 210m to the south east of Courtmacsherry harbour, but the nature and extent of the works are not likely to affect this habitat area and so it is not a concern.

3.2.2.2 European Sites

Given the location of the site of the proposed ground investigation survey works, within the marine environment, and within both Courtmacsherry Estuary SAC and Courtmacsherry Bay SPA. There are no other European sites within the Argideen River catchment upstream of Courtmacsherry. The Bawnaknockane-Leamawaddra-Coastal catchment sits adjacent to Courtmacsherry Bay to the east.

No European sites sit within that catchment except for the Old Head of Kinsale SPA, located 11.1km east of the site of the proposed ground investigations around one headland and then across open sea. The Roury-Coastal catchment sits adjacent to Courtmacsherry Bay to the south and west. Within that catchment there are no hydrologically connected European sites.

The Seven Heads SPA is located 4.7km by sea around two headlands from the site of the proposed ground investigations. Marine mammals are highly mobile and can wandering individuals of these populations can potentially be present in the works area. The nearest SAC designated for marine mammals is Roaringwater Bay and Islands SAC, 58 km (by sea) west of Courtmacsherry Estuary.

3.2.3 Assessment

The site of the proposed ground investigation survey works is located within both estuarine habitat and intertidal mudflat habitat. Courtmacsherry Estuary SAC is also for saltmarsh, perennial vegetation, drift line and sand dune habitats.

There is a possibility that the proposed ground investigation works could result in loss or deterioration of two qualifying interest habitats of Courtmacsherry Estuary SAC (Estuaries [1130] and Mudflats and sandflats not covered by seawater at low tide [1140]) and/or wetland habitats of Courtmacsherry Bay SPA and as such likely significant effects cannot be excluded at the screening stage of appraisal in the absence of further evaluation or analysis or the application of mitigation measures.

There is no possibility of habitat loss or significant deterioration of the saltmarsh, shingle beach or sand dune habitats of Courtmacsherry Estuary SAC, or any habitats of Seven Heads SPA or the Old Head of Kinsale SPA. That conclusion can be drawn in the absence of mitigation measures.

The proposed works are to be carried out in the estuary. There is a very clear hydrological link and a direct pathway of effect between the areas where the works are to be carried out and the intertidal and estuarine Annex I habitats of Courtmacsherry Estuary SAC and Courtmacsherry Bay SPA. Any engineering activity in the marine environment has potential to give rise to water quality impacts and associated habitat deterioration through the release of seabed sediments or contaminants, such as petrochemical fuels and lubricants.

3.2.4 Mitigation

Mitigation measures are required to ensure the proposed development does not have adverse impacts on Courtmacsherry Bay SPA and Courtmacsherry Estuary SAC and NHA. Mitigation measures proposed include the recommendations to undertake dredging at high tide and follow best practice with regards to dredging works and protection of water quality including use of fuels/oils and minimising release of sediments to the aquatic environment during removal from site.

Mitigation measures will be implemented by the contractor and will include the requirements for best practice and adherence to the following relevant Irish guidelines and recognised international guidelines:

- Good practice guidelines on the control of water pollution from construction sites developed by the Construction Industry Research and Information Association (CIRIA, 2001);
- Fisheries Guidelines for Local Authority Works. Department of Communications, Marine & Natural Resources, Dublin, (Anonymous, 1998);
- Guidelines on protection of fisheries habitats during construction projects (Eastern Regional Fisheries Board, 2006); and
- Control of Substances Hazardous to Health (COSHH) Handling of Hazardous Materials.

Netregs Guidance for Pollution Prevention series (GPP), Pollution prevention guidelines (PPGs) in relation to a variety of activities developed by the Environment Agency (EA), the Scottish Environmental Agency (SEPA) and the Northern Ireland Environment Agency (NIEA);

- GPP5: Works and maintenance in or near water
- PPG6: Working at construction and demolition sites
- GPP8: Safe Storage and disposal of used oils
- GPP21: Pollution incident response planning
- GPP22: Dealing with spills.

3.2.5 Conclusion

Provided the proposed mitigation measures are fully and adequately implemented during the proposed works, it is objectively concluded that no significant direct, indirect or cumulative impacts on the integrity of the protected areas considered in this assessment are likely to occur.

3.3 Geology & Soil

3.3.1 Introduction

The following sources of information were used in the compilation of this assessment:

- Environmental Protection Agency Map viewer - <https://gis.epa.ie/EPAMaps/>; and
- Geological Survey Ireland Spatial Resources Map viewer- <https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx>.

For the purposes of this assessment it is considered that Regionally Important (R) Aquifers are Principal Aquifers; Locally Important (L) Aquifers are Secondary Aquifers and Poor (P) Aquifers are Unproductive Strata. Different classifications exist for each of the aquifer types, as listed below:

Regionally Important (R) Aquifers:

- Karstified bedrock (Rk) where Rkc represents an aquifer dominated by conduit flow and Rkd represents an aquifer dominated by diffuse flow
- Fissured bedrock (Rf)
- Extensive sand and gravel (Rg)

Locally Important (L) Aquifers:

- Bedrock which is generally moderately productive (Lm)
- Bedrock which is moderately productive only in local zones (LI)
- Sand & gravel (Lg)
- Locally important karstified bedrock (Lk)

Poor (P) Aquifers:

- Bedrock which is generally unproductive except for local zones (PI)
- Bedrock which is generally unproductive (Pu)

3.3.2 Baseline Geology & Soils

3.3.2.1 Bedrock Geology

The proposed development is underlain by Devonian sandstone & mudstone (Old Head Sandstone Fm) bedrock geology, which is described as an area of flaser-bedded sandstone & minor mudstone.

The bedrock aquifer at the proposed development falls within the Locally Important (LI) classification, which is bedrock that is moderately productive only in local zones. This area of bedrock is of High Vulnerability of groundwater contamination and surrounded by areas of Moderate and Extreme Vulnerability.

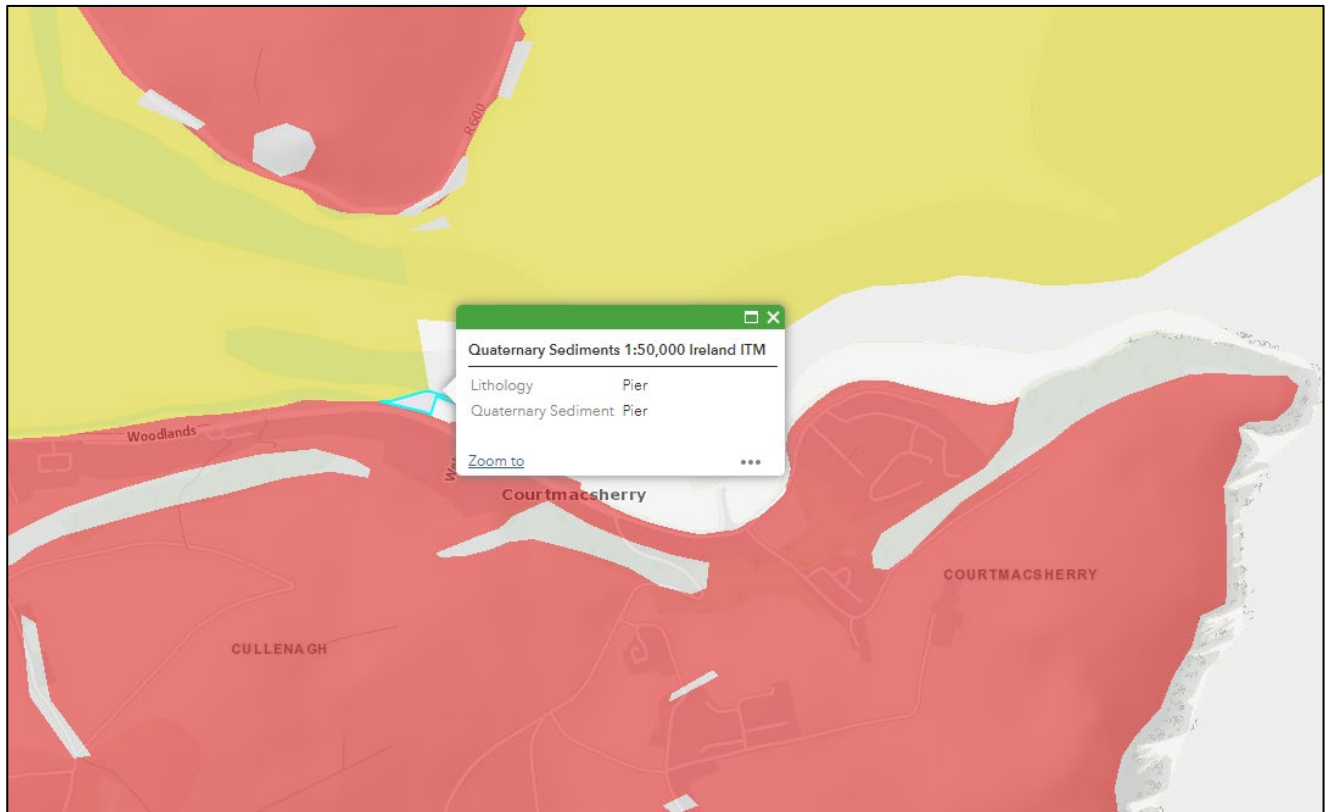
3.3.2.2 Drift Geology and Recent Deposits

Drift is a general term applied to all mineral material (clay, sand, silt, boulders) transported by a glacier and deposited directly by or from the ice, or by running water emanating from the glacier. It generally applies to Pleistocene glacial deposits.

The drift geology of the area is expected to principally reflect the depositional process of the last glaciation when an extensive ice sheet that extended into the Irish Sea covered the region. Typically during the ice advance boulder clays were deposited sub-glacially as lodgement till over the eroded rock head surface, whilst moraine deposits were laid down at the glacier margins.

Subsequently, with the progressive retreat of the ice sheet from the region, fluvio-glacial deposits (sand, gravel and silt) were laid down by melt waters discharging from the front of the glacier. Recent deposition prior to reclamation of the site principally reflects marine erosional and depositional processes, which have modified the glacial deposits. As shown on Figure 3, the site is anticipated to be underlain by made ground and determined as a pier. The quaternary sediments surrounding the pier to the south are classified as till derived from Devonian and Carboniferous sandstones and shales and estuarine silts and clays to the north.

Figure 3: Drift Geology and Recent Deposits



Source: GSI Spatial Resources Map Viewer

3.3.2.3 Hydrogeology

The geology that underlies the region have been classified by the Geological Survey of Ireland as “Locally Important Aquifer, bedrock which is moderately productive only in local zones”.

The widespread faulting and folding associated with the Variscan Orogeny in the south of Ireland has given rise to zones of enhanced permeability in the mudstones and sandstones. These can occur close to faults and near the axes of folds.

These rocks have no intergranular permeability; groundwater flow occurs in fractures and faults. In the mud dominant units limited fracturing and in-filling of fractures are to be expected. The permeability of individual fractures and the degree of interconnection will be generally low, with fracturing confined to local zones.

These locally productive zones are due to the presence of more permeable strata that are encountered in different parts of the outcrop area due to substantial faults, fractures or fissures. The limited groundwater movement within the rock tends to be restricted to the weathered horizons or to non-extensive fractured zones. These zones tend to have a limited hydraulic continuity, low storage capacity and low potential yield. The Quaternary drift is considered the principal medium for groundwater movement in the area. The infiltration capacity of the clay deposits would be limited due to their low permeability and hence groundwater movement is likely to be confined to the fluvio-glacial sand and gravel deposits that overlie the clays. The potential importance of the Quaternary drift deposits as a groundwater resource is a function of their permeability,

thickness and extent. The low permeable fine grained glacial clays represent aquitards that limit infiltration and restrict recharge to bedrock aquifers when sufficiently thick. The overlying fluvio-glacial sand and gravel deposits represent material with a significantly higher permeability. Consequently these deposits have a high potential recharge and storage capacity.

It is generally expected that groundwater levels beneath the site will remain close to sea level and may exhibit tidal variation. Groundwater at the site is expected to be brackish / saline and unsuitable for potable supply.

3.3.3 Assessment

The impact to soils, geology and hydrogeology from the proposed works is considered to be Neutral.

3.3.4 Mitigation

No specific construction or operational phase mitigation measures with regard to soils, geology and hydrogeology are required.

3.3.5 Conclusion

The terrestrial areas of the site and surrounding pier are comprised entirely of an area of hardstanding which operates as a functioning dock for vessels.

3.4 Water Quality

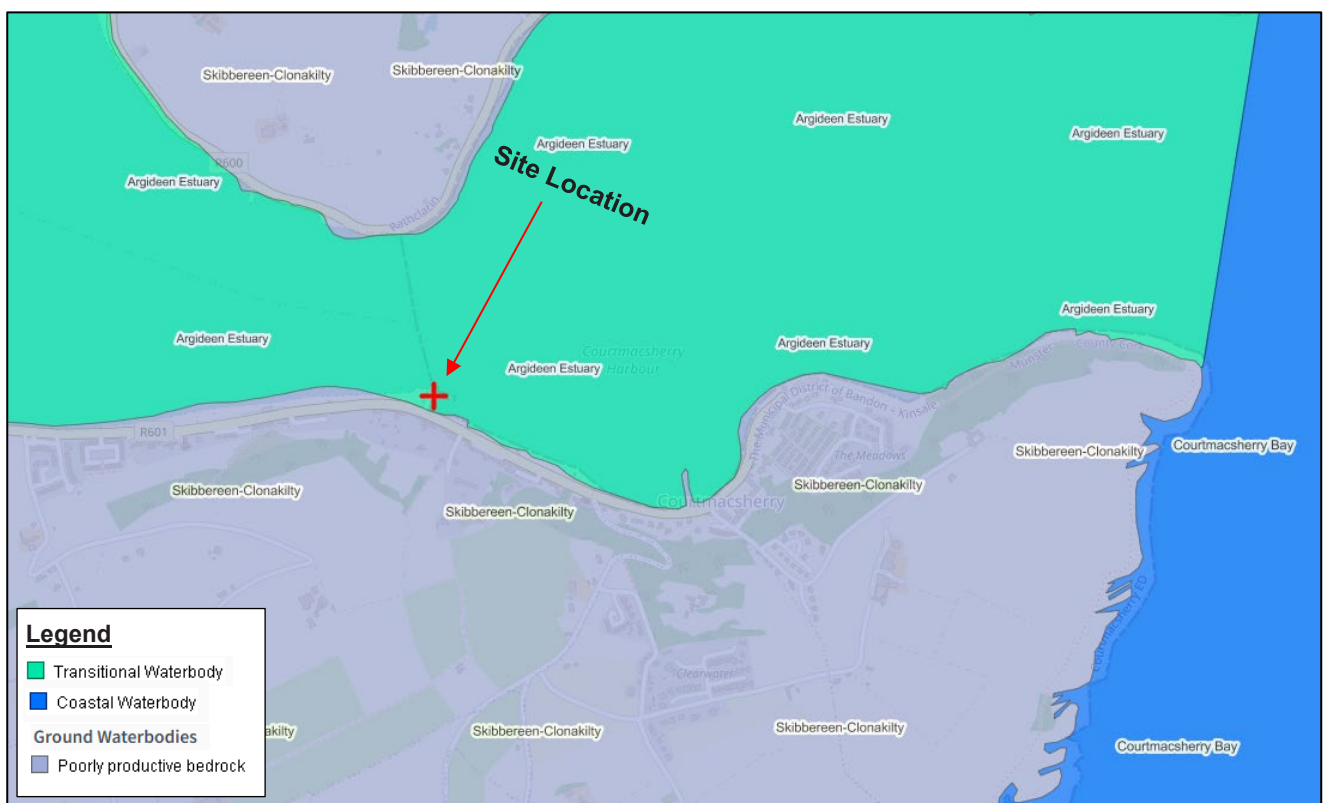
3.4.1 Introduction

For the purposes of monitoring and assessing the quality of surface waters, all rivers, lakes, coastal inter-basins, estuaries, and coastal waters (within 1 nautical mile of the shoreline) have been divided into management units called “water bodies”. The condition of each water body must be reported to the European Commission in the form of ecological status and chemical status.

Ground water bodies are similarly delineated with status identified. Surface water bodies are grouped into sub-catchments for the purposes of water management, of which there are 583 nationally, which are further grouped into catchment management units of which there are 46 based on the hydrometric areas used by public authorities.

As illustrated in Figure 9, the proposed development, will take place within Dublin Bay. The works are located within ‘Argideen Estuary’ transitional water body (IE_SW_090_0200). Transitional waters connect fresh waters such as rivers and marine waters.

Figure 4: Site Location in the Context of the Wider Surface Water Environment



Source: <https://gis.epa.ie/EPAMaps/Water>

The Skibbereen-Clonakilty groundwater body to the north and the south is classified as poorly productive bedrock. The Courtmacsherry Bay coastal waterbody to the east is currently identified as being of good status.

Due to the nature of the proposed development and the relatively limited scale of geotechnical activities in the application area, there are no likely significant water quality effects on groundwater expected.

In terms of water quality, there is a potential hazard associated with vessel fuel usage, oily residues/water, other substances (e.g., lubricants) and subsequent spillage and pollution. In addition, other waste typically includes human waste. A number of control and mitigation measures have been proposed in order to reduce the risk of spillage and pollution into the environment and national maritime legislation and all requirements of

the MARPOL Convention will be adhered to. Mitigation measures will be adopted to prevent adverse effect on the integrity of the sites concerned.

3.4.2 Baseline Water Quality

Environmental Quality Standards (EQSs) for classifying surface water status are established in the European Communities Environmental Objectives (Surface Waters) Regulations, 2009 (SI No. 272 of 2009), as amended. These regulations set standards for biological quality elements, physico-chemical conditions supporting biological elements (including general conditions and specific pollutants), priority substances and priority hazardous substances.

The 'ecological status' of a water body is established according to compliance with the EQSs for biological quality elements, physico-chemical conditions supporting biological elements and relevant pollutants and hydromorphological quality elements. The 'chemical status' of a water body is established according to compliance with the EQSs for priority substances and priority hazardous substances. In addition to achieving good ecological and chemical status, a water body must achieve compliance with standards and objectives specified for protected areas, which include areas designated by the Bathing Water Directive; the Urban Waste Water Treatment Directive; the Shellfish Waters Directive; the Habitats Directive.

The Argideen Estuary transitional water body was reported as "moderate" in the 2016-2021 WFD monitoring cycle, but in previous years it had maintained a "poor" status.

3.4.3 Assessment

3.4.3.1 Potential Construction Phase Impacts

There is a risk involved with any activity involving the use of machinery within or in proximity to the marine environment that a pollution incident might arise and result in spills or leaks of polluting substances into the water. There is potential for the works required to facilitate the proposed fender removal, installation and piling works to lead to pollution events to occur from discharges of hydrocarbon fuels, oil-based lubricants and other chemicals. The risk of such pollution events occurring must be managed to ensure their likelihood is low and that there are effective measures will be put in place in the event that they do occur to prevent any wide reaching or short-term adverse effects.

Temporary impacts on water quality have the potential to occur during the construction phase of the works. Mobilised suspended sediment and cement release through construction activities are the principal potential sources of water quality impact. The following have been considered:

- Increased suspended sediment levels due to the accidental release of sediment during dredging
- General water quality impacts associated with works machinery, infrastructure and on-land operations including the temporary storage of construction materials, oils, fuels and chemicals.

Works will generally comprise of the following:

- 3 Boreholes – Target depth 25m
- 12 Vibrocores – Target depth 4m
- In situ sampling with further testing and reporting to be undertaken *off site*.

No structures will be erected on the foreshore; all works will be temporary in nature (a duration of 10 days).

Works will require a small jack-up barge suitable for shallow water depths at nearshore sites and a small vessel capable of undertaking activities in shallow water depths.

Given the limited nature of the works the potential for significant impact is negligible.

3.4.3.2 Potential Operational Phase Impacts

The operational phase will remain largely unchanged when compared to the existing situation. Given the scale and nature of the works, the magnitude of the impact associated with general construction is considered to be negligible.

3.4.4 Mitigation

Mitigation measures will be implemented by the contractor and will include the requirements for best practice and adherence to the following relevant Irish guidelines and recognised international guidelines:

- Good practice guidelines on the control of water pollution from construction sites developed by the Construction Industry Research and Information Association (CIRIA, 2001);
- Fisheries Guidelines for Local Authority Works. Department of Communications, Marine & Natural Resources, Dublin, (Anonymous, 1998);
- Guidelines on protection of fisheries habitats during construction projects (Eastern Regional Fisheries Board, 2006); and
- Control of Substances Hazardous to Health (COSHH) Handling of Hazardous Materials.

Netregs Guidance for Pollution Prevention series (GPP), Pollution prevention guidelines (PPGs) in relation to a variety of activities developed by the Environment Agency (EA), the Scottish Environmental Agency (SEPA) and the Northern Ireland Environment Agency (NIEA);

- GPP5: Works and maintenance in or near water
- PPG6: Working at construction and demolition sites
- GPP8: Safe Storage and disposal of used oils
- GPP21: Pollution incident response planning
- GPP22: Dealing with spills.

3.4.5 Conclusion

The risk of water quality impacts associated with the proposed works associated with the construction phase (for example leakages/spillages of fuels, oils, other chemicals and waste water) will be controlled through good site management and the adherence to codes and practices which limit the risk and there is no predicted significant impact.

3.5 Air Quality & Noise

3.5.1 Introduction

Potential effects to air quality and noise may arise during the construction phase, such as from the generation of construction dusts and construction traffic. The construction activities have been examined to identify those that have the potential for air and noise emissions.

3.5.2 Baseline Air Quality & Noise

3.5.2.1 Air Quality

EU legislation on air quality requires that all Member States divide their territory into zones for the assessment and management of air quality. The current trends in air quality in Ireland are reported in the EPA publication *Air Quality in Ireland – 2019* (EPA, 2020) which is the most up to date report on air quality in Ireland. For ambient air quality management and monitoring in Ireland, four zones, A, B, C and D are defined in the AQS Regulations (S.I. No. 180 of 2011) and are defined as follows:

- **Zone A:** Dublin Conurbation;
- **Zone B:** Cork Conurbation;
- **Zone C:** 24 cities and large towns. Includes Galway, Limerick, Waterford, Clonmel, Kilkenny, Sligo, Drogheda, Wexford, Athlone, Ennis, Bray, Naas, Carlow, Tralee, Dundalk, Navan, Newbridge, Mullingar, Letterkenny, Celbridge and Balbriggan, Portlaoise, Greystones and Leixlip; and,
- **Zone D:** Rural Ireland, i.e. the remainder of the State excluding Zones A, B & C.

According to the above classification, the Proposed Scheme is within **Zone D**.

The current state of the environment in terms of baseline air quality has been determined from the data from the EPA monitoring Zone D (Rural Ireland) network to determine compliance with relevant ambient air legislation.

In order to apply with European Directives relating to air quality, the EPA manages the National Ambient Air Quality Network and measures the levels of a number of atmospheric pollutants at locations across the country. The current air quality within the area of the proposed development is identified by the EPA as being *good*.

3.5.2.2 Noise

The Cork County Council Noise Action Plan (NAP) 2018- 2023 has been prepared in accordance with EU directive 2002/49/EC commonly referred to as the 'END' Directive and the Environmental Noise Regulations 2006 (S.I. No. 140 of 2006), as revoked by European Communities (Environmental Noise) Regulations 2018 (S.I. No. 549 of 2018).

The purpose of the NAP is to act as a means of managing environmental noise, and to meet the aim of the END Directive of preventing, and reducing where necessary, environmental noise through the adoption of the action plan.

There are noise maps that have been produced in the Strategic Noise Mapping stage as one of the key inputs into the Noise Action Planning Stage. These strategic noise maps identify and prioritise cluster areas which require further assessment, and which may require mitigation measures to be put in place. These maps show that none of these identified areas are within the vicinity of the proposed development.

The existing noise environment in the vicinity of the harbour is dominated by road traffic noise, from the nearby R601 Road.

3.5.3 Assessment

3.5.3.1 Air Quality

There are potential impacts to atmosphere from the construction stage of the proposed development:

- Generation and dispersion of construction emissions during the proposed works; and
- Emissions associated with construction traffic and borehole works.

A range of mitigation measures will ensure that impacts are not significant.

3.5.3.2 Noise

The ambient noise levels at the site are not known. Ambient noise in Courtmacsherry Bay are not known but is expected to be very low with only the occasional fishing vessel and recreational craft using the immediate area. Due to the temporary nature of construction activities, higher noise threshold limits apply to construction phase activities than to permanent operational phase activities. These guidance documents do not apply significance criteria for noise impacts other than outlining permissible threshold limits for noise. There are no likely significant impacts in relation to noise and vibration from the proposed development.

3.5.4 Mitigation

3.5.4.1 Air Quality

A range of mitigation and control measures may be adopted by the appointed contractors:

- It will be required that all vehicles are suitably maintained to ensure that emissions of engine generated pollutants are kept to a minimum;
- Turning off vehicular engines when not in use for more than five minutes. This restriction will be enforced strictly unless the idle function is necessary for security or functionality reasons; and,
- Regular maintenance of plant and equipment. Technical inspection of vehicles to ensure they will perform the most efficiently.

In the event that the mitigation measures as outlined are implemented in the construction phase as set out in the application documentation, the levels of dust generated are assessed to be minimal and are unlikely to cause an environmental nuisance

3.5.4.2 Noise

Vibrocoring is a technology and a technique for collecting core samples of underwater sediments. The vibrating mechanism of the vibrocorer will be powered by two large electrical motors. The nominal frequency of the motors is approximately 50 Hz. British Standard BS5228:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and open Sites - Part 2: Vibration includes a range of measures for the reduction of vibration associated with construction activities and for general surface-based activities. The mitigation measures included in British Standard BS5228:2009+A1:2014, will be implemented to reduce vibration levels from general activities to the lowest possible levels.

3.5.5 Conclusion

There will be no significant operational phase plant/equipment noise or air quality impacts from the proposed development at the nearest noise sensitive properties. There will be no significant vibration residual effects associated with the proposed development.

3.6 Landscape

3.6.1 Introduction

Article 1 (a) of the European Landscape Convention provides a definition of landscape as follows; “*Landscape means an area, as perceived by people whose character is the result of the action and interaction of natural/or human factors*”. The importance of landscape and visual amenity and the role of its protection are recognised in the Planning and Development Act 2000 as amended, which requires that Development Plans include objectives for the preservation of the landscape, views and the amenities of places and features of natural beauty.

Courtmacsherry village is attractively situated on the end of a wooded peninsula near the mouth of Courtmacsherry Bay, approximately 14 km east of Clonakilty and approximately 4 km east of Timoleague. The settlement is located within the West Cork Strategic Planning Area.

The village is located along a narrow strip of land adjacent to Courtmacsherry bay which is several kilometres in length. The village is a seasonal tourist centre, which has a major influx of tourists in the summer months. Timoleague and Courtmacsherry act in tandem providing different functions to the large rural hinterland that stretches to Bandon in the north and Clonakilty to the west.

The proposed development area falls within the Courtmacsherry Cork County Landscape Character Area, which is an area of incised patchwork and wooded estuaries with mudflats.

3.6.2 Assessment

The harbour will remain largely unchanged when compared to the existing situation. Given the scale and nature of the works, the magnitude of the impact associated with general construction is considered to be negligible.

3.6.3 Mitigation

No specific construction or operational phase mitigation measures with regard to landscape are required.

3.6.4 Conclusion

It is considered that the proposed development will not create significant changes to the existing landscape character and visual amenity of the area. It is considered that the proposed works will not significantly affect landscape and scenic views, and as such no mitigation measures are considered necessary.

3.7 Navigation

3.7.1 Introduction

Courtmacsherry Harbour is currently used as a Lifeboat Station and the proposed development will include a new RNLI jetty and berth, as a Shannon Class lifeboat is due to come into service at Courtmacsherry and the RNLI prefers to moor 'All Weather Lifeboats' at an afloat / alongside berth, where possible, so that the power for these vessels can be shore connected.

Therefore, significant impacts on marine traffic are considered highly unlikely.

3.7.2 Assessment

Works will require a small jack-up barge suitable for shallow water depths at nearshore sites and a small vessel capable of undertaking activities in shallow water depths; these vessels may conflict with movements and access of other users in the works area however works are only for a duration of 10 days and will be transient across the proposed site area i.e. moving from borehole/vibrocore location to location.

Therefore, the impact to navigation from the proposed works is considered to be Neutral.

3.7.3 Mitigation

No specific construction or operational phase mitigation measures with regard to navigation are required.

3.7.4 Conclusion

It is considered that the proposed development will not create significant changes to the existing navigation setting of the area. It is considered that the proposed works will not significantly affect navigation, and as such no mitigation measures are considered necessary.

3.8 Fishing and Heritage

3.8.1 Introduction

The Cork County Development Plan 2022 defines Courtmacsherry as a small pier and does not include it in their fisheries figures, therefore it is not deemed to be a major fishery. It is possible that the works may conflict with vessel movements and access of other users in the works area, including anyone who is fishing, however works are only for a duration of 10 days and will be transient across the proposed site area i.e. moving from borehole/vibrocore location to location. Therefore, significant impacts of fishing are considered to be highly unlikely.

Records of Protected Structures are legislated for under Section 12 and Section 51 of the Planning and Development Act 2000 as amended. Protected structures are defined in the Planning and Development Act 2000 as amended as structures, or parts of structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

There are 31 records of National Inventory of Architectural Heritage (NIAH) and 3 records of Sites and Monuments Record (SMR) within the vicinity of Courtmacsherry Harbour, as shown in Figure 5.

Figure 5: Archaeological Heritage



Source: Historic Environment Viewer

Courtmacsherry Pier is a registered NIAH (Reg no. 20847003), falling under the Architectural, Social and Technical Categories of Special Interest. It is described as a limestone pier, built c.1875, incorporating fabric of earlier pier, having recent additions and modifications. Roughly dressed limestone blocks with battered sides, having steps to water. Exposed cobbled surface to west and south, having recent cement surface elsewhere with tooled limestone mooring posts. Rubble stone wall to approach (south), having roughly dressed limestone coping.

This pier was built to facilitate the light railway that opened in 1891. Much of its fabric was salvaged from an older pier to the east, known locally as Tanner's Pier. The pier serves as a reminder of the historic importance of fishing and trade at Courtmacsherry, but also of the impact that the new railway had on the transportation of goods.

The proposed works for the proposed development are to be undertaken beside the pier but the pier itself will remain untouched and so it will not be adversely impacted.

3.8.2 Assessment

The impact to fishing and heritage from the proposed works is considered to be Neutral.

3.8.3 Mitigation

No specific construction or operational phase mitigation measures with regard to fishing and heritage are required.

3.8.4 Conclusion

The works proposed will not significantly impact on any features of fishing or heritage.

3.9 Conclusion

The proposed works do not require EIA, nor do they require a case-by-case determination of significant effects. However, as a precautionary measure and to provide a robust description of the survey works, this report presented a brief, non-statutory consideration of the potential environmental effects of the proposed works. The following environmental aspects relevant to projects in the marine environment are considered:

- People;
- Biodiversity;
- Geology & Soil;
- Water Quality;
- Air Quality & Noise;
- Landscape; and
- Fishing and Heritage.

The works proposed will not significantly impact on the environment. A range of mitigation measures have been proposed that will be employed by the contractor during the construction phases that will help prevent significant impacts on the environment and its receptors.

APPENDICES

Appendix A

Design Drawings



55°10'51"E, 54°29'50"N



NOTES

1. Verifying Dimensions
The contractor shall verify dimensions against each other drawings or site conditions as pertain to this part of the work.
2. Existing Services
The contractor shall determine the location of existing services indicated on the drawing is intended for general guidance only. It shall be the responsibility of the contractor to determine and verify the exact horizontal and vertical alignment of all cables, pipes, etc. both underground and overhead below work commences.
3. Issue of Drawings
Hard copies, .dwg and .pdf will form a controlled issue of the drawing. All other formats (.svg, .dxf, etc.) are deemed to be an uncontrolled issue and any work carried out based on these files as at the recipient's own risk. RPS will not accept any liability for errors or omissions in the drawing or any work carried out thereon arising from the use of uncontrolled formats. The contractor shall be responsible for any errors or omissions in the drawing or any work carried out thereon arising from the use of uncontrolled formats. The contractor shall be responsible for any errors or omissions in the drawing or any work carried out thereon arising from the use of uncontrolled formats.
4. Datum



Licence Area



ITM Grid Coordinates

Name: Mr Paul McGettigan B Eng C Eng
M.I Struct E LLM

Signature: *P. McGettigan*

Address: Elmwood House,
74 Boucher Road,
Belfast,
BT12 6RZ
Northern Ireland

rev	amendments	check	date



Elmwood House

T +44 (0) 28 90 087914

A Boucher Road

W +44 (0) 28 90 087914

Belfast

E +44 (0) 28 90 087914

BT12 6RZ

ireland@rpsgroup.com

Client

RNLI

Project
Courtmacsherry

Title
Foreshore Licence Map

Project Number	Sheet Size	Drawing Scale
N12366	A3	1:1250

Drawing Number

CK136-04

Drawn By	Status	Revision
LMK	LICENCE	

Checked By	Approved By	Date
AM	CB	12/01/2023

55°06'54"E, 54°26'21"N



