



ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR)

Ros an Mhíl Deep Water Quay

Chapter 9: Material Assets – Built Infrastructure

Department of Agriculture, Food and the Marine

November 2025

Contents

9.	Material Assets	9-1
9.1	Introduction	9-1
9.2	Assessment Criteria	9-1
9.3	Methodology.....	9-2
9.3.1	Study Area	9-2
9.3.2	Desk Study	9-3
9.3.3	Legislation, Policy and Guidance	9-4
9.3.4	Scoped out from Further Assessment.....	9-4
9.3.5	Statement on Limitations and Difficulties Encountered	9-5
9.4	Baseline Environment.....	9-5
9.4.1	Baseline Assessment	9-5
9.4.1.1	Grid Capacity and Electricity Infrastructure	9-5
9.4.1.2	Wastewater Infrastructure	9-6
9.4.1.3	Water Supply	9-6
9.4.1.4	Surface Water Drainage.....	9-7
9.4.1.5	Telecommunications.....	9-7
9.4.1.6	Gas	9-7
9.4.1.7	Waste Management	9-7
9.5	Description of Likely Effects	9-7
9.5.1	Construction Phase Effects	9-7
9.5.1.1	Grid Capacity and Electricity Infrastructure	9-7
9.5.1.2	Wastewater Infrastructure	9-9
9.5.1.3	Water Supply	9-11
9.5.1.4	Surface Water Drainage.....	9-13
9.5.1.5	Telecommunications.....	9-14
9.5.1.6	Gas	9-14
9.5.1.7	Waste Management	9-14
9.5.2	Operational Phase Effects.....	9-15
9.5.2.1	Grid Capacity and Electricity Infrastructure	9-15
9.5.2.2	Wastewater Infrastructure	9-15
9.5.2.3	Water Supply	9-16
9.5.2.4	Surface Water Drainage.....	9-17

9.5.2.5	Telecommunications.....	9-17
9.5.2.6	Gas	9-17
9.5.2.7	Waste Management	9-18
9.6	Mitigation Measures.....	9-18
9.6.1	Grid Capacity and Electricity Infrastructure.....	9-18
9.6.1.1	Construction Phase	9-18
9.6.1.2	Operational Phase.....	9-18
9.6.2	Water Supply/Wastewater Infrastructure	9-19
9.6.2.1	Construction Phase	9-19
9.6.2.2	Operational Phase.....	9-19
9.6.3	Surface Water Drainage.....	9-19
9.6.3.1	Construction Phase	9-19
9.6.3.2	Operational Phase.....	9-19
9.6.4	Waste Management.....	9-19
9.6.4.1	Construction Phase	9-19
9.6.4.2	Operational Phase.....	9-20
9.7	Monitoring	9-20
9.8	Residual Effects	9-20
9.9	Cumulative Effects	9-21
	References.....	9-22

Tables

Table 9-1: Material Assets and Topics to be Included	9-1
Table 9-2: Deep Water Quay Demand	9-6
Table 9-3: Construction Effect 1: Grid Capacity and Electricity Infrastructure.....	9-9
Table 9-4: Construction Phase Effect 2: Wastewater Infrastructure	9-11
Table 9-5: Construction Phase Effect 3: Water Supply	9-13
Table 9-6: Construction Phase Effect 4: Surface Water Drainage	9-14
Table 9-7: Construction Phase Effect 5: Telecommunications	9-14
Table 9-8: Construction Phase Effect 7: Waste Management.....	9-15
Table 9-9: Operational Phase Effect 1: Grid Capacity and Electricity Infrastructure	9-15
Table 9-10: Operational Phase Effect 2: Wastewater Infrastructure	9-16
Table 9-11: Operational Phase Effect 3: Water Supply.....	9-17

Table 9-12: Operational Phase Effect 4: Surface Water Drainage	9-17
Table 9-13: Operational Effect 5: Waste Management	9-18
Table 9-14: Residual Effects.....	9-20

Figures

Figure 9-1: Study Boundary	9-3
Figure 9-2 Existing Electrical Infrastructure.....	9-5
Figure 9-3: Wastewater Treatment Plant and Water Supply Infrastructure	9-6
Figure 9-4: Substation Location (pink) and Electrical Layout (red dashed lines)	9-8
Figure 9-5: Proposed Foul Sewage System Connection.....	9-10
Figure 9-6: Proposed Watermain Layout.....	9-12

Appendices

Appendix 9A - Údarás na Gaeltachta Letter Confirming Landowner Consent and the Availability of Connection to their Local Effluent Treatment Plant for Future Works

Project No.	Doc. No.	Rev.	Date	Prepared By	Checked By	Approved By	Acceptance Code / Status
24984	6003	A	17/11/2025	KB	MT/KB	MT	FINAL

MWP, Engineering and Environmental Consultants

Address: Reen Point, Blennerville, Tralee, Co. Kerry, V92 X2TK, Ireland

www.mwp.ie



Disclaimer: This Report, and the information contained in this Report, is Private and Confidential and is intended solely for the use of the individual or entity to which it is addressed (the “Recipient”). The Report is provided strictly on the basis of the terms and conditions contained within the Appointment between MWP and the Recipient. If you are not the Recipient you must not disclose, distribute, copy, print or rely on this Report (unless in accordance with a submission to the planning authority). MWP have prepared this Report for the Recipient using all the reasonable skill and care to be expected of an Engineering and Environmental Consultancy and MWP do not accept any responsibility or liability whatsoever for the use of this Report by any party for any purpose other than that for which the Report has been prepared and provided to the Recipient.

9. Material Assets

9.1 Introduction

This Environmental Impact Assessment Report (EIAR) has been prepared to accompany the planning application for the works to be completed for the proposed Ros an Mhíl Deep Water Quay, Co. Galway.

This chapter of the EIAR addresses the direct and indirect significant effects, if any, on material assets located in the vicinity of the Site, which may occur or which can reasonably be expected to occur.

This chapter considers physical resources in the environment which may be of human origin, as those of a natural origin are addressed elsewhere in the EIAR.

9.2 Assessment Criteria

The assessment has been made with guidance from the ‘Guidelines on the Information to be contained in Environmental Impact Assessment Reports’, published by the EPA in May 2022. The guidelines were drafted by the EPA with a view to facilitating compliance with EIA Directive (2012/52/EU).

The 2022 EPA guidelines suggest the following subheadings under which to arrange issues concerning ‘Built Services’, “Electricity, Telecommunications, Gas, Water Supply Infrastructure, Sewerage”.

The assessment also considered ‘Advice Notes for Preparing Environmental Impact Statements’, also published in ‘draft’ by the EPA in September 2015.

Table 9-1 outlines the issues which the EPA guidance documents suggest may be examined as part of the material assets impact assessment.

Table 9-1: Material Assets and Topics to be Included

Material Asset	Topics to be Covered
Roads & Traffic	Construction Phase Operational Phase Unplanned Events (i.e. Accidents)
Built Services	Electricity Telecommunications Gas Water Supply Infrastructure Sewerage
Waste Management	Construction Waste Operational Waste

Having regard to the above guidance, particularly the 2022 EPA guidelines, and the characteristics and context of the lands that are the subject of this application, this chapter aims to identify the likely significant effects that the Development may have on ‘built services’ and these are discussed under the following headings:

- Electricity network;
- Gas Infrastructure;

- Telecommunications;
- Local water supplies and foul network;
- Surface water drainage infrastructure; and
- Waste management infrastructure.

The majority of the other topic areas recommended for assessment under Material Assets are closely related to other sections of the EIAR and therefore reference should be made to the associated chapters as follows:

- Water resources are considered in the assessment on the surface water and groundwater resource provided in **Chapter 7 Water**. No further assessment is included in this chapter.
- The assessment on the land and geological resources is presented in **Chapter 6 Land and Soils**. No further assessment on this topic is included in this chapter.
- Assimilative capacity of the air resource is considered in the assessment provided in **Chapter 12 Air Quality and Climate**. No further assessment on this topic is included in this chapter.
- Traffic is considered in **Chapter 14 Traffic and Transport**.

9.3 Methodology

The methodology of the assessment comprises:

- Identifying baseline conditions of the site and its environs.
- Identifying the sensitivity of receptors that had potential to be affected by changes in the baseline conditions.
- Predicting the magnitude of likely changes to the baseline receiving environment.
- Assessing the significance of effects taking into account sensitivity of receptors and magnitude of effect.
- Identifying and assessing appropriate mitigation measures, including alternatives.
- Assessing the significance of residual effects, taking account of any mitigation measures.

9.3.1 Study Area

The assessment directly covers the physical extent of the study boundary for the Site as shown in **Figure 9-1**, and the assessment area has been extended as appropriate to identify the relevant material assets surrounding the proposed development.

In the assessment of cumulative impacts, the geographical extent of the EIAR has been extended as appropriate to include the relevant related or unrelated development activities.

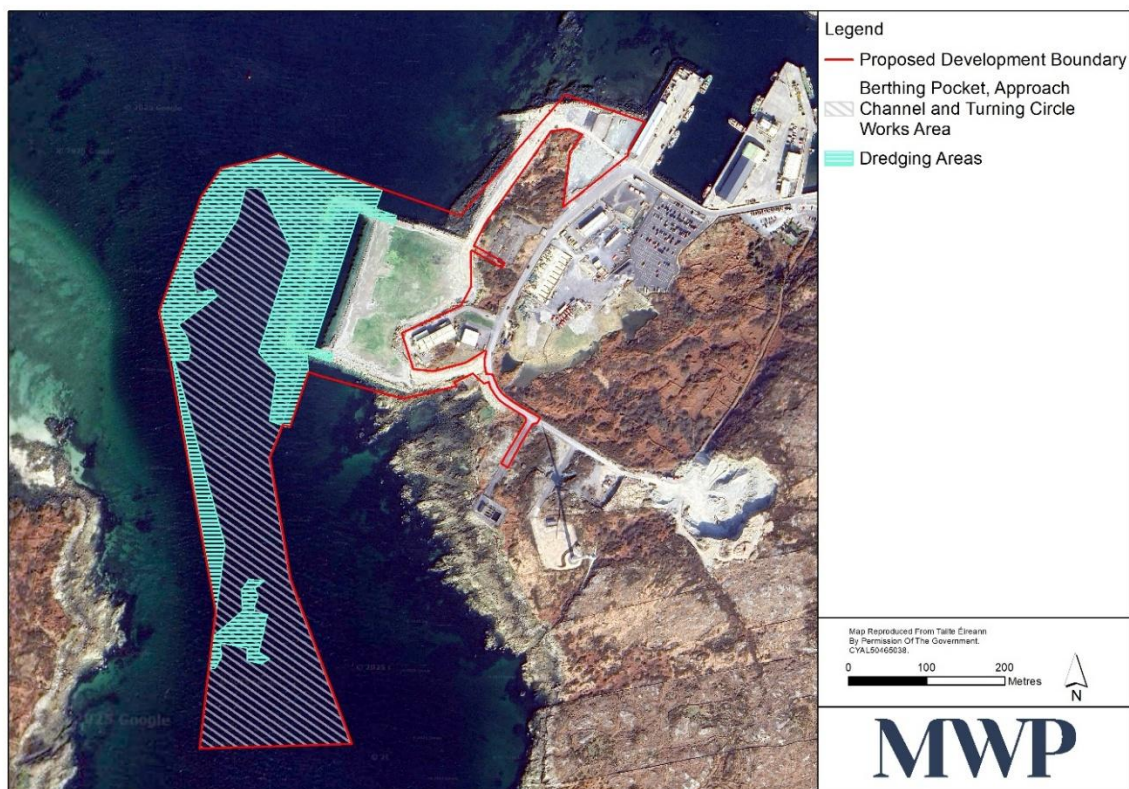


Figure 9-1: Study Boundary

9.3.2 Desk Study

The study including desk-based research was carried out during the EIA process, starting April 2025, with a final search in June 2025 of published information and site visits to assemble the information on the local receiving environment and the proposed development.

The desk study included the following activities:

- Review of Ordnance Survey Mapping and aerial photography to establish existing land use and settlement patterns within the study area.
- Review of the Galway County Development Plan 2022-2028 in order to identify future development and planning applications within the area of the proposed development and surrounding locations.
- Review of Galway County Council's Planning Register to identify relevant development proposals.
- As part of the EIS prepared for the 2017 planning application, details of the material assets were documented and have been referenced for obtaining some of the material assets information.
- Review of the following sources for information regarding existing utilities:
 - Gas Networks Ireland Dial Before You Dig Maps (DBYD).
 - ESB Dial Before You Dig Maps (DBYD).
 - EIR eMaps open eir Civil Engineering Infrastructure Service.
 - Uisce Eireann Utility Mapping.

9.3.3 Legislation, Policy and Guidance

This assessment was undertaken taking into consideration the Guidelines on the Information to be contained in *Environmental Impact Assessment Reports* (EPA, 2022).

The legislation, policy and guidance applicable to the assessment for waste section of chapter is as follows:

- *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment* (Department of Housing, Planning and Local Government, 2018);
- *A Waste Action Plan for a Circular Plan for a Circular Economy: Ireland's National Waste Policy 2020-2025* (Government of Ireland);
- *Landfill Directive (2018/850)(EU, 2018a)*;
- *The European Union Waste Framework Directive (2018/851)(EU, 2018b)*; and
- *The European Commission's 'Circular Economy Action Plan' (EC, 2020)*

National waste management regulations including the following:

- *Circular Economy and Miscellaneous Provisions Act 2022*;
- *Connacht-Ulster Waste Management Plan 2015-2021*;
- *The Waste Management (Collection Permit) (Amendment) (No.2) Regulations 2023*;
- *European Union (Waste Licensing) (Amendment) Regulations 2019*;
- *Waste Management (Packaging) Regulations 2014 to 2022 (as amended)*;
- *Waste Management (Planning) Regulations 1997 (as amended) (S.I. No. 137/1997)*;
- *Waste Management (Landfill Levy) (Amendment) Regulations 2023*;
- *Waste Management (Food Waste) Regulations 2009-2015 (as amended)*;
- *Waste Management (Hazardous Waste) Regulations 1998 to 2000*;
- *Waste Management (Shipments of Waste) Regulations 2007 (as amended) (S.I. No.419/2007)*;
- *Waste Management Act 1996 (as amended) (Act No.10/1996)*;
- *Environmental Protection Agency Acts 1992-2011 (as amended)*;
- *Protection of the Environment Act 2003 (as amended) (Act No 27/2003)*;
- *Litter Pollution Acts 1997 to 2009 (as amended)*; and
- *Planning and Development Act 2000 – 2023 (as amended) (Act No. 30/2000)*.

9.3.4 Scoped out from Further Assessment

All relevant built services/waste management within the proposed development area and surrounds were considered during the assessment.

9.3.5 Statement on Limitations and Difficulties Encountered

There were no difficulties or limitations encountered during the production of the material assets chapter of this EIA.

9.4 Baseline Environment

Due to the shoreline location of the proposed quay and the land reclamation nature of the works on the site, there were no existing services and infrastructure within the development boundary. The only exception was the site of the construction compound and concrete batching plant which was located in a former parking area that formed part of the existing Ros an Mhíl harbour area.

9.4.1 Baseline Assessment

9.4.1.1 Grid Capacity and Electricity Infrastructure

The Electricity Supply Board (ESB) provides electrical power to the Ros an Mhíl area. The harbour is supplied by overhead electricity lines running along the eastern side of regional road R372. Cables run underground from the start of the harbour area and run to an electrical substation within the Údarás na Gaeltachta site at the land-side of the proposed deep water quay. The substation then distributes electrical power to all of the sites in the harbour area. The underground line supplying the substation is believed to be a 10.5kV line. The existing lines exiting the substation are 400V lines.

The existing substation for the harbour is located at the end of the wayleave marked out in the boundary map.

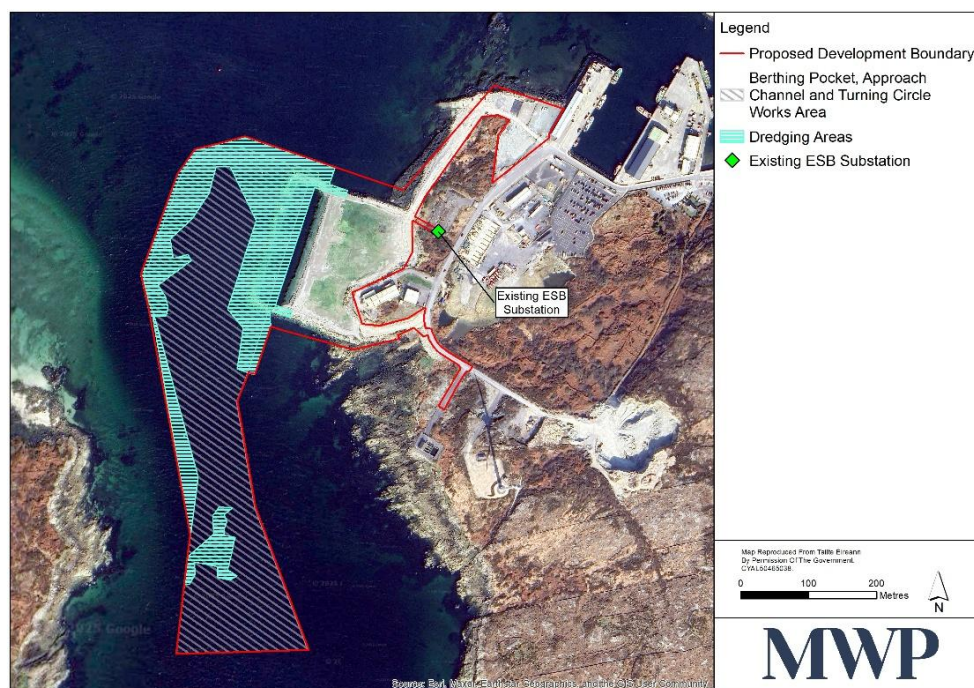


Figure 9-2 Existing Electrical Infrastructure

9.4.1.2 Wastewater Infrastructure

The existing harbour area is serviced by a sewerage system which is operated by Údarás na Gaeltachta. The sewerage system comprises of gravity fed lines that discharge into two pumping stations. The pumping stations pump sewage under pressure to the wastewater treatment plant, which is located just south of the development site, approximately 184m from the site entrance, refer to **Figure 9-3**. Treated sewage is disposed of through an outlet into Cashla Bay.

Information provided by Údarás na Gaeltachta for the effluent treatment plant details the ultimate capacity of the plant as 2,100 m³/week. The current loading is understood to be 1065 m³/week.

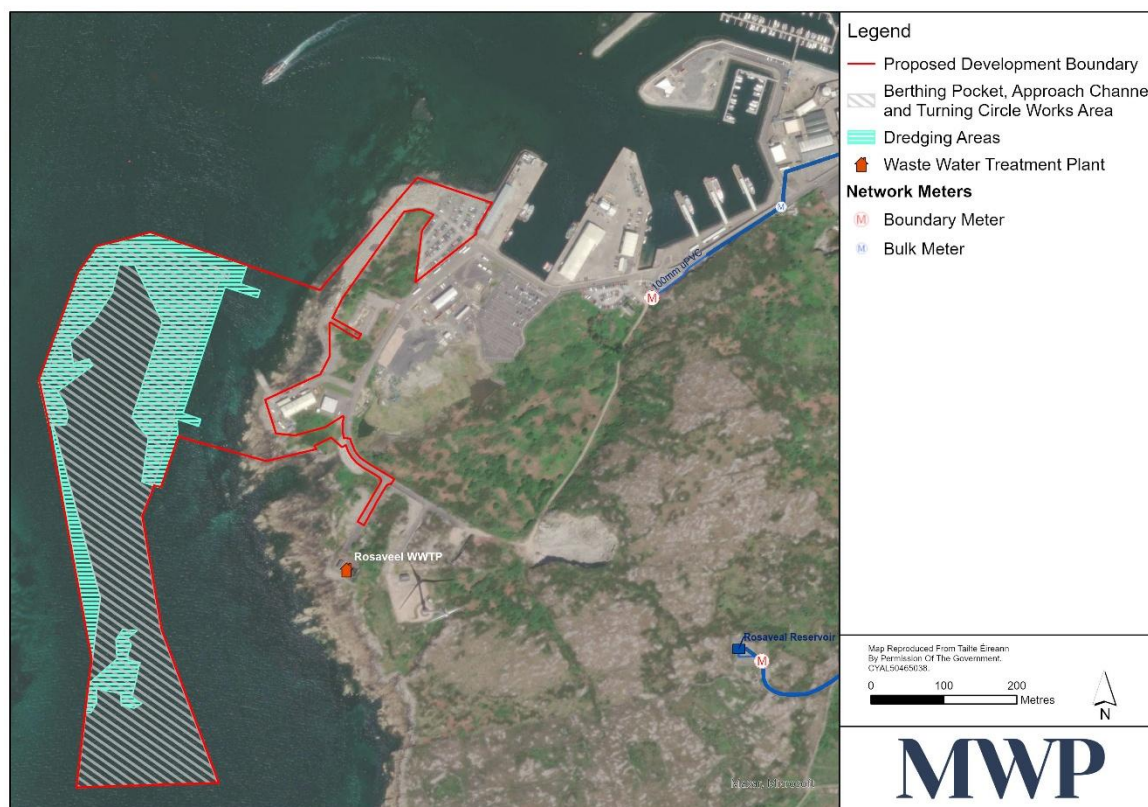


Figure 9-3: Wastewater Treatment Plant and Water Supply Infrastructure

9.4.1.3 Water Supply

Uisce Eireann currently provides a 250mm diameter water main to the edge of the harbour area. The water main is supplied by the Carraroe/Ros an Mhíl system. From the edge of the harbour area a 100/150mm water main system supplies the existing harbour area.

The water network in the harbour area is under the control of the DAFM, which is responsible for distribution and water rates thereafter.

Table 9-2 details the maximum water demands at the quay.

Table 9-2: Deep Water Quay Demand

	Maximum Hourly Demand	Maximum Daily Demand
Deep Water Quay	50 m ³ /hr	150 m ³ /day

Apart from above, there is currently no water supply infrastructure associated with works to date installed on site.

9.4.1.4 Surface Water Drainage

Prior to development, there was no drainage infrastructure in much of the development boundary. The site lies in an area of coastal land, and water on the northwest shore of Ros an Mhíl Hill. A portion of the development is within Cashla Bay.

There is a network of drainage systems at the wider area of Ros an Mhíl Harbour consisting of stormwater drains and gullies.

9.4.1.5 Telecommunications

Eir supply a fibre broadband service into and throughout the Ros an Mhíl Harbour area.

9.4.1.6 Gas

Based on information from Gas Networks Ireland (GNI), there are no gas transmission lines within the proposed development site.

9.4.1.7 Waste Management

The site lies in an area of coastal land, and water on the northwest shore of Ros an Mhíl Hill. Currently there is no specific waste management ongoing for the proposed development area. There is waste management required for the wider port area in order to protect the marine environment.

The DAFM are responsible for the management, maintenance and development of the port and its facilities and have developed a specific Port Waste Management Plan for Ros an Mhíl. This plan ensures that port waste management facilities are relevant and are up to date.

9.5 Description of Likely Effects

9.5.1 Construction Phase Effects

9.5.1.1 Grid Capacity and Electricity Infrastructure

The proposed works will include the construction of a new Substation at the harbour development site, which will serve all of the electrical requirements of the site, refer to **Figure 9-4**. This is to be constructed at the eastern boundary of the site. This substation will be connected to the existing substation on the lands to the east of this site.

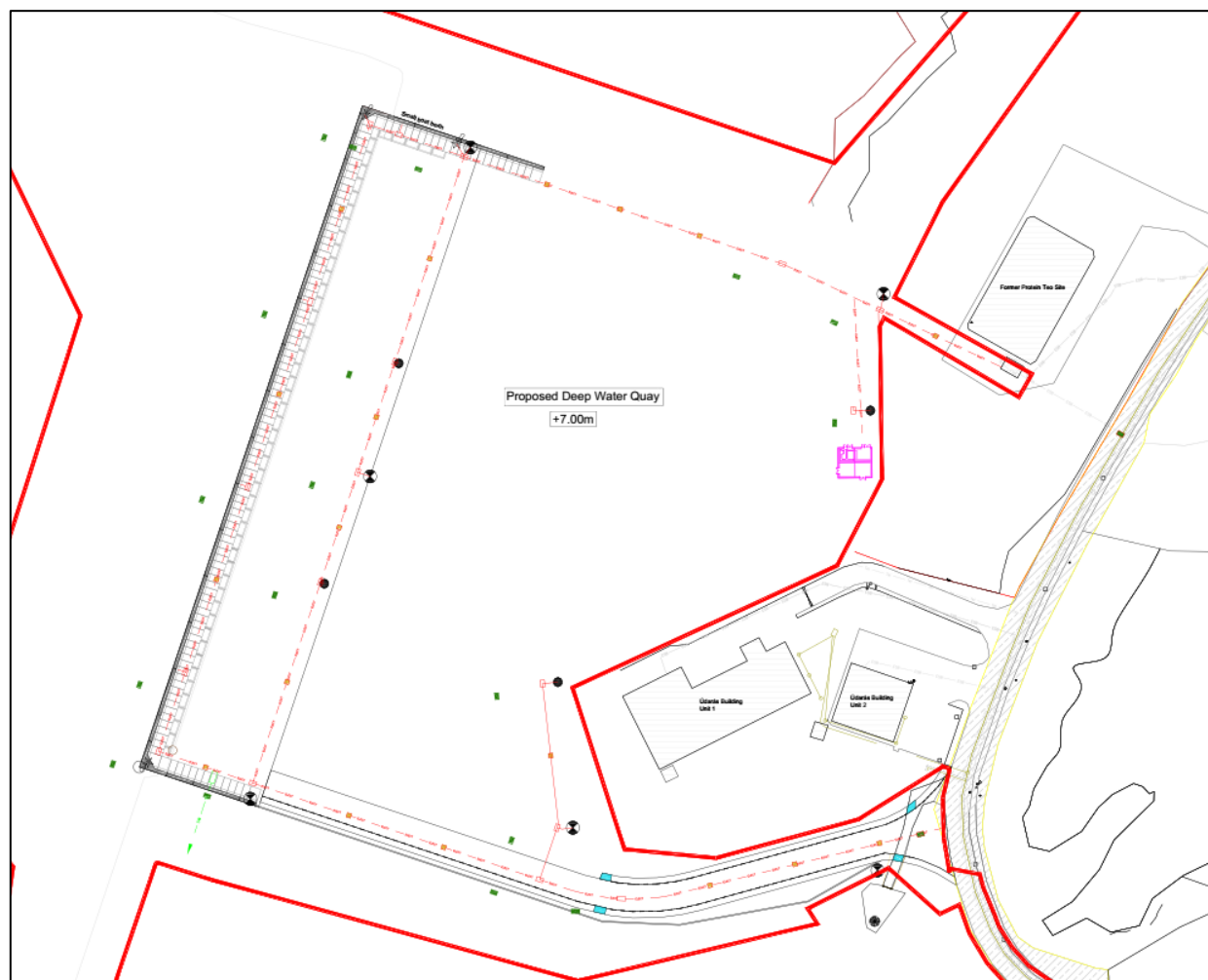


Figure 9-4: Substation Location (pink) and Electrical Layout (red dashed lines)

Electrical Ducts

Electrical ducts throughout the site will connect the power supply at the proposed new substation to installed utility boxes along the quay and the High Mast, CCTV cameras, Foul sewer pump station and Fuel Interceptor on the site.

During the construction period (24 months), there will be a requirement for a temporary connection to the local electricity supply network via the existing neighbouring fisheries warehouse supplied by the DAFM.

Where working near overhead electrical lines, the contractor will comply with ESB Networks Code of Practice for Avoiding Danger from Electricity Lines, 2019.

During the construction phase (24 months) there is potential for some brief local interruptions to existing dwellings/businesses during periods associated with connecting the new development to the ESB network. Although the exact number of interruption days for particular customers cannot be ascertained at this stage, any electricity interruptions are likely to be brief and rare and will generally occur for a set number of hours during the day (no more than eight hours where reasonably practicable).

During construction, it is likely that the proposed development electricity connection works will cause a **negative, brief/once to rarely, not significant**, effect on power supply to houses/businesses in the vicinity, refer to **Table 9-3**. Apart from brief interruptions, no continuous interruptions, resulting in temporary or short-term durations, are anticipated.

Table 9-3: Construction Effect 1: Grid Capacity and Electricity Infrastructure

Construction Effect 1: Grid Capacity and Electricity Infrastructure					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Negative	Not Significant	Local	Brief/Once to Rarely	Direct

9.5.1.2 Wastewater Infrastructure

During the construction phase, portable chemical toilets will be provided for the duration of the works and all waste material will be removed from site and disposed of to an appropriately licensed facility.

It is proposed to construct sewerage discharge points at regular intervals along the deep water quay to be used by fishing vessels. The discharge points will feed into a 150 mm gravity sewer pipe that will run down the length of the quay. The gravity line will discharge into a small pumping station, which will in turn discharge into the existing sewerage network, which is operated by Údarás na Gaeltachta, refer to **Figure 9-5**.

The construction of the new wastewater infrastructure will involve trench excavations and installation of infrastructure such as pipes, valves and manhole chambers.

During the excavations for installation of wastewater infrastructure, the appointed contractor will be obliged to conduct the works in accordance with all relevant local authority and Údarás na Gaeltachta requirements as well as best practice measures outlined in the **CEMP** in relation to excavations (**EIAR Volume III, Appendix 2A**). Appropriate construction method statements should be prepared and implemented by the appointed contractor.

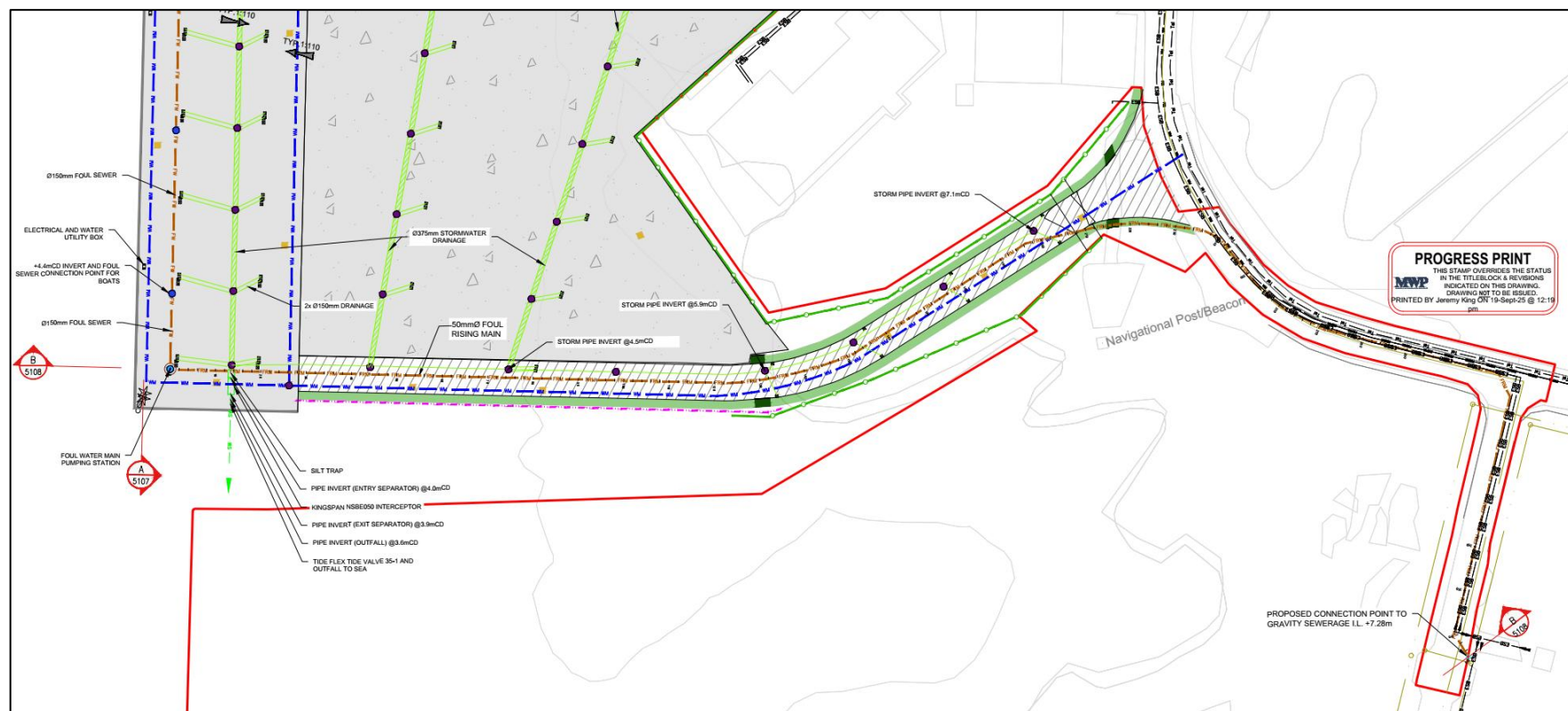


Figure 9-5: Proposed Foul Sewage System Connection.

In the absence of mitigation, negative effects to the existing wastewater infrastructure could be caused by excavation work and during the connection works. This would cause issues in the wastewater networks ability to effectively collect and direct wastewater in the existing network for treatment or affect nearby water quality. No long-term effects to wastewater infrastructure or water quality are anticipated.

In the absence of mitigation, the potential effect would therefore be **negative, brief/temporary**, and **slight** on the **local** wastewater infrastructure which feeds into the effluent treatment plant, or water quality of Cashla Bay, refer to **Table 9-4**.

Table 9-4: Construction Phase Effect 2: Wastewater Infrastructure

Construction Phase Effect 2: Wastewater Infrastructure					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Negative	Slight	Local	Brief/Temporary	Direct

9.5.1.3 Water Supply

Uisce Eireann currently provides a 250mm diameter water main to the edge of the harbour area. This water main is supplied but the Carraroe/Ros an Mhíl system. From the edge of the harbour area a 100/150mm water main system supplies the existing harbour area. The water network in the harbour area is under the control of the DAFM, which is responsible for distribution and water rates thereafter.

It is proposed to extend this 100/150mm system to provide potable water to the deep water quay. The new water main will connect to the existing system at the beginning of the proposed access road, the new line will then run through a service duct in the road out to the deep water quay itself. The main will loop around the outside of the deep water quay in a service duct. Taps and hydrants will be provided at regular intervals for use on the deep water quay. Refer to **Figure 9-6** for proposed watermain layout.



Any work connecting to the existing water supply will require a brief shutdown of the water supply. The presence of valves within the wider water vicinity of the water supply network will allow for shutoffs of water supply to be localised. Any localised shut down of water supply will ensure that downtime in supply will be brief and will occur once or rarely. Users will be notified prior to any shutdown of water supply and consultation and agreements with Uisce Éireann will also be required.

Excavations not carried out with best practice measures outlined in the **CEMP** would cause negative effects to the water quality of the water supply to end users. The appointed contractor will be obliged to conduct the works in accordance with all relevant local authority and Uisce Éireann requirements. Appropriate construction method statements should be prepared and implemented by the appointed contractor. Hydrocarbons or any liquids that could negatively affect the water supply will be banded. Good construction practice and the implementation of all measures outlined in the **CEMP**, will effectively reduce the potential for negative effects.

In the absence of mitigation, any existing water supply infrastructure in the proposed excavations area could cause ingress of suspended solids into the existing water supply pipeline potentially affecting the water quality of receiving users. In addition to suspended solids, hydrocarbons may be released into the water supply networks from accidental spills during the works. No long-term effects on the water supply network are anticipated.

In the absence of mitigation, the water supply infrastructure works can potentially have a **negative, brief/temporary, slight** effect on the receiving water supply network or water quality of adjacent watercourses such as Cashla Bay, refer to **Table 9-5**.

Table 9-5: Construction Phase Effect 3: Water Supply

Construction Phase Effect 3: Water Supply					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Negative	Slight	Local	Brief/Temporary	Direct

9.5.1.4 Surface Water Drainage

Water pollution measures as outlined in the **CEMP** will reduce the risk of contamination to existing drainage systems and harbour within the site during construction.

In addition to mitigation measures carried out during the construction phase, Turbidity monitoring will be carried out in harbour during works, in accordance with the **CEMP**.

The deep water quay will be provided with a cross fall to allow runoff to flow into a central drainage channel running south down the centre of the quay. The central drain discharge will be processed by a proprietary oil separator system prior to discharge directly into the sea.

In the absence of mitigation, it is considered that surface water drainage works are likely to have a **negative, slight, localised** and **temporary to short-term** effect on existing surface water drainage or adjacent watercourse Cashla Bay, refer to **Table 9-6**.

Table 9-6: Construction Phase Effect 4: Surface Water Drainage

Construction Phase Effect 4: Surface Water Drainage					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Negative	Slight	Local	Temporary to Short-Term	Direct

9.5.1.5 Telecommunications

During construction, the temporary compound has its own satellite dish for telecommunications. There will be no requirement for excavations or connections to existing telecoms infrastructure required.

Effects on telecommunications during the construction phase will therefore be **neutral, imperceptible, localised** and **short-term**, refer to **Table 9-7**.

Table 9-7: Construction Phase Effect 5: Telecommunications

Construction Phase Effect 5: Telecommunications					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Neutral	Imperceptible	Local	Short-Term	Direct

9.5.1.6 Gas

There have been no requirements for a GNI connection to service Development. According to GNI, there are no gas pipelines in the area. Therefore, there have been no additional supply demands on the GNI networks from the Site from works to date.

Consequently, there will be no effects to gas infrastructure during construction works.

9.5.1.7 Waste Management

During the construction phase, the proposed development will generate a range of non-hazardous and potentially hazardous waste materials. The construction employees will generate typical municipal waste and packaging of materials will also contribute to the waste streams. Waste materials will be managed and stored correctly to prevent litter issues arising on site. This will include the segregation and storage of all wastes until they can be disposed of by a licensed waste disposal service provider.

The use of permitted waste contractors or unauthorised facilities during construction could give rise to inappropriate management of waste. Inappropriate management of waste would result in negative environmental effects in the form of waste pollution. If waste material is not stored correctly and managed, this could lead to litter issues on site.

The Construction Contractor will be required to develop and submit a Resource Waste Management Plan for approval by the Galway County Council in compliance with the The plan will be prepared in accordance with the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects published by the Department of the Environment, Community and Local Government 2021.

In the absence of a waste management plan and mitigation, waste management would likely occur which result in a **negative, slight, localised** and **temporary to short-term** effect on the local environment, refer to **Table 9-8**.

Table 9-8: Construction Phase Effect 7: Waste Management

Construction Phase Effect 7: Waste Management					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Negative	Slight	Local	Temporary to Short-Term	Direct

9.5.2 Operational Phase Effects

9.5.2.1 Grid Capacity and Electricity Infrastructure

Section 9.4.1.1 has described the proposed electricity supply system and facilities for the deep water quay development. Preliminary discussions with ESB networks and the Department of Agriculture, Food and the Marine (DAFM) have indicated there are currently no issues with the provision of the required power for the proposed development.

The potential effects from the operational phase of the proposed development on the electricity supply network is likely to be **neutral, imperceptible, localised** and **long term**, refer to **Table 9-9**.

Table 9-9: Operational Phase Effect 1: Grid Capacity and Electricity Infrastructure

Operational Phase Effect 1: Grid Capacity and Electricity Infrastructure					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Neutral	Imperceptible	Local	Long-Term	Direct

9.5.2.2 Wastewater Infrastructure

The existing harbour area is serviced by a sewerage system which is operated by Údarás na Gaeltachta. The sewerage system comprises of gravity fed lines that discharge into two pumping stations. The pumping stations pump sewage under pressure to the wastewater treatment plant. Treated sewage is disposed of through an outlet into Cashla Bay. Information provided by Údarás na Gaeltachta for the effluent treatment plant details the ultimate capacity of the plant as 2,100 m³/week. The current loading is understood to be 1065 m³/week.

Correspondence from Údarás na Gaeltachta confirming the availability of the effluent treatment plant for use with the deep water quay is provided in **Volume III, Appendix 9A** of this EIAR.

The deep water quay has been designed to accommodate mainly reefer ships (refrigerated cargo ships) and trawlers. A large number of reefer ships have their own onboard wastewater treatment plants and can discharge at sea in accordance with International Maritime Organisation requirements. It is proposed to provide sewerage discharge points at regular intervals along the deep water quay to be used by fishing vessels. The discharge points will feed into a 150 mm gravity sewer pipe that will run down the length of the quay. The gravity line will discharge into a small pumping station, which will in turn discharge into the existing sewerage network which is operated by Údarás na Gaeltachta. Refer to **Figure 9-5** of **Section 9.5.1.2** for proposed foul network details.

Foul pumping station for DAFM harbour usage will have a typical maximum sewage volume from harbour/boats of 5 m³/day at a max flow rate of 1.8 ltr/sec. The availability and connection has been deemed feasible by Údarás na Gaeltachta. Údarás na Gaeltachta has given consent to allow foul water discharge of 35m³/week.

The potential effect of the proposed development on the wastewater network, during the operational phase, is therefore likely to be **neutral, imperceptible, localised** and **long-term**, refer to **Table 9-10**.

Table 9-10: Operational Phase Effect 2: Wastewater Infrastructure

Operational Phase Effect 2: Wastewater Infrastructure					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Neutral	Imperceptible	Local	Long-Term	Direct

9.5.2.3 Water Supply

Uisce Eireann currently provides a 250mm diameter water main to the edge of the harbour area. This water main is supplied but the Carraroe/Ros an Mhíl system. From the edge of the harbour area a 100/150mm water main system supplies the existing harbour area. The water network in the harbour area is under the control of the DAFM, which is responsible for distribution and water rates thereafter.

It is proposed to extend this 100/150mm system to provide potable water to the deep water quay. The new water main will connect to the existing system at the beginning of the proposed access road, the new line will then run through a service duct in the road out to the deep water quay itself. The main will loop around the outside of the deep water quay in a service duct. Taps and hydrants will be provided at regular intervals for use on the deep water quay. Refer to **Figure 9-6** of **Section 9.5.1.3** for proposed water supply details.

During the operational phase, there will be no change in terms existing water use volumes. Therefore, in the absence of mitigation, the new water supply infrastructure, during the operation phase will have a **neutral, imperceptible, localised** and **long-term** effect on the receiving water supply network, refer to **Table 9-11**.

Table 9-11: Operational Phase Effect 3: Water Supply

Operational Phase Effect 3: Water Supply					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Neutral	Imperceptible	Local	Long-Term	Direct

9.5.2.4 Surface Water Drainage

The deep water quay will be provided with a cross fall to allow runoff to flow into a central channel running s-down the centre of the quay. The central drain discharge will be processed by a proprietary oil separator system prior to discharge directly into the sea. The central drain discharge will be processed by a proprietary oil separator system prior to discharge directly into the sea. The oil separator system will be serviced regularly, and any sludge build up will be collected by a licensed Contractor and disposed to an appropriately licenced facility.

In the absence of mitigation, such as regular servicing of surface water infrastructure, it is considered that surface water drainage works are likely to have a **negative, long term, slight** effect on surface water drainage systems and surrounding waterbodies such as Cashla Bay, refer to **Table 9-12**.

Table 9-12: Operational Phase Effect 4: Surface Water Drainage

Operational Phase Effect 4: Surface Water Drainage					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Negative	Slight	Local	Long-term	Direct

9.5.2.5 Telecommunications

There will be no telecommunication connection required for the operational phase of the proposed development. Consequently, there will be no effect on telecommunications effect on telecommunications infrastructure during the operational phase of the proposed development.

9.5.2.6 Gas

There are no requirements for a GNI connection to service Development. According to GNI, there are no gas pipelines in the area. There will be no additional supply demands on the GNI networks during the operational phase of the proposed development.

There will be no effect on gas infrastructure during the operational phase of the proposed development.

9.5.2.7 Waste Management

During the operational phase of the deep water quay at Ros an Mhíl Fishery Harbour Centre, stringent waste management practices will be implemented in accordance with the Ros an Mhíl Fishery Harbour Centre Port Waste Management Plan.

Emphasis will be placed on minimising waste generation through effective segregation, recycling initiatives, and responsible disposal methods. Regular audits and monitoring will ensure compliance with environmental regulations and standards, aiming to mitigate any potential impacts on the surrounding marine environment.

Training programs for staff and contractors will further promote awareness and adherence to waste reduction strategies, reinforcing commitment to sustainable practices throughout the operational lifecycle of the quay wall.

In the absence of mitigation, improper waste management would have a **negative, slight, local** and **long-term** effect on the receiving environment.

Table 9-13: Operational Effect 5: Waste Management

Operational Phase Effect 5: Waste Management					
	Quality of Effect	Significance	Spatial Extent	Duration	Other Relevant Criteria
Pre-Mitigation	Negative	Slight	Local	Long-Term	Direct

9.6 Mitigation Measures

9.6.1 Grid Capacity and Electricity Infrastructure

9.6.1.1 Construction Phase

The Contractor will be obliged to put measures in place to ensure that there are no interruptions to existing services and that all services and utilities are maintained unless this has been agreed in advance with ESB networks.

All works in the vicinity of the ESB Networks infrastructure will be carried out in ongoing consultation with ESB Networks and will be in compliance with any requirements or guidelines they may have including procedures to ensure safe working practices are implemented when working near live overhead/underground electrical lines.

Where new services are required, the Contractor will apply to ESB Networks for a connection permit where appropriate and will adhere to their requirements.

9.6.1.2 Operational Phase

It is not envisaged that any mitigation measures will be necessary during the operational phase of the development.

9.6.2 Water Supply/Wastewater Infrastructure

9.6.2.1 Construction Phase

All mitigation measures outlined in the **CEMP, EIAR Volume III, Appendix 2A** should also be implemented during the installation of water supply and wastewater infrastructure.

Any temporary water supply for the temporary site compound will be agreed with DAFM. To enable leak detection, a water supply meter will be installed for the temporary water supply. The water meter will monitor consumption of water and will be used to help confirm potential leaks.

Wastewater from welfare facilities on site will drain to integrated wastewater holding tanks associated with the toilet units. The stored effluent will then be collected on a regular basis from site by a permitted waste contractor and removed to a licensed/permitted waste facility for treatment and disposal.

9.6.2.2 Operational Phase

It is not envisaged that any mitigation measures will be necessary during the operational phase of the development.

9.6.3 Surface Water Drainage

9.6.3.1 Construction Phase

The contractor will be obliged to consult the **CEMP**, which includes a **SWMP** for implementation of mitigation measures to prevent negative effects to existing infrastructure and over ground infrastructure and watercourses.

Prior to excavation the Contractor will ensure that adequate silt management methods are implemented and that silt controls are in place as recommended in the **CEMP**.

All silt controls will be checked on a regular basis in accordance with a monitoring schedule outlined in the **CEMP**.

9.6.3.2 Operational Phase

Appropriate maintenance regimes will be put in place to monitor/maintain surface water drainage networks and interceptors. This will include periodic cleaning out of gully pots & drainage channel sumps and cleaning out of pipes if/when blockages occur.

9.6.4 Waste Management

9.6.4.1 Construction Phase

The Construction Contractor must develop and submit a Resource Waste Management Plan (RWMP) for approval by the relevant authorities in compliance with Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects published by the Department of the Environment, Community and Local Government 2021. The RWMP must detail measures to minimise waste generation and provide details of the specific waste expected to be generated, measures to separate and store wastes on site, and provide details of the proposed waste contractors and destinations for each waste stream.

All measures included in the Waste Management Plan/ Resource Recovery Plan, should be adhered to ensure effective waste management and minimisation, reuse, recycling and disposal of waste material generated during the construction phase of the proposed development.

9.6.4.2 Operational Phase

During the operational phase of the quay wall at Ros an Mhíl Fishery Harbour Centre, stringent waste management practices will be implemented in accordance with the Ros an Mhíl Fishery Harbour Centre Port Waste Management Plan.

Emphasis will be placed on minimising waste generation through effective segregation, recycling initiatives, and responsible disposal methods. Regular audits and monitoring will ensure compliance with environmental regulations and standards, aiming to mitigate any potential impacts on the surrounding marine environment.

Training programs for staff and contractors will further promote awareness and adherence to waste reduction strategies, reinforcing commitment to sustainable practices throughout the operational lifecycle of the quay wall.

9.7 Monitoring

Turbidity monitoring will be carried out during the construction phase as per the **SWMP** in the **CEMP**.

9.8 Residual Effects

Table 9-14 shows the proposed development Material Assets residual effects after mitigation measures are applied.

There will be no significant negative residual effects from the construction or operational phase of the proposed development on material assets.

Table 9-14: Residual Effects

Impact/Activity /Receptor	Quality Of Effect	Pre-Mitigation Significance Rating	Mitigation Measures	Post-Mitigation / Residual Significance Rating
CONSTRUCTION EFFECTS				
Grid Capacity and Electricity Infrastructure	Negative	Not significant	Used the power supply for the Fisheries Warehouse adjacent to the construction compound.	Imperceptible
Wastewater Infrastructure	Neutral	Not significant	All waste material for temporary facilities was removed from site and disposed of to an appropriately licensed facility in accordance with the CEMP.	Imperceptible
Water Supply	Neutral	Not significant	Water has been supplied from the existing mains network servicing the harbour area. A connection was established via a hydrant	Imperceptible
Surface Water Drainage	Negative	Not significant	Handling procedures laid out in the CEMP as well as additional safety measures applied.	Not Significant

Impact/Activity /Receptor	Quality Of Effect	Pre-Mitigation Significance Rating	Mitigation Measures	Post-Mitigation / Residual Significance Rating
Telecommunications	Neutral	Not significant	Installation of a temporary compound with its own satellite.	Imperceptible
Gas	No effects	Not significant	None required.	No Effects
Waste Management	Neutral	Not significant	In accordance with the CEMP, wastes separated appropriately.	Imperceptible
OPERATIONAL EFFECTS				
Grid Capacity and Electricity Infrastructure	Negative	Not significant	No mitigation measures necessary.	Imperceptible
Wastewater Infrastructure	Neutral	Not significant	All waste material for temporary facilities was removed from site and disposed of to an appropriately licensed facility in accordance with the CEMP.	Imperceptible
Water Supply	Neutral	Not significant	Water has been supplied from the existing mains network servicing the harbour area. A connection was established via a hydrant	Imperceptible
Surface Water Drainage	Negative	Not significant	Handling procedures laid out in the CEMP as well as additional safety measures applied.	Not Significant
Telecommunications	Neutral	Not significant	Installation of a temporary compound with its own satellite.	Imperceptible
Gas	No effects	Not significant	None required.	No Effects
Waste Management	Neutral	Not significant	In accordance with the CEMP, wastes separated appropriately.	Imperceptible

9.9 Cumulative Effects

Based on a review of developments in proximity to construction works, no significant cumulative effects on material assets are predicted.

References

CURWMO (May 2015) Connacht-Ulster Waste Management Plan 2015–2021. Connacht-Ulster Waste Region Management Office.

DAFM (2020), Ros an Mhíl Fishery Harbour Centre Port Waste Management Plan. Department of Agriculture, Food and the Marine.

EIR, EIR eMaps Open eir Civil Engineering Infrastructure Service, EIR.

ESB, ESB Dial Before You Dig Maps (DBYD), ESB.

Galway County Council (2022), Galway County Development Plan 2022–2028, Galway County Council.

Gas Networks Ireland, Gas Networks Ireland Dial Before You Dig Maps (DBYD), Gas Networks Ireland.

Uisce Éireann, Uisce Éireann Utility Mapping, Uisce Éireann.