Environmental Impact Assessment Report (EIAR) – Volume 2

Chapter 3 – Description of the Proposed Development

CHAPTER 3

Proposed ORE Capable Terminal on a 250m Wharf Extension & Ancillary Operational Support Infrastructure

Port of Waterford Company

Port of Waterford, Belview, Co. Kilkenny

MALONE O'REGAN ENVIRONMENTAL

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3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

3.1 Introduction

This Chapter gives a description of the Proposed Development, including the design layout and elements of the Construction Phase. It should be read in conjunction with the Site layout (Figure 3-1) and the detailed drawing provided in Appendix 3-1.

A standalone Engineering Report has been prepared by Malone O'Regan Consulting Engineers and has been submitted in support of this planning application. This Engineering Report should be read in conjunction with this chapter.

3.2 Description of the Proposed Development

The Proposed Development will comprise a proposed ORE Capable Terminal located on a ca. 250m wharf extension, land reclamation, ancillary works and a biodiversity enhancement area (gross area ca. 8ha), partly on land and partly in the near shore area of the coastal planning authority (Kilkenny County Council) at Port of Waterford, Belview, Co. Kilkenny.

The Proposed Development will comprise:

- A ca. 250m extension to the existing wharves at the container / bulk handling terminal at Belview port, as a continuation of the existing wharves, comprising a reinforced concrete suspended deck supported on reinforced concrete beams and steel piles socketed into bedrock below the Lower River Suir Special Area of Conservation ('SAC') and partly on land with a retaining structure to the rear;
- Land reclamation, covering an area of ca. 1.3ha primarily using imported quarried rock and, if suitable, treated dredged material, retained by the wharf structure and a rock-armoured embankment beneath the wharf and to the downstream end of the development;
- Two separate quayside ORE Operator support facilities (annotated Operator 1 and Operator 2 on drawings) located at the downstream area of the Port, supported on piled foundations, with associated support and warehousing / workshop buildings, berthing pontoons, yard areas and crane installations;
- A three-storey administrative office and staff facilities building for Operator 1 located in the downstream area of the Port and supported on piled foundations, and associated car parking to the east of the railway bridge crossing;
- A three-storey administrative office and staff facilities building for Operator 2 located on the north side of the Rosslare-Limerick railway line and supported on piled foundations, and associated car parking for staff;
- Associated underground services, water supply and drainage to include a pumped rising main to discharge foul water from the development to the Uisce Eireann network
- An Electricity Substation to replace existing Substation;
- Additional lighting and lighting pylons;
- Relocation of existing weighbridges and security cabin;
- Partial demolition of both the existing downstream ramp and the existing dolphin to facilitate the development;
- Minor works to the existing quay to facilitate structural interfacing between existing and proposed structures;
- Roof-mounted solar photovoltaic ('PV') arrays;

- Biodiversity Enhancement Area (ca. 1.8ha) located to the northeast of the wharf extension in existing agricultural wet grassland that is bisected by the Luffany Stream;
- Diversion, extension and relocation of the outfall to the existing drainage pipe serving the SmartPly facility; and,
- All associated Site development works.

Further details on the above elements of the Proposed Development are provided below.

3.2.1 250m Wharf Extension

The Proposed Development will include a ca. 250m extension to the existing wharves at the container / bulk handling terminal at Belview Port, located at the downstream end of the Belview Port.

The quay will comprise a reinforced concrete suspended beam and slab structure measuring ca. 23.5m in width by ca. 250m in length and will be a continuation of the existing wharves.

The quay will be supported on ca. 200 - 240 steel piles. The level of the front elevation of the quay will be nominally 6.3 metres above Ordnance Datum ('mOD') Poolbeg.

The wharf extension will support two ORE Operator Facilities and will provide additional space for port-related activities. As part of the port-related activities, it is proposed that an additional mobile harbour crane be installed, which will be in line with the existing Belview Port mobile harbour cranes that have a maximum lifting capacity of ca. 84t and a maximum lifting height of ca. 48m.

3.2.2 ORE Operator Facilities

The Proposed Development will also comprise two distinct ORE Operator Facilities to serve the needs of future ORE projects in the Celtic Sea off the southern coast of Ireland. The ORE operator facilities have been designed to operate independently of one another. Each facility has separate infrastructure, utilities and access arrangements to ensure autonomy in their management; please see further details below.

<u>Operator 1 Facility:</u>

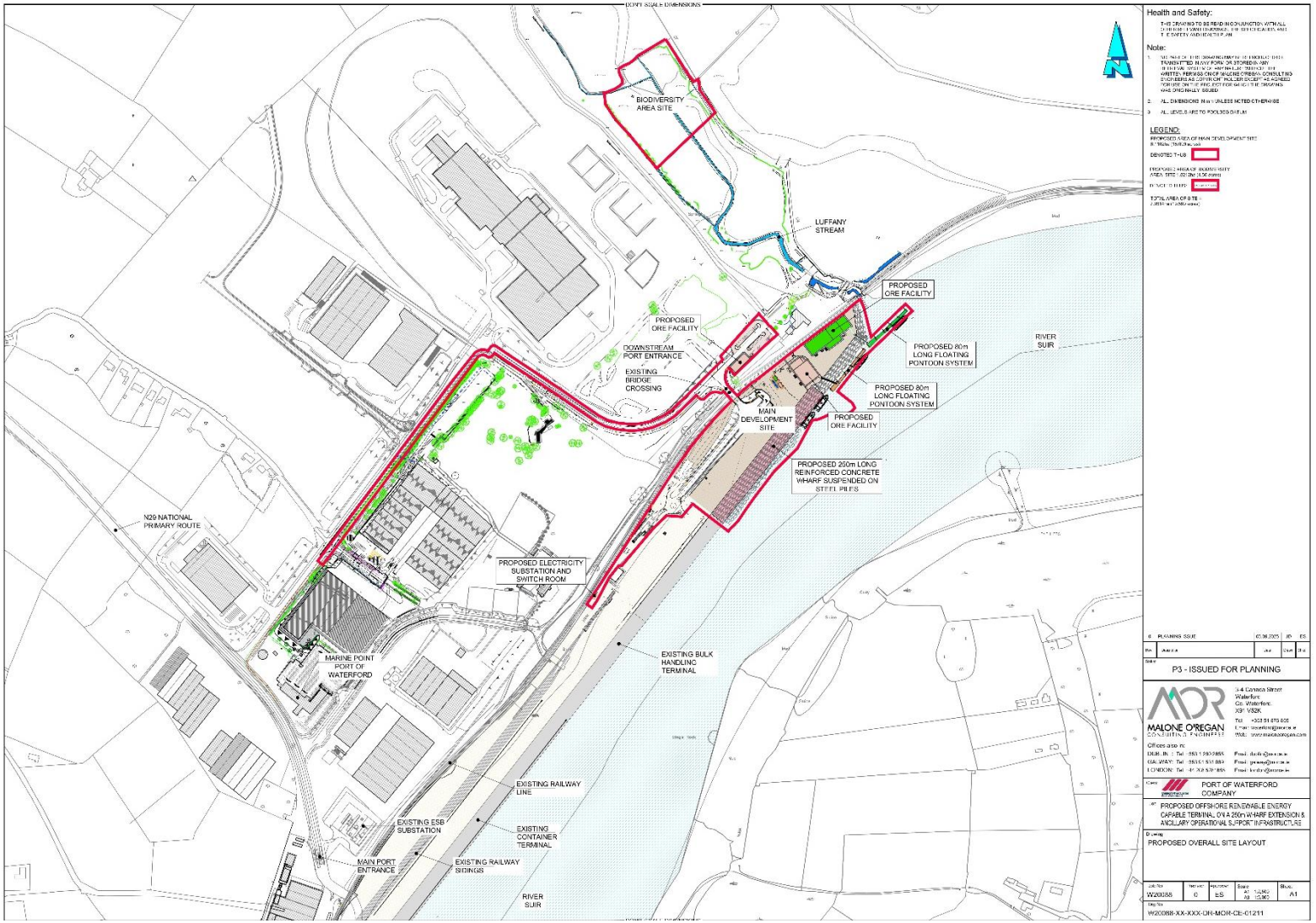
- A three-storey building located on the proposed wharf extension that will include warehousing, workshop, welfare areas, office space, electrical stores, switch room and control rooms, which will include:
    - Dimensions of ca. 41m in width, ca. 27m in length and ca. 17m in height; and,
    - Floor areas of ca. 1750 m² at ground floor, ca. 700 m² at first floor and ca. 700 m² at second floor.
- Solar PV panels will be mounted on the rooftops, where possible;
- Yard area of ca. 2,575m^2;
- One quayside fixed crane installation (max height of ca. 6m);
- One dedicated fuel tank with 90,000-litre ('L') capacity, which will be located in a bunded area designed to hold 110% of the tank volume. The fuel loading and unloading will take place within a contained area;
- One 80m berthing pontoon designed to accommodate up to two 30m Crew Transfer Vessels ('CTV');
- Berthing space along the wharf extension designed to allow for up to one 100m Service Operations Vessel ('SOV');

- 38 car parking spaces; and,
- Stormwater and foul water drainage; see Section 3.2.6 below for further details.

Operator 2 Facility:

- A two-storey building that will include warehousing, workshop and welfare areas, which will include:
    - Dimensions of ca. 75m in width, ca. 28m in length and ca. 11m in height; and,
    - Floor areas of ca. 1050 m² at ground floor and ca. 250m² at first floor.
- A three-storey building located on the north side of the Rosslare-Limerick railway line, which will include office space, welfare areas, electrical stores, server room and control rooms, which will include:
    - Dimensions of ca. 30m in length, 12m in width and 14m in height; and,
    - Floor area of ca. 370 m² at each level.
- Solar PV panels will be mounted on the rooftops, where possible;
- Yard area of ca. 1,455m^2;
- One quayside fixed crane installation (max height of ca. 6m);
- One dedicated fuel tank with 90,000-litre ('L') capacity, which will be located in a bunded area designed to hold 110% of the tank volume. The fuel loading and unloading will take place within a contained area;
- One 80m berthing pontoon designed to accommodate up to two 30m CTVs;
- Berthing space along the wharf extension designed to allow for up to one 100m SOV;
- 38 car parking spaces; and,
- Stormwater and foul water drainage; see Section 3.2.6 below for further details.

Figure 3-1: Site Layout



3.2.3 Energy Supply

The existing substation at the Port of Waterford wharf has a maximum import capacity ('MIC') supply of 750kVA. Presently, this substation supplies power to the existing lighting, general services and crane requirements for the port. The existing 750kVA MIC is expected to be sufficient to supply the power requirements for the Proposed Development.

In order to comply with the current ESB standards, it is proposed to replace the existing substation with a new ESB-compliant substation. Therefore, the Proposed Development will involve the construction of a new 750kV substation and switch room. This substation will replace the existing 750kV substation. The new substation will have the capacity to supply energy to the Proposed Development and the existing Port of Waterford operations.

Power and communications will be supplied to separate locations within the new wharf extension via new low voltage ('LV') and extra low voltage ('ELV') ducting to a number of dual-compartment mini pillars and external metering units, depending on the electrical requirements needed at specific areas of the wharf.

ORE operators have indicated that future SOV and CTV vessels may be electrically powered in the future. Therefore, the design of the proposed substation will allow for future capacity for potential electric SOVs and CTVs.

In addition, rooftop-mounted solar PV panels will be installed on the ORE Operator facilities, which will cover a combined maximum area of ca. 2,100m^2 across the buildings. The estimated annual electricity generation was calculated using the Sustainable Energy Authority of Ireland ('SEAI') baseline for a well-sited domestic solar PV system, which produces approximately 2,600kWh/year from a 20m^2 array [1]. Based on this data, the 2,100m^2 array has a potential maximum generation of approximately 273,000kWh of electricity per annum.

3.2.4 Water Supply

3.2.4.1 Potable Water

Potable water will be supplied to the ORE facilities on the quayside and for bunkering vessels berthed alongside the ca. 250m wharf extension by extending the existing potable supply network as shown on the drawings.

Potable water for the Operator 2 office building, located north of the Rosslare-Limerick railway line, will be supplied from the existing port watermain in the industrial access road.

Uisce Éireann have confirmed feasibility for the ORE operator facilities, which will be subject to a connection agreement with Uisce Éireann. Confirmation of feasibility from Uisce Éireann was received on 28th May 2025.

3.2.4.2 Fire Water Supply

Fire water supply will be provided to the Proposed Development by extending the existing port area fire main, which is connected to the existing large capacity static firefighting water tank located adjacent to the Port offices at the upstream entrance to the Port.

This tank, in turn, is fed by an existing borewell with primary backup from a second borewell and secondary backup from the Uisce Eireann network. Fire supply to the Proposed Development will be provided by extending to the fire main, incorporating hydrants as indicated on the drawings, to meet the firefighting requirements of the ORE Energy facilities and the port extension.

3.2.5 Drainage

3.2.5.1 Stormwater Drainage

Operator 2 Office Building Surface Water Drainage

It is proposed to provide permeable paving to allow stormwater generated in the proposed parking areas to discharge to the ground.

Stormwater runoff from the roof of Operator 2's office building, located to the north of the railway line, will be collected via rainwater downpipes and will be discharged into the proposed surface water drainage network. This stormwater runoff will be discharged under controlled flow into the existing surface water network to the east of the Site, which discharges to the Luffany Stream downstream of the existing tidal flap along this stream.

Quayside Stormwater Drainage

Stormwater runoff from the wharf extension and reclaimed area will be collected via longitudinal heavy-duty channels and gullies to discharge to an underground drainage network, which will be routed to a proposed settling tank (ca. 2.5m wide x ca. 12m long x 3.5m depth) on the quay before draining through a hydrocarbon bypass interceptor before discharging to the Lower Suir Estuary through the proposed new outfall pipe. The works will include modifications to the existing stormwater drainage to facilitate the extended wharf structure and associated work areas.

The settling tank will have a V-notch weir fitting, composite sampling equipment and continuous pH and conductivity probes. In the unlikely event of a major spill or a fire occurring at the Port, contaminated run-off will be diverted to an Emergency Holding Tank (capacity of 636m^3) where the liquid will be contained for further testing. All contaminated run-off water will be removed off-site for treatment at an appropriate waste facility in strict accordance with the requirements of the Waste Management Regulations.

Additionally, as part of the Proposed Development, the existing 600mm diameter outfall discharging existing stormwater runoff from the port will be extended to an outfall within the proposed new revetment.

Operator 1 & 2 Quayside Stormwater Drainage

Stormwater from the roofs of the new ORE buildings will be collected via rainwater downpipes and discharged to the proposed surface water piped network. Surface water from the proposed ORE yards will be directed into the new network through road gullies and channels that will link into the quayside stormwater drainage.

SmartPly Discharge Pipe

As part of the Proposed Development, the existing 600mm diameter outfall discharge pipe from the SmartPly site located to the northwest will be diverted and extended to the outfall within the proposed new revetment. There will be no changes to the current discharge rates / capacity to the discharge pipe as a result of the Proposed Development. As this discharge is strictly regulated by the EPA under Industrial Emissions ('IE') Licence P0001-05, Smartply Europe DAC, the licence holder, will need to obtain the Agency's consent for these works.

Quayside Fuel Tank Loading and Unloading Area

As mentioned, each ORE Operator will have a 90,000L dedicated bunded fuel tank. A dedicated containment area will be provided immediately adjacent to the two fuel tank bunds to mitigate any impact from potential spillages or leakages during the filling of the fuel tanks by fuel delivery tankers.

The stormwater generated in the re-fuelling zone and bunded areas will flow through an automated shut-off valve, activated on detection of hydrocarbons, and will discharge through a forecourt interceptor to the surface water network. The fuel delivery tankers will be subdivided into four compartments, each with a 7,600-litre capacity. The forecourt interceptor will therefore have the capacity to retain the entirety of one of the 7,600 litre delivery compartments.

In addition, each ORE Operator will have a separate underground pipeline that will connect the fuel tank to a manifold on the wharfs that will be used for refuelling of the CTVs and SOVs.

3.2.5.2 Foul Water Drainage

ORE Operator Facilities

A new foul water drainage system is proposed to collect foul water from the ORE Operator facilities and to discharge via a gravity and pumped system to the Uisce Éireann network, subject to a connection agreement with Uisce Éireann and in accordance with the Uisce Éireann Code of Practice for Wastewater Infrastructure. Uisce Éireann provided a Confirmation of Feasibility.

Port of Waterford

However, no additional drainage infrastructure was deemed necessary to accommodate the additional 30 employees as the existing drainage system for the Port of Waterford Marine Point Offices and Terminal Building has the capacity to accept the additional staff.

3.2.6 Fire-fighting Facilities

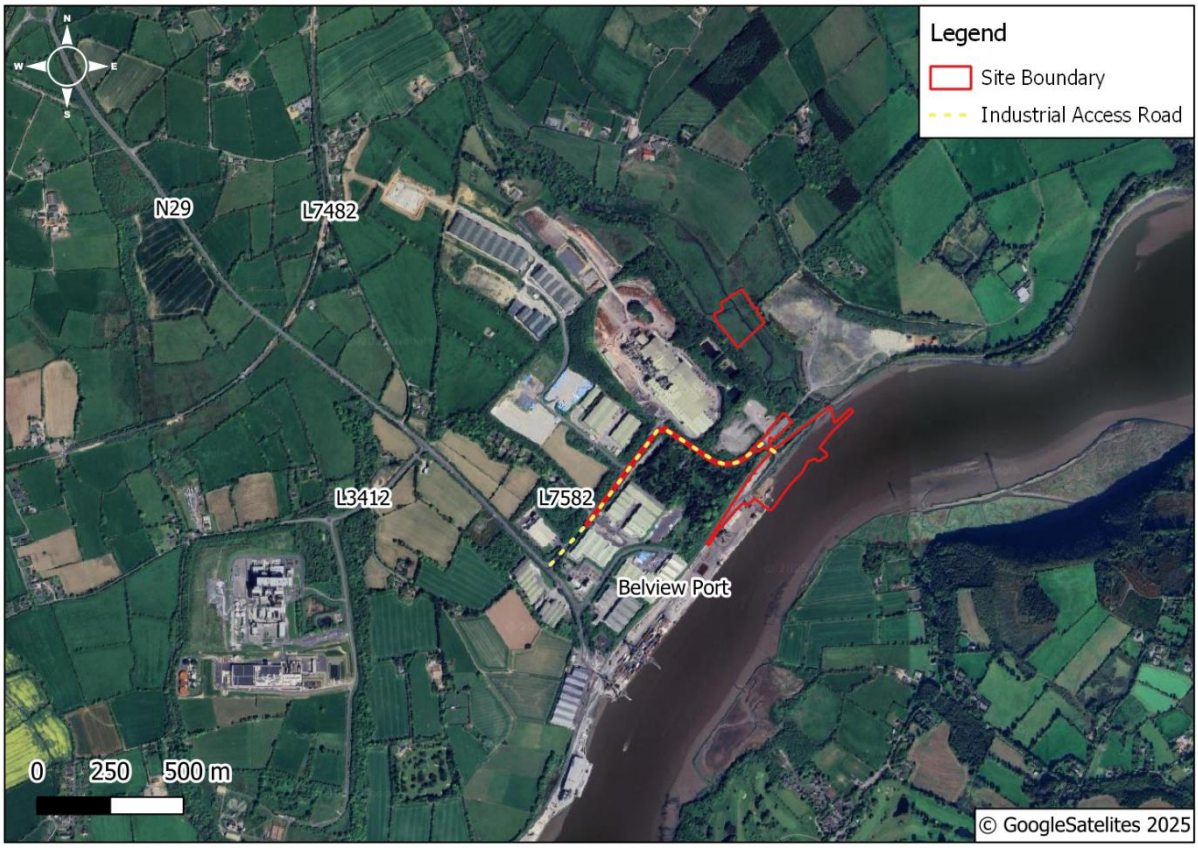
The Proposed Development will include the following fire-fighting facilities, which will include:

- Tie-in to the existing fire mains as described in Section 3.2.4 above;
- A new fire hydrant system including three new double-headed hydrants;
- Fire hose reels within the buildings;
- Installation of Fire alarms as per BS 5839 / IS 3218 within the onsite buildings; and,
- Hand-held fire extinguishers at key locations within the buildings.

3.2.7 Site Access

Access to the Proposed Development will be primarily via the existing downstream Port of Waterford entrance.

Figure 3-2: Access Road and Proposed Haulage Road



3.2.8 Parking

The Proposed Development has been designed to incorporate 70 standard car parking spaces, 35 of which will be located on the elevated site north side of the Rosslare-Limerick railway line, 35 of which will be located to the south of the railway line and six disabled parking spaces, two adjacent to each of the ORE operator offices and buildings. In total, there will be 76 parking spaces serving the Proposed Development.

Parking will also be available at the existing Port of Waterford offices or at the terminal parking area adjacent to the existing upstream main entrance to the Belview Port, in line with the current Port operations.

3.2.9 Weighbridges

The two existing downstream weighbridges within the Port of Waterford will be relocated as part of the Proposed Development.

3.2.10 Lighting

The Proposed Development will operate on a 24-hour basis, and proposed lighting will be provided to align with the requirements of the ORE Operators. New general lighting has been proposed for the wharf area, pontoons, staff carparks, pedestrian walkways, access roadways and office areas.

Luminaires have been selected on the merit of their efficiency and minimal glare, back light and up light spill characteristics to ensure minimal light pollution to surrounding areas.

External Lighting control shall be completed by means of timeclocks and external photocell units.

Lighting will be at the following lux levels:

- Roads - 15 to 20 lux;
- Wharves - 10 to 30 lux;
- Pontoons - 5 to 8 lux;
- External areas around buildings - 10 to 20 lux; and,
- Car parking areas - 15 to 20 lux.

The lighting strategy has been specifically designed to minimise light pollution to surrounding areas and avoid excessive lighting. For full details, please refer to the Lighting Reality report submitted in support of this application.

3.2.11 Biodiversity Enhancement Area

As part of the Proposed Development, an area of ca. 1.8ha will be managed to enhance local biodiversity. The proposed works will include:

- Installation of stock-proof fencing around the Biodiversity Enhancement Area to exclude cattle but allow the free movement of other species, including otter, badger, deer, etc.;
- The creation of pond complexes within the Biodiversity Enhancement Area with natural regeneration of wetland species;
- Enhancement of existing hedgerows with additional species-rich riparian woodland planting along the eastern and western boundaries;
- Allowing for the natural regeneration of wet grassland habitat and reed and large sedge swamp habitat following the removal of livestock from the area; and,
- The provision of wildlife shelters providing nesting opportunities for protected and locally important species, including sand martin, nest bank, kingfisher nest bank, bat boxes, habitat piles / hibernaculum, deadwood habitat and artificial otter holts.

3.3 Demolition and Construction Procedures

The construction works are currently planned to begin in Q3 2026 and will take ca. 18-24 months to complete.

3.3.1 Construction Programme

The construction works will be undertaken in six phases. Summary details for the different phases are outlined below. The construction phases will be:

Table 3-1: Construction Programme

Construction Phase	Estimated Duration (Months)*
Site Set-up	0.5 – 1
Demolition Works	1
Capital Dredging & Land Reclamation Works	6 – 9
Construction of Wharf	9 – 12
Building Construction	12 – 15
Works Completion	2 – 3

Construction Phase	Estimated Duration (Months)*
Estimated Duration of Construction	**18-24 Months**

***Note:** The construction programme for the works will involve the various construction activities occurring simultaneously in different areas of the Site as the works progress.

3.3.1.1 Site Set-up

The temporary Contractor's compound will initially be established on the elevated area in the northern section of the Site, north of the Rosslare-Limerick railway lines. As the works progress and reclamation makes further areas available, the Contractor will establish a secondary compound adjacent to the construction works for the wharf in the main Belview Port area.

Site set-up activities will also include establishing secure perimeter fencing, controlled access points, and clear site signage to manage vehicle and pedestrian movement. Temporary welfare facilities will be installed, and existing port facilities will be utilised where feasible. Wheelwash systems will be provided at exit points to prevent debris and sediment from reaching public roads, and internal haul routes will be prepared with appropriate surfacing to reduce dust and sediment runoff into adjacent waters.

Additional preparatory measures will include minor grading or clearance works, the installation of temporary drainage infrastructure such as silt traps to manage surface water, and the provision of bunded storage areas for fuels, oils, and other hazardous materials. Designated waste segregation areas will be established to ensure inert, recyclable, and general waste streams will be managed appropriately. All enabling works will be carried out under strict environmental controls to safeguard local water quality, minimise dust and noise emissions, and limit disruption to port operations and surrounding communities.

3.3.1.2 Demolition Works

The Proposed Development will involve the demolition of the following:

- The existing downstream ramp will be partially demolished to facilitate the development of the wharf extensions. This demolition work will involve the removal of ca. 3,000m^3 of material. The materials from this demolition work will be reused as part of the infill material in the reclaimed area;
- The existing dolphin, comprising a reinforced concrete deck on steel piles, together with a steel access gangway, will be partially demolished. Piles will be cut at bed level and left in place. Demolished concrete will be transported to a land-based area within the Site for crushing and reuse as part of the fill material for reclamation, subject to meeting relevant specification;
- The existing fendering at the downstream end of the wharf. This fendering will be removed and returned to the Port of Waterford for future reuse; and,
- The existing supporting steel framing within the downstream end of the wharf will be removed and taken offsite for recycling (if suitable) or appropriately disposed of by a licenced contractor.

Materials arising from demolition works that will not be suitable for reuse on-site will be removed to licenced facilities for recycling or disposal.

3.3.1.3 Land Reclamation Works

Capital Dredging Works

Capital dredging will be required to be carried out locally at the downstream end of the wharf extension to achieve the proposed berth depth of -10mOD Poolbeg. There will be a need to remove ca. 7,000m^3 of material from the riverbed to facilitate the construction of the wharf extension. The dredging works will be carried out using appropriate dredging methods and equipment to loosen the compacted material. Loading will take place under controlled conditions, with material removed from the bed transferred by a suction pipe directly to the vessels' holding tanks.

Dredged material suitable for reuse will remain on-site to be treated and reused as fill material. Unsuitable material will be loaded onto tipper trucks and transported to a suitably permitted / licensed facility for recovery and/or disposal.

Reclamation Works

Approximately 160,000 tonnes of rock will be imported from local quarries, as much as practicable, to the Site. This rock will infill the area behind the open wharf and will be brought up to the same level as the wharf. A subbase layer will be placed on top of the infill material. Concrete paving will be finished at the surface, and therefore, there will be minimal pouring of concrete required within this portion of the Proposed Development.

3.3.1.4 Construction of Wharf

The sequence of the wharf construction will consist of the following:

- Removal of the existing rock armour in the area of the wharf extension using floating plant and retention on-site for re-use, if suitable;
- Removal of material from the footprint of the development and from the proposed berth via capital dredging and disposal off-site to a suitably licenced facility, as outlined in Section 3.3.1.3 above;
- Placement of fill material from the shore to the reclaimed areas within the river, commencing at the upstream end. Placement of fill to be undertaken in layers;
- Setting out and installation of the steel piles using floating plant, and/or other appropriate methodology, to socket the piles into the bedrock to support the wharf and the pontoons;
- Infilling of material to the profile of the revetment, placement of geogrid geotextile membrane and placement of rock armouring;
- Placement of reinforced concrete precast beam sections on the piles and casting of the reinforced concrete in-situ concrete pile heads;
- Placement of the precast prestressed deck slab units and casting of the reinforced concrete in-situ slab;
- Installation of the tie rods and precast in-situ anchor walls and completion of the filling;
- Installation of the cone fender units, fender panels and mooring bollards; and,
- Installation of underground services and underground tanks will be progressed during the filling works.

3.3.1.5 Building Construction

The construction of the ORE facilities will commence when the wharf construction and reclamation works will be advanced.

Piles will be driven to support the buildings, followed by construction of the reinforced concrete pile caps, ground beams and ground floor slabs, erection of the steel frames, installation of the upper floors, roof and wall cladding, installation of the building services and building fit-out.

External works will be completed latterly to include the elevated site to the north of the railway and will comprise external finishes, lighting, fencing and gates.

3.3.1.6 Works Completion

Works completions will include the delivery and installation of the pontoons and gangways, fabricated office, erection of external lighting, fencing, gates, application of road making and erection of signage, and delivery and installation of the ORE wharf-mounted cranes, mobile harbour crane, two fuel tanks and fuel tank bund enclosures.

3.3.2 Construction Management

3.3.2.1 Construction Access

The primary access during the construction period will be via the existing Port of Waterford secure entrances.

3.3.2.2 Construction Employment

It is anticipated that the number of construction workers will range between 20 and 100 during the different phases of construction over an estimated 18-24 month period.

3.3.2.3 Hours of Work

The hours of construction work are intended to be:

- Monday – Friday: 07:00 – 19:00; and,
- Saturday: 07:00 – 14:00.

Pile installation works will be limited to 08:00 – 18:00 Monday to Friday, and 8:00 – 14:00 on Saturdays.

As per any construction works programme, there may be the occasional requirement for specific works that will be required outside these hours. Any works that take place outside the agreed hours will be notified to the Planning Authority in advance.

3.3.2.4 Marine Traffic

The Port of Waterford will maintain normal port operations during the Construction Phase. Therefore, the Port of Waterford will notify all port users of the construction works and will notify the Marine Survey Office as necessary.

Navigation marks and lighting will be established if necessary to warn other marine users of any works potentially interfering with navigations.

3.3.2.5 Construction Management

During the Construction Phase, the methods of work will comply with all relevant legislation and best practices in reducing the environmental impacts of the works. The impacts will be reduced as far as practicable through compliance with the mitigation measures stated in this EIAR and current construction industry guidelines, as outlined in relevant chapters of this EIAR.

As part of the pre-construction preparation, a preliminary Construction Environmental Management Plan (‘pCEMP’) has been developed and will accompany this application. To ensure the Construction Environmental Management Plan (‘CEMP’) is relevant to the project

and the current environment at the time of construction, it will be prepared by the appointed Contractor in advance of the commencement of construction works.

The CEMP prepared by the Contractor will outline in a single document the procedures for monitoring the effectiveness of the environmental protection measures. The CEMP will, as a minimum, include the following:

- Incorporate all Environmental Commitments and Mitigation Measures in the contract documents, which will include all mitigation and prevention measures identified in Chapters 5 to 18 of this EIAR and the NIS submitted as part of this planning application, and any conditions of any permission as may be granted and any further requirements of Statutory Bodies;
- Provide a method of documenting compliance with these Environmental Commitments and Mitigation Measures;
- List all relevant environmental legislative requirements;
- State methods by which construction work will be managed to avoid, reduce or remedy potential adverse impacts on the environment;
- The contractor shall ensure that all personnel working onsite will be trained and made aware of the measures detailed within the CEMP;
- A detailed Dust Management Plan ('DMP') will be prepared in accordance with best practice guidelines;
- A detailed Construction Resource and Waste Management Plan ('CRWMP') will be prepared in accordance with best practice guidelines;
- A detailed Construction Traffic Management Plan ('CTMP') will be prepared in accordance with best practice guidelines; and,
- A detailed Greenhouse Gas ('GHG') Reduction Plan will be prepared in accordance with best practice guidelines.

The CEMP will be required to take into account best practice guidance, such as:

- CIRIA C532 – Control of Water Pollution from Construction, Guidance for Consultants and Contractors [2];
- CIRIA C584 – Coastal and Marine Environmental Site Guide for Protection of Water Quality and, in turn, Aquatic Life, During the Construction Phase of the Works [3];
- CIRIA C648 – Control of Water Pollution from Linear Construction Projects: Technical Guidance [4];
- CIRIA C649 – Control of Water Pollution from Linear Construction Projects: Site Guide [5];
- CIRIA C674 – The Use of Concrete in Maritime Engineering – Guide to Good Practice [6];
- CIRIA C811 – Environmental Good Practice on Site (5th edition) [7];
- CIRIA C753 – The SuDS Manual [8]; and,
- CIRIA C744 – Coastal and Marine Environmental Site Guide (Second Edition) [9].

All works will be undertaken in accordance with the following documents:

- Inland Fisheries Ireland ('IFI'), 'Requirements for the Protection of Fisheries Habitat during Construction and Development' [10];

- National Roads Authority ('NRA'), 'Guidance for the Treatment of Otters Prior to the Construction of National Road Schemes' [11];
- NRA 'Guidance for the Treatment of Bats Prior to the Construction of National Road Schemes' [12];
- NRA, 'Guidance on the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads' [13];
- Department of Arts, Heritage and the Gaeltacht ('DAHG'), 'Guidance to Manage the Risk to Marine Mammal from Man-made Sound Sources in Irish Waters' [14];
- Guidance on Marine Baseline Ecological Assessments and Monitoring Activities for Offshore Renewable Energy Projects Part 1 [15];
- Guidance on Marine Baseline Ecological Assessments and Monitoring Activities for Offshore Renewable Energy Projects Part 2 [16];
- OSPAR - Guidelines for the Management of Dredged Material [17];
- BS 5228-1 + A1:2014: Code of Practice for noise and vibration control on construction and open sites- Part 1: Noise [18] and Part 2 Vibration [19];
- Statutory Instrument ('S.I.'): S.I. No. 299 of 2007: Safety, Health and Welfare at Work (General Application) Regulations, 2007 [20]; and,
- S.I. No. 254 of 2018 as amended by S.I. No. 180 of 2019, HSA Safety, Health and Welfare at Work (Diving) Regulations, 2018-2019 [21] (where required).

3.4 Operational Phase

3.4.1 Operational Phase Employment

The Proposed Development will generate approximately 100 full-time permanent jobs during the Operational Phase; this will include:

- 35 personnel for ORE Operator 1;
- 35 personnel for ORE Operator 2; and,
- 30 personnel for the additional space for port-related activities at the Port of Waterford.

3.4.2 Operational Hours

It is intended that the Proposed Development will operate 12 months a year, 7 days a week on a 24-hour basis in line with the current Port of Waterford operations.

Working hours may vary for the different types of employment that will be created by the Proposed Development, which will include:

- **Office Staff**: Office staff will work during normal office hours of ca. 08:00 – 18:00.
- **Warehousing Staff**: Warehousing staff will work primarily during normal working hours, ca. 08:00 – 18:00, Monday to Friday. However, 24-hour access will be required to the warehouses.
- **O&M Technicians**: Each ORE operator will require technicians to facilitate the O&M works required at the offshore wind farms:
    - O&M works utilising CTVs will be undertaken in 12-hour shifts. Personnel will arrive to the Port and will commence loading and refuelling of the CTVs from ca. 06:00 to 07:00. The CTVs will depart from the Site at ca. 07:00 and go to

the offshore wind farms. The CTV will then return to the Port at ca. 19:00 and the plant / equipment will be unloaded until ca. 20:00; and,

- In addition, SOVs required for O&M works will remain at the offshore wind farm for up to two weeks and will only return to the Port of Waterford for supplies, crew change and refuelling. Loading and fuelling of the SOVs will commence from ca. 07:00 to 18:00. The SOVs will depart from the Site after loading is complete, ca. 18:00, and go to the offshore wind farms for a period of two weeks.

- **Port Staff**: Within the design of the Proposed Development, the proposed ca. 250m wharf extension will also be utilised for ongoing port operations. It is proposed that these port operations will operate on a 24-hour basis, in line with the current Port of Waterford operations.

The Proposed Development has been designed to cater for two ORE Operators. At this preliminary stage, it was not possible to predict the exact operations that will be required for ORE Operators in the South Coast. Therefore, the Proposed Development has been designed to accommodate a range of vessels; however, different scenarios may arise at the time of operation based on the requirements of the ORE Operators. Therefore, for the purposes of this EIAR, the assessments have been based on a 'worst-case scenario' in which the two ORE Operators utilise the CTV operations and utilise two CTVs each, i.e., a total of four CTVs moving in and out of the Port on a daily basis.

3.5 Decommissioning

The MAC for the Proposed Development has a term of 60 years. At the end of this 60-year term, a new MAC and all other appropriate consents will be sought. Given the nature of the Proposed Development, it is proposed that the development will be either continued or re-purposed.

The Proposed Development has been designed to support offshore wind infrastructure in the Celtic Sea, which typically has a lifespan of ca. 25-40 years. However, it is envisioned that with continued technological advancements and improvements in engineering practices, the operational lifetime of ORE developments will potentially increase. In addition, it is considered possible to extend the lifetime of an ORE development by 'repowering' or replacing turbines / foundations with newer specifications and designs. Therefore, if the lifetimes of the ORE developments are extended, then the ORE facilities within the Proposed Development will continue to be utilised.

The Proposed Development will also provide space for the Port of Waterford to utilise for general port operations.

Therefore, in the unlikely event that the ORE developments should be decommissioned and the ORE facilities will not be required, then the Proposed Development will be used solely for port-related activities.

Furthermore, it should be noted that the MAC received from MARA on the 16th June 2025 outlines the requirement for rehabilitation of the consented area prior to the expiration of the MAC, in accordance with Condition 19. According to the MAC, the rehabilitation works must be completed in accordance with the Rehabilitation Schedule; however, this will only be provided following the grant of planning permission. Therefore, at this time, the Rehabilitation Schedule is not currently known. However, a preliminary Rehabilitation Plan for the Proposed Development has been prepared, and full details are provided in Appendix 3-2.

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