

**KILKENNY COUNTY COUNCIL**



**Planning and Development Act 2000 (as amended)**

**Planning and Development (Strategic Infrastructure) Act 2006**

Planning Authority report in accordance with the requirements of  
Section 291 of the Planning and Development Act 2000 (as amended)

<b>An Bord Pleanála Ref. No.:</b>	<b>ACP-323575-25</b>
<b>Applicant:</b>	<b>Port of Waterford, Marine Point, Belview Port, Co. Kilkenny</b>
<b>Agents:</b>	<b>Malone O'Regan</b>
<b>Site location:</b>	<b>Belview Port, Co. Kilkenny</b>

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## PART I – SITE LOCATION AND DEVELOPMENT DESCRIPTION

### Site Location

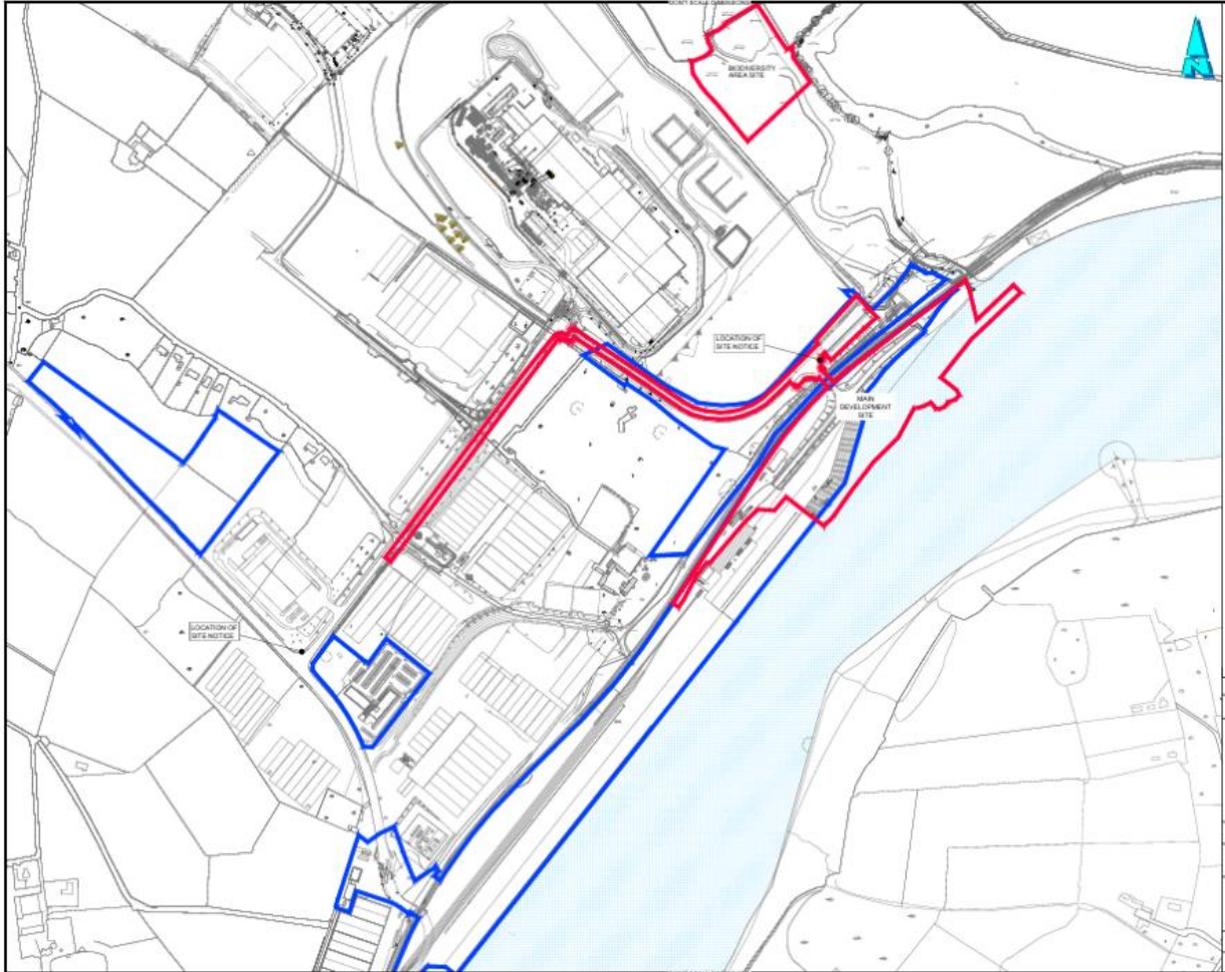


Fig: Site Location Map courtesy of SCA Planning and Malone O'Regan  
Red indicating site boundary, blue indicating land under same ownership



Fig: Aerial View of Site



Fig: Draft Zoning Map for Draft Ferrybank Belview Framework Plan showing subject lands/adjoining lands zoned Port Facilities and Industry (grey) and Biodiversity Enhancement Area zoned Passive Open Space (light green)

The proposed development will be located partly on land and partly in the near-shore at the Port of Waterford, Belview, Co. Kilkenny. The site has a gross site area of c.8 ha and is made up of the following elements:

- c.4.9ha of development within the existing Port of Waterford land ownership;
- c.1.3ha of reclaimed area within the River Suir using reclaimed materials and quarried rock; and;
- c.1.8ha of a biodiversity enhancement area located to the northwest of the wharf development

Belview Port currently comprises c.960m of quays on the northern bank of the River Suir and has open and closed storage areas / warehousing within the c.256ha area designated as the Belview Port Zone. The site covers an area of c.8ha and is located partly on land and partly in the River Suir within the industrial landscape of the Port of Waterford, Belview, Co. Kilkenny. The site is accessed via local road L7852 off the N29 national road. The site is bordered to the north and west by a primarily industrial landscape, and within the wider area are the sites of SmartPly Europe, Southeast Port Services Ltd., Target Fertilisers, the wider Belview Port and more. Across the River Suir is Faithlegg, Co. Waterford, an area of one-off residential housing, agricultural lands, forestry and marshlands. Further south east is Cheekpoint and surrounds, Co. Waterford a village to the opposite side of the Suir Estuary.

The site boundary includes an area identified as a proposed biodiversity enhancement area located north of the proposed wharf extension. This area is currently comprised of a mosaic of agricultural wet grassland and areas of rushes. A letter of consent in respect of this part of the site is enclosed. The portion of the site located within the River Suir is considered to be located in the 'Nearshore' as defined in the Maritime Area Planning Act 2021 ('MAPA').

## **Description of Development**

The Proposed Development provides for an extension to the port facilities with the intention of supporting Offshore Renewable Energy development and includes the following. -

- A c. 250m extension to the existing wharves at the container / bulk handling terminal at Belview port, as a continuation of 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 approximately 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 (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 southern 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 (c.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
- All associated site development works.

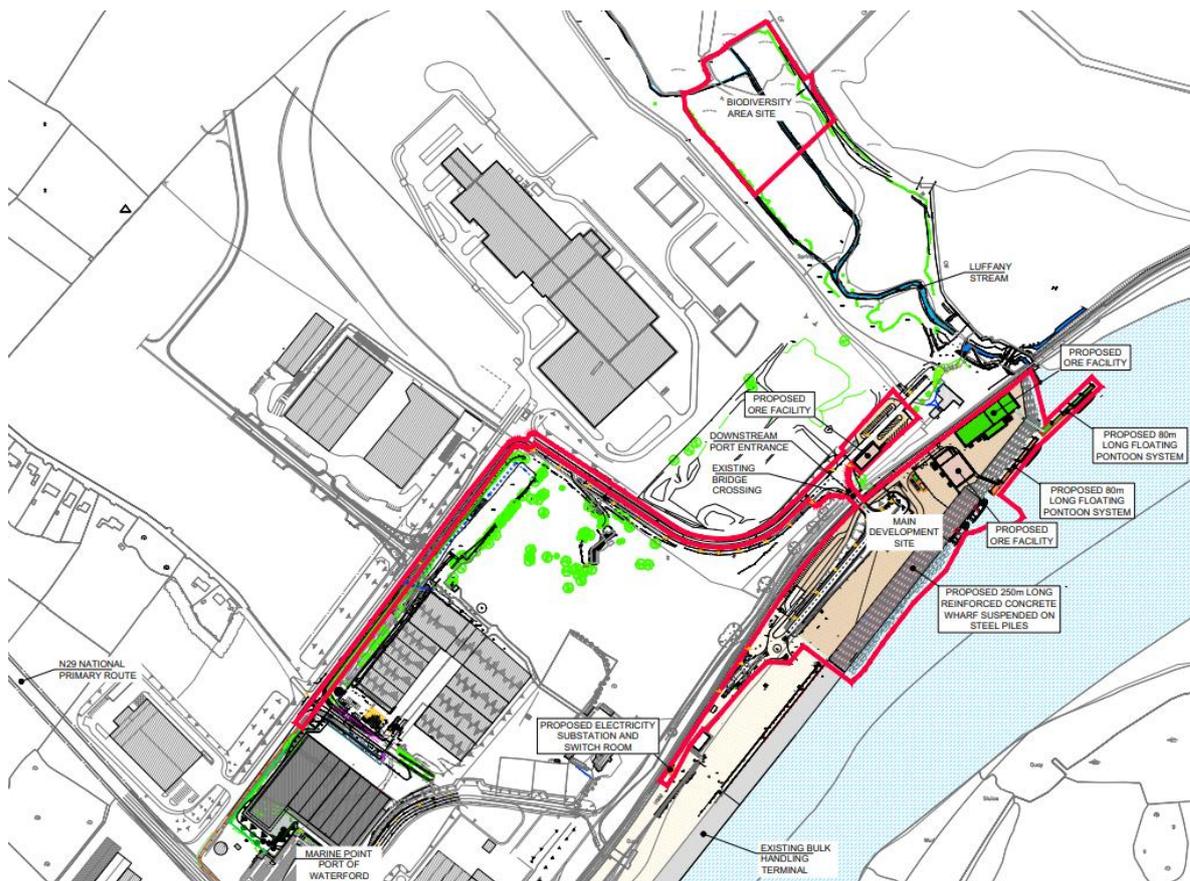


Fig: Proposed Site Layout Plan

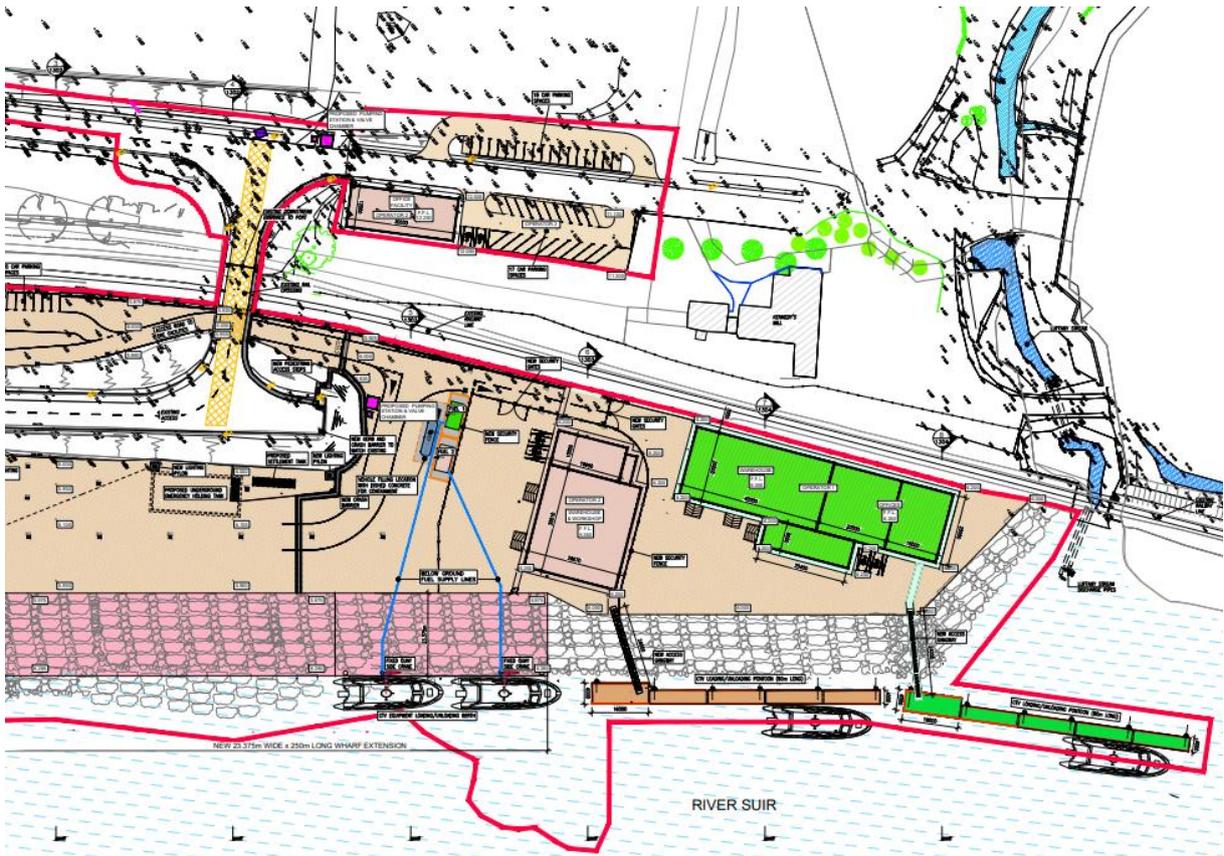


Fig: Proposed Site Layout Plan – close up

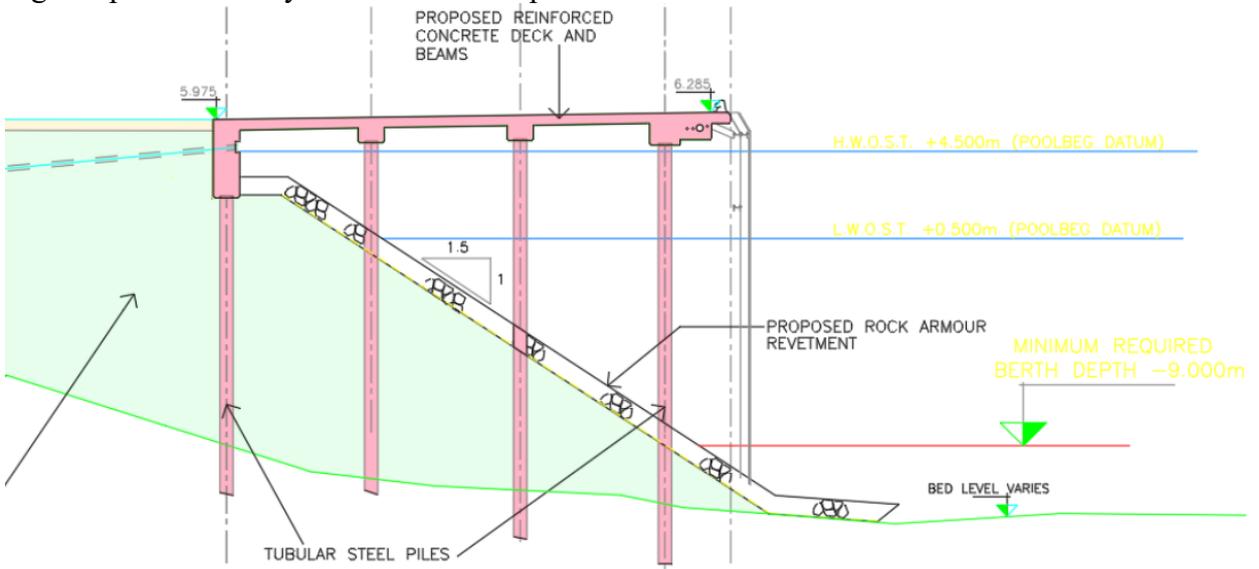


Fig: Proposed Site Section of wharf extension

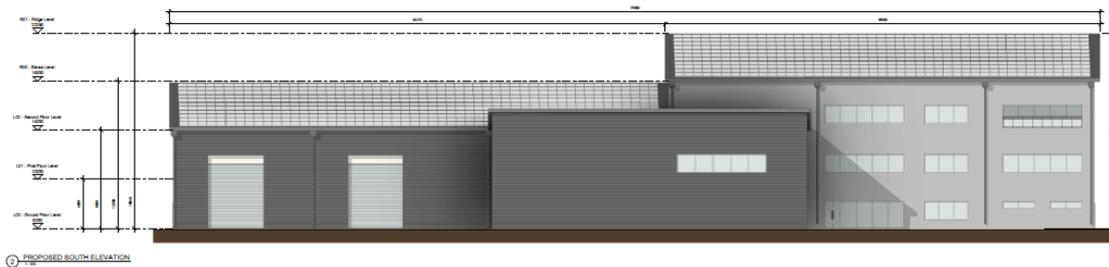


Fig: Building: Operator 1- Southern elevation

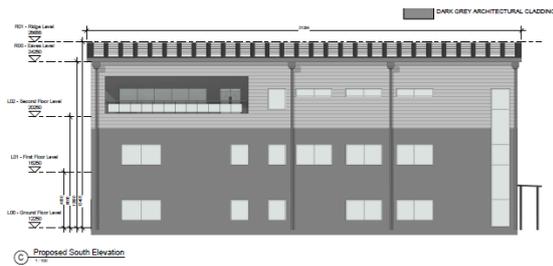


Fig: Building: Operator 2- Southern elevation

Biodiversity works to an area of c.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;
- Allowance 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.

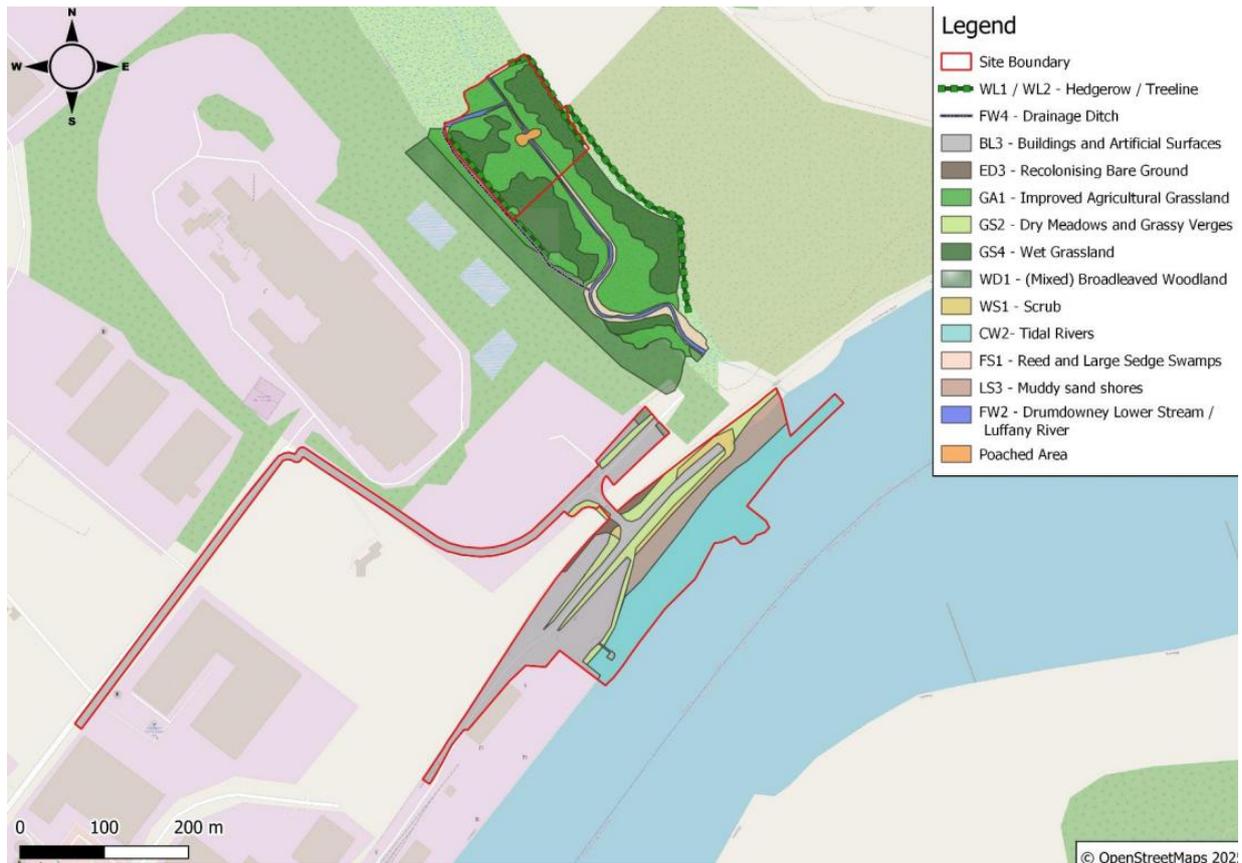


Fig: Biodiversity Enhancement Area

## PART II – INTERNAL REFERRALS

### Roads

The following recommendations / observations were made by the Roads Section of Kilkenny County Council:

It is noted the applicant has demonstrated capacity within the surrounding road network to cater for the proposed development. There is no objection in principle to the development, and the following conditions are recommended:

1. Prior to the commencement of the development the applicant shall further develop the pedestrian access routes throughout the site for written approval of the planning authority.
2. Noted the applicant has submitted CEMP for the proposed development. The applicant or appointed contractor shall be required to prepare and manage a site-specific CEMP for the duration of the project for the construction phase. It is noted that the CEMP is a live working document, and the applicant shall be required to prepare an updated construction environmental, and traffic management plan for the construction phase which shall be submitted to the Municipal District Office prior to commencement of development works for agreement.
3. A road cleaning regime shall be implemented along the L7582 and its junction with the N29 for the duration of the construction works

## **Environment**

The following recommendations / observations were made by the Environment Section of Kilkenny County Council:

1. The emergency holding tank has no obvious isolation functionality built into the array of MHs serving it either by way of penstock valves, direct access covers or by pass routes. If isolation functionality does exist then it is not clearly alluded to on submitted drawings. Also, how might such a tank be accessed to evacuate any contamination. This is again not clear on drawings.
2. A noise management plan is not present, it would contain following:
  - Identification and range to potential noise sources,
  - Specific steps that will be taken to ensure compliance with specified noise limits.
  - A list of adequate measure to ensure compliance with the noise limits specified in the conditions.
  - A schedule of noise spatial related measurements sites to check compliance has been achieved through monitoring and testing
3. The CEMP only considers minor spillage issue however the nature of the works is one in which a major oil spillage is possible and contingencies should be stated to address same by way of training, equipment and protocols
4. The applicant has only alluded to a CEMP under certain headings but the items remain devoid of specific details.
5. At Grid 3 carparking as identified in the lighting report, car parking lighting is excessively bright with levels exceeding 25lux which contradicts the applicant written Engineering Report of 10-20lux No light spillage is shown beyond the site boundary.
6. Construction works should be limited to the following hours: 07:00 to 19:00 Monday – Friday and 08:00 – 14:00 on Saturday.
7. End of life concerns, and responsibility for decommissioning of proposed infrastructure require to be discussed.
8. There is also risk of discharging any stormwater to an area upgradient of infill-reclamation works as considered between proposed parking and build-up of quarry material on the shore side.
9. A Refurbishment Demolition Asbestos Survey, RDAS shall be carried out in accordance with Section 8 of the Health and Safety
10. The applicant has not conducted any significant site investigation work thus any provisional discussion alluded to in the applicant case cannot be fully inclusive of all mitigation measures at this point in time.

## **Conservation Officer**

The following recommendations / observations were made by the Conservation Officer of Kilkenny County Council:

The submission titled '**Environmental Impact Assessment Report (EIAR) – Volume 2 Chapter 15 – Underwater Cultural Heritage**' is welcome.

A number of significant built heritage elements were noted as part of the assessment, significantly the masonry quay wall.

The proposed development will potentially impact sub surface features and locations which have not been developed previously, therefore opening the possibility of uncovering previously unknown archaeology.

The requirement for dredging in the proposed development is also noted from this report. Archaeological monitoring, both under water and land, under licence will be required.

The historic quay will be recorded and covered. It is advised that a photogrammetry survey of the quay wall is undertaken. The applicant shall liaise with both the Planning Authority and the NBHS and NMS sections of the Department of Housing, Local Government and Heritage. Section 15.10 of the above-mentioned report, titled 'Monitoring' shall be strictly implemented.

The submission of '**Environmental Impact Assessment Report (EIAR) – Volume 2 Chapter 14 – Terrestrial Cultural Heritage**' is also welcome. The report includes:

*Gorteens Old Mill lies ca. 100m to the west of the Site (Figure 14-7). The Gorteens Old Mill is a late-eighteenth-century paper mill, but was soon after used as a flour milling complex. The Gorteens Old Mill buildings are a single entity comprising eight continuous units. The remains of a mill stream and quay wall exist to the east of the Gorteens Old Mill, and these adjoin the Site.*

While also stating:

*There will be no physical impact on the ruined Gorteens Old Mill (RPS D136), which borders the Site but is enclosed by a permanent security fence.*

While it is acknowledged that the Gorteens Old Mill is now engulfed in vegetation, and lies outside the redline boundary of the current proposal, a strategy of vibration monitoring shall be compiled and submitted by way of condition in the event of grant of planning permission.

The **condition of both the Glass House and the Gorteens Old Mill, both protected structures continue to deteriorate.** Both buildings are part of the original landscape of what has now become the port and cannot be allowed to deteriorate to point where they will be lost from the landscape.

A planning permission from 2000, Planning ref: 00/1848, contained a condition of permission that the Glass House was to be repaired, conserved and reused. The decision was appealed to ABP and was upheld with conditions. No works however undertaken.



Fig: Gorteens Old Mill



Fig: Glass House

**Please see Appendix A** for the conditions imposed under Planning ref: 00/1848 and policy related to the Glass house.

**Conservation Officer has no objections to proposed development and recommend following conditions be attached** should the development be approved:

1. A number of significant built heritage elements were noted in the 'Environmental Impact Assessment Report (EIAR) – Volume 2 Chapter 15 – Underwater Cultural Heritage'. The historic quay shall be recorded in detail and covered, it is advised that a photogrammetry survey of the quay wall is undertaken prior to covering of same: the applicant shall liaise with both the Planning Authority and the NBHS and NMS sections of the Department of

Housing, Local Government and Heritage in this regard. Section 15.10 of the above-mentioned report, titled 'Monitoring' shall be strictly implemented.

2. While it is acknowledged that the Gorteens Old Mill is positioned outside the redline boundary of the current proposal, a strategy of vibration monitoring shall be compiled and submitted by way of condition. Such proposals require to be agreed prior to commencement of works.

**Of Note: 2 no. protected structures are located proximate to the proposed development site:** The **Glass House and Gorteens Old Mill**, while they are outside the red line, they now have become **endangered through a process of neglect**. Both buildings are part of the original landscape of what has become the port, they simply **cannot be allowed to deteriorate** to point where they will be lost from the landscape.

As protected structures, it is the **responsibility of the owners to maintain the structures and avoid endangerment**. It is advised that the **owners now submit a strategy, with a timeframe for delivery**, to save these two buildings.

### **Chief Fire Officer**

#### **Fire Water Supply**

Fire water supply will be provided to the proposed development by extending the existing port area fire main. This main is supplied from a large capacity firewater static tank located adjacent to the port offices at the upstream entrance to the Port. The tank is fed by an existing borewell with primary back up from an existing second borewell and secondary back up from the Uisce Eireann network. Fire supply to the proposed development will be provided by extending the fire main, incorporating hydrants as indicated on the drawings to meet the firefighting requirements of the Offshore Renewable Energy facilities and the port extension. Recommended conditions be attached in event of GOPP.

The Conditions of the Chief Fire Officer are attached in **Appendix B:**

## **PART III – POLICY CONTEXT AND GUIDANCE**

### **National**

#### **The National Planning Framework (NPF)**

Chapter 7 deals with Realising Marine Potential and Chapter 9 deals with Climate Transition and Environment, including the following relevant extracts: - In line with the Climate Action Plan 2024, the transport sector will continue to support to facilitate the development of at least 5GW of installed offshore wind capacity by 2030, and the longer-term ambition for over 37GW of offshore renewable Energy (ORE) to be delivered before 2050. The Irish Commercial State Ports can act as positive contributors to the ORE Industry. Work to identify and resolve barriers to the delivery of ports infrastructure to facilitate ORE, while ensuring protection of biodiversity in line with national and EU legislation, the National Biodiversity Action Plan and forthcoming National Nature Restoration Plan will be advanced by the Department of Transport. 15 Tier 1 and 2 ports are, in the main, located within close proximity to our cities and the role of these ports will be considered and addressed in tandem with long-term infrastructural requirements as part of the relevant Regional Spatial and Economic Strategy and plan making processes at local level. Strategic plans for relevant Tier 1 and 2 ports and corresponding city growth strategies should align and be consistent with the broader aims and policies for the effective growth and sustainable development of the city regions. Furthermore, naturally occurring deep water at ports in the south and south-west, are capable of receiving the largest ocean-going vessels and offer the potential for industrial and energy related developments that depend on the availability of suitable deep-water berths. Given the identification of offshore renewable energy as a key element of the approach to reducing carbon emissions across number of sectors, including transport and electricity generation, ports in our regions have a natural advantage with proximity to potential offshore renewable energy locations and will play a critical role in facilitating the development maintenance and operation of the sector through the accommodation of supporting infrastructure. Government policy supports a multi-port approach to the development of necessary port infrastructure facilities to enable offshore renewable energy (Government’s Policy Statement on the Facilitation of Offshore Renewable Energy by Commercial Ports in Ireland (2021), which is supported by the NPF.

The NPF also references the SC- DMAP and includes the following:

National Policy Objective 50: - Ensure that the strategic development requirements of Tier 1 and Tier 2 Ports, ports of regional significance, State Fishing Harbours and smaller harbours are addressed as part of Regional Spatial and Economic Strategies, and plans at local level to ensure the effective growth and sustainable development of the city regions and regional and rural areas, in accordance with National Ports Policy.

National Policy Objective 51: - Support the sustainable delivery of port and harbour infrastructure to facilitate the development, maintenance and operation of offshore renewable electricity generating developments.

#### **Regional Planning Policy (RSES)**

Waterford MASP Policy Objective 15 – Port of Waterford – ‘Port of Waterford Local Authorities and Public Bodies shall support the development of the necessary port infrastructure and associated road and rail connectivity required to support the development of the Port of Waterford Belview and to support the role of the Port as an Economic Driver for the South-East subject to the outcome of appropriate appraisal, environmental assessments and the planning process.’

Waterford MASP Policy Objective 20 - Strategic Employment Locations - ‘Local Authorities and Public Bodies shall support the development of the identified Strategic Employment Locations and other potential sites/locations and provision of associated transport and services necessary to support the overall development of the Waterford Metropolitan Area, subject to the outcome of environmental assessments and the planning process.’

### **South Coast Designated Maritime Area Plan for Offshore Renewable Energy October 2024 (SC-DMAP)**

The SC-DMAP was made by the Minister for the Environmental, Climate and Communications (MECC) on 24 October 2024. The SC-DMAP envisions, subject to obtaining the necessary project level consents, the future deployment of a single ORE project by 2030, or as soon as feasible thereafter, and further deployments for the post 2030 period, which will take place in an orderly and strategically managed basis. The SC-DMAP will inform future decision-making processes and assessments by relevant competent authorities regarding the award of MACs and development permission for proposed ORE projects. Building upon the National Marine Planning Framework (NMPF), it will further inform decisions by competent authorities regarding the development of enabling infrastructure required to implement the objectives of the SC-DMAP, including offshore electricity transmission system infrastructure. It will also support the coordination of land and sea 12 interactions and the alignment of terrestrial plans and policy at national, regional, and local level that deliver sustainable onshore infrastructure to enable ORE projects in the four Maritime Areas. In addition to ORE, the wider geographical area of the SC-DMAP, including but not limited to the four Maritime Areas, will incorporate the offshore transmission system infrastructure, where required, to connect future ORE projects to the onshore transmission system or to alternative end-users. In this regard, the preparation of the SC-DMAP has also taken place with consideration for the following NMPF objective in respect of Energy Transmission (Chapter 15), which is to:

- Develop the offshore electricity transmission system, and connection between the offshore and onshore electricity grids, which is necessary for wider development of Ireland’s offshore renewable energy sector. The following considerations underpinned the Government’s decision to establish Ireland’s first ORE DMAP off the South Coast: -
- There is a substantial marine space off the South Coast of Ireland with sea-depths suitable for immediate and future developments of fixed offshore wind. This is a proven renewable energy technology that can be delivered at scale, within an accelerated timeframe, and at an affordable cost to Irish households and businesses. This will provide for the timely, strategic, orderly and sustainable development of offshore wind that delivers a clean and secure alternative to imported fossil fuels;
- The Celtic Sea contains a very significant offshore wind resource, which will contribute to the accelerated and cost-effective achievement of Ireland’s renewable energy and decarbonisation objectives, while bolstering security of supply;
- As identified by Ireland’s transmission system operator, EirGrid, there is sufficient immediate available onshore grid capacity along the South Coast, to connect approximately 900 MW of ORE capacity to the onshore transmission system;
- The SC-DMAP area is within proximity to a number of significant port facilities which have the potential to enable accelerated installation and servicing of these future developments and provide a significant source of regional and local economic and employment growth. This proximity should further minimise associated installation and servicing costs. [emphasis added];

- There is a significant and growing population and industrial base along the South Coast that is well placed to stimulate and benefit from the secure and cost-effective long-term supply of green energy that will be provided by implementation of the SC-DMAP.

This proximity could further provide for alternative off-take solutions for potential non-grid connected offshore wind projects, including but not limited to the production of green hydrogen and other green fuels, as well private wires directly connected to large energy users. The SC-DMAP identifies four Maritime Areas as the proposed locations for future deployments of ORE, in this instance exclusively relating to fixed offshore wind technology. The Plan provides that a proposed fixed offshore windfarm located in Maritime Area A will be directly connected to the onshore electricity transmission system, as described below. Fixed offshore wind is a proven technology that has been delivered at scale in other jurisdictions and is supported by an existing global supply chain, thereby offering the best prospects for accelerated deployment. In addition to increased deliverability prospects, fixed offshore wind can be deployed at an affordable cost to Irish electricity consumers. Put simply, deployment of fixed-bottom offshore wind is aligned with the accelerated achievement of Ireland's renewable energy and legally binding decarbonisation objectives. DMAP places significant restrictions on the extent of future ORE development which may only take place in the four identified Maritime Areas. This approach will achieve the objectives of accelerating ORE development, while at the same time avoiding and minimising associated adverse impacts, and in particular potential adverse impacts on the environment, biodiversity and on other existing marine users.

The SC-DMAP indicates as follows:

A development within Maritime Area A will aim to deploy by 2030 or as soon as feasible thereafter, subject to all necessary project level assessments and consents. Due to significantly shallower water depths than within Maritime Areas B, C and D, and therefore the existence of the global supply chain required to facilitate construction at these depths, an ORE project located in Maritime Area A offers significantly greater prospects for achieving deployment by 2030 or as soon as feasible thereafter. This is critical to achieving Ireland's renewable energy and climate objectives... It is proposed that this single deployment within Maritime Area A will be directly connected to the onshore electricity transmission system at two separate existing onshore sub-stations at locations to be determined by EirGrid. Offshore and onshore transmission system infrastructure, including offshore sub-stations and export cables will be developed by EirGrid. It is intended that this development will aim for deployment by 2030, or as soon as feasible thereafter, in order to contribute to Ireland's legally binding target of reducing greenhouse gas emissions by 51% by the end of this decade.

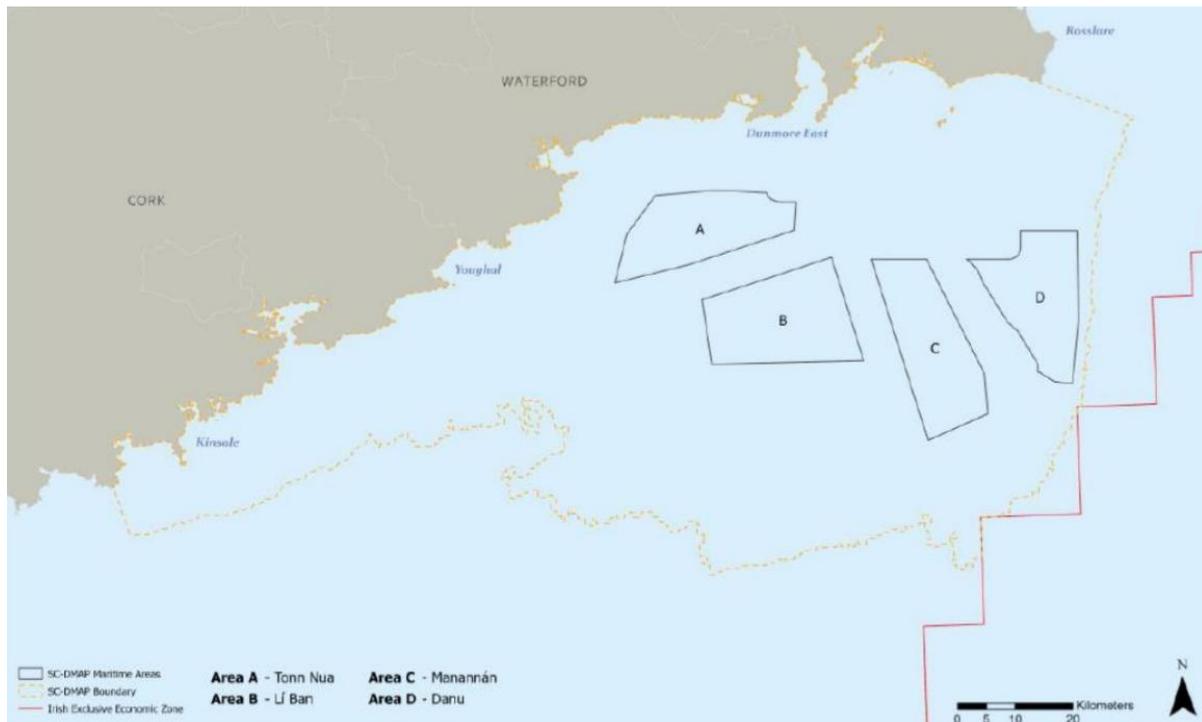


Fig: Maritime Areas off the Waterford and Wexford coastlines (Note Area A Tonn Nua, closest to coastline & Belview Port)

### Port of Waterford Masterplan 2019-2025

#### Section 4.5.4 Offshore supply/servicing vessels.

The Port of Waterford already has experience in the handling of wind farm components and is well equipped with mobile harbour cranes to service the renewable sector. The future demand for offshore supply/servicing vessels in this region will be to support the installation, commissioning, servicing and eventual decommissioning of tidal energy projects and offshore wind farms. Marine accessibility and proximity to deployment sites is essential. Ideally deployment sites should be within 2 – 4 hours sailing time of the port, although distances of 200 -300km have been used. The marine access through the approach channel to Belview will take some of this time, but the channel should be suitable for 24-hour operation with the majority of these highly manoeuvrable offshore supply vessels.

RPO 142 Economic opportunities for all ports in the Southern Region, seek to:

- Protect the marine related functions of ports in the region including landside accessibility to ensure the future role of ports as strategic marine related assets is protected from inappropriate uses;
- Harness economic opportunities from the ocean economy and the role of Ports in the region in realising the full potential of the ocean economy. Particular regard should be had to the Government's integrated plan for the marine industry – Harnessing Our Ocean Wealth (2012), the National Marine Research and Innovation Strategy 2017-2021 (Marine Institute Ireland, 2017), and Ireland's Ocean Economy (NUIG, 2017), as well as the Marine Strategy Framework Directive and Ireland's Programme of Measures; and Ireland's forthcoming Maritime Spatial Plan (due 2021);
- Support the role of ports, where appropriate, in facilitating the sustainable development and operation of off-shore renewable energy development;

- Support appropriate enabling infrastructure development to harness our ocean wealth at regional and local levels including grid, pier and port facilities to support renewable energy and export potential;
- Undertake feasibility studies to determine the carrying capacity of ports in relation to potential for likely significant effects on associated designated sites including Special Protection Areas and Special Areas of Conservation;
- Port development in the region must adhere to the European Commission guidelines on the Implementation of the Birds and Habitats Directives in Estuaries and Coastal Zones in order to protect European Sites; Any economic activity which utilises the marine resource shall also have regard to Ireland’s obligations under the Marine Strategy Framework Directive (MSFD) which requires achieving and maintaining Good Environmental Status (GES) of coastal and marine waters (comprising both the water column and the seabed beneath it).

## **Local Planning Policy**

### **The Kilkenny City and County Development Plan 2021 - 2027**

The plan states that:

*“The Belview Port area near Ferrybank in South Kilkenny is just 4 miles from Waterford City and is an ideal location for large-scale industries and manufacturing companies. Belview port is the nearest major Irish port to mainland Europe providing a saving to shippers of both time and fuel while being a natural hub for the integration of port, shipping, road and rail freight services. Existing businesses operating from there include Medite Smartply, part of the Coillte group.”*

It is policy of the Council to: *“support the development of the necessary port infrastructure and associated road and rail connectivity required for the development of the Port, to enhance the role of the Port as an Economic Driver for the South-East subject to the outcome of appropriate appraisal, environmental assessments and the planning process.”*

### **Draft Ferrybank Belview Framework Plan/ KCCDP Variation (for reference purposes only)**

The following extracts from Sections 8.3, 8.4, 8.5 & 8.7 of the Draft Ferrybank Belview Framework Plan is set to replace the 2017 Ferrybank/Belview Local Area Plan (expired). Dependent on the final date of adoption, this will in time be the statutory plan that will set the local policy context for planning decisions.

The plan supports

#### **8.3 National and Local Policy Context**

The First Revision to the National Planning Framework (May 2024) contains National Policy Objectives that seek to ensure the strategic development requirements of Tier 1 and Tier 2 ports are addressed through regional and local development plans, including infrastructure to effectively support the development and maintenance of offshore renewable electricity generating developments.

The National Marine Planning Framework (NMPF) supports the strategic development of ports in line with approved master/strategic plans and supports investment in the land-based and

coastal infrastructure that is necessary to establish and maintain an indigenous Offshore Renewable Energy sector (ORE).

This plan seeks to position the Port of Waterford and surrounding enterprise area at Belview to capitalise on the potential of the ORE sector. The Kilkenny CDP and the Waterford CDP identify Belview Port as being of strategic national, regional and county importance with good road and rail links, and as a strategic employment location.

The Kilkenny CDP notes, that albeit located in Kilkenny, Belview Port will be developed as part of an agreed Waterford Metropolitan Strategy, as the area is included in the Waterford MASP. The Kilkenny CDP acknowledges the presence of a significant industrial hinterland including the IDA's 55 ha Strategic Industrial landbank, also notes that one of the main priorities for the port's expansion is the attraction of FDI. The strategic masterplan for the port identifies the need for further additional land and facilities to support port activity. The Kilkenny CDP further supports the Port of Waterford in the development of port facilities at Belview as outlined in the strategic masterplan.

#### 8.4 Future of Belview Industrial Area

As identified in the City & County Development Plan five sectors for specific development initiatives. Two of which; Agri-Food and Life Sciences (including Pharma) relates to Belview. This Plan aims to facilitate the development of these sectors in Belview. This Plan also recognises that there is a need to capitalise on the significance of Belview Port as a critical piece of infrastructure, rivalling the more traditional ports of Dublin and Cork. The Port of Waterford is currently developing infrastructure to facilitate the deployment of Offshore Renewable Energy (ORE) and has engaged with Maritime Area Regulatory Authority (MARA) to secure Maritime Area Consent and with An Bord Pleanála for permission to construct a 250 extension to the existing wharves at the Container / Bulk Handling Terminal. This quay extension and the 2ha on quay storage will facilitate the servicing of ORE developments. This quay extension was identified as part of the Port of Waterford Masterplan 2020 – 2044 published in October 2020. It is the ambition of the Port of Waterford to become a transactional ORE port for the SouthEast coast which will facilitate the Offshore renewable sector in terms of construction support, transportation of ORE components and the maintenance of offshore wind farms. This objective is supported by Kilkenny County Council.

#### 8.5 Energy Centre of Excellence

A significant opportunity for Belview Port and in turn the wider region, is the development of an energy centre of excellence, leveraging the envisaged increase in clean energy from wind farms off Ireland's south coast. This energy park, which could include data centre use, would likely be a very attractive offering given the Port's strategic location. This would leverage the envisaged increase in clean energy from wind farms located offshore to the currently gas-fired Great Island Power Station. To facilitate this an upgrade of the electrical transmission infrastructure between the Port and Great Island would be required. The required upgrade is highlighted in Eirgrid/SONI's Shaping Our Electricity Future Roadmap which identifies Great Island as a Renewables Hub, with associated infrastructure upgrades to the west (Figure 8.1). Incentivising nearby Large Energy User (LEU) demand is thought to be an opportunity for the area to make use of abundant renewable energy resources.

#### 8.7 Belview Port and Industrial Area Objectives

BPIA1 Support the sustainable delivery of port and harbour infrastructure to facilitate the development, maintenance and operation of offshore renewable electricity (ORE) generating developments.

BPIA2 Ensure that further development of Belview Port does not have an undue impact on natural and built heritage, or residential amenity.

BPIA3 Undertake conservation management plan for Glasshouse site with a focus on possible creation of park for local workers and community.

BPIA4 Ensure any development of Belview House secures the future of the walled garden and outbuildings.

BPIA5 Work in conjunction with Irish Water to promote the ongoing upgrade and expansion of water supply and wastewater services to meet the future needs of the Belview Industrial area and to seek extensions for the water and foul water networks to service the zoned lands sequentially.

BPIA6 Continue to work with Transport Infrastructure Ireland to finalise an approach an upgraded junction arrangement at the N29/L3412 junction.

BPIA7 Provide access to the IDA lands with an upgrade to the existing local road (the L3412) in cooperation with the IDA.

BPIA8 Work with TII to investigate the feasibility of providing dedicated Active Travel links from the SE Greenway at Ballyvalla in the short-medium term and a future N29 Active Travel route in the longer-term.

## **PART IV – ENVIRONMENTAL REPORTS**

An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in relation to the project and accompanies this planning application.

Summary of EIAR

### *Chapter 1 Introduction*

Introduction sets out a summary description of the applicant, the project, the location, the EIAR content, outlines the legislative context and a brief background to the project and describes the consultation process.

### *Chapter 2 Planning Context and Need for Expansion*

This chapter sets out the summary of planning history; national, regional and local policy; need for proposed development.

### *Chapter 3 Description of Project*

This chapter provides a detailed description of the various components of the proposed development including the construction, operational phase.

### *Chapter 4 Assessment of Alternatives*

This chapter sets out that the proposed development can only be located at a port location given the requirement for quayside facilities and berthing for facilities. Stated that the location of Belview Port, a Tier 2 port requires a significant extension. The EIAR sets out the design rationale for a 250m open wharf design setting out unsuitability of 400m and 200m options due to various concerns. It further sets out the short-term consequences of the ‘Do Nothing’ alternative which would prevent the delivery of strategic planning objectives for the local area which would result in an inefficient use of a strategically located and well serviced existing perch.

### *Chapter 5 Population and Human Health*

The EIAR States that:

- the proposed development will have a neutral-to-slight, positive, long-term effect with regard to indirect local and regional employment;
- the construction phase will have a short-term positive effect in the local area with c.100 temporary construction jobs created during 18–24-month construction programme.
- There will also be a short-term positive effect on existing businesses operating in the area through the potential for local enterprises to provide materials and services during construction.
- Once operational, the proposed development will provide up to 100 full-time jobs.
- the proposed development will also support indirect jobs in the local area, both through ORE supply chain and the increase in port-related activities estimating that up to four indirect jobs will be created for every port-based job.
- the residual effects will be positive, long-term impact on the local economy and employment as well as on the wider economy;
- all effects such as noise, vibration, air quality, visual and waste management which have the potential to directly affect human health were assessed throughout the EIAR, with a conclusion of ‘no significant’ effects.

Overall, it was considered that there would be no significant effects on human health or population arising from any phase of the proposed development.

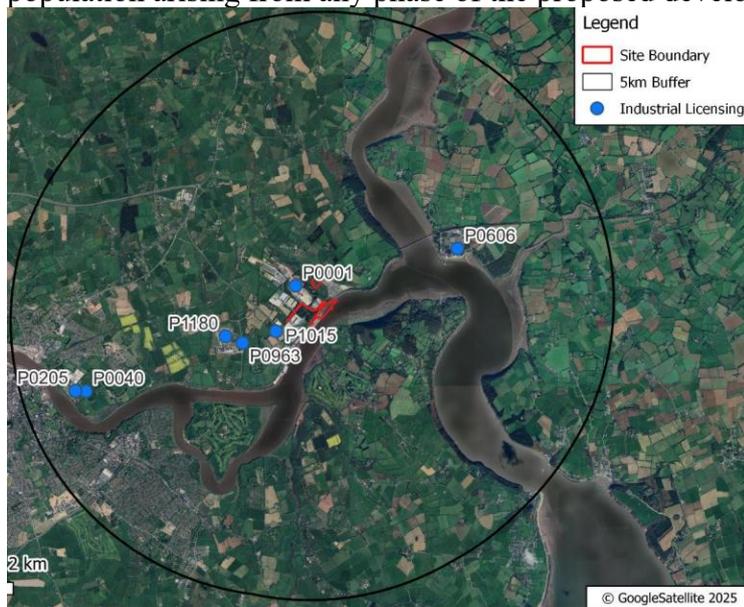


Fig: Industrial Licences within 5km of boundary

### Chapter 6 Biodiversity

Extensive surveys were undertaken to establish baselines. MOR Environmental Ecologists surveyed the site and wider area since February 2021. Surveys undertaken at the site include:

- Detailed habitat and invasive species surveys in 2021, 2024 and 2025;



Fig: Existing habitats onsite

- Bat surveys and assessments in the summers of 2023 and 2024;



Fig: Bat Surveys

- Otter surveys on a predominantly monthly basis since February 2021 to March 2025, including bankside surveys of accessible areas, boat surveys and camera trap surveys;

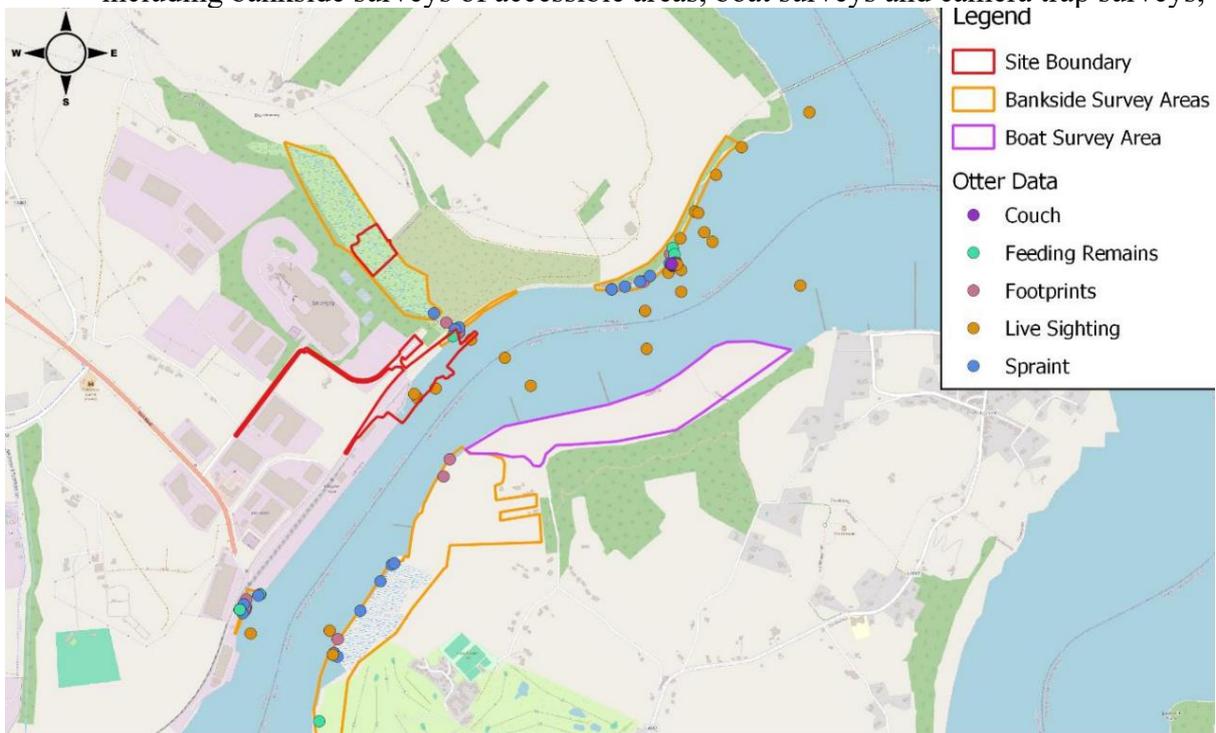


Fig: Otter survey areas

- Wetland bird surveying from designated vantage point location during the 2021, 2022, 2023 and 2024 summer wetland seasons and 2021/2022, 2022/2023, 2023/2024 and 2024/2025 winter wetland seasons;

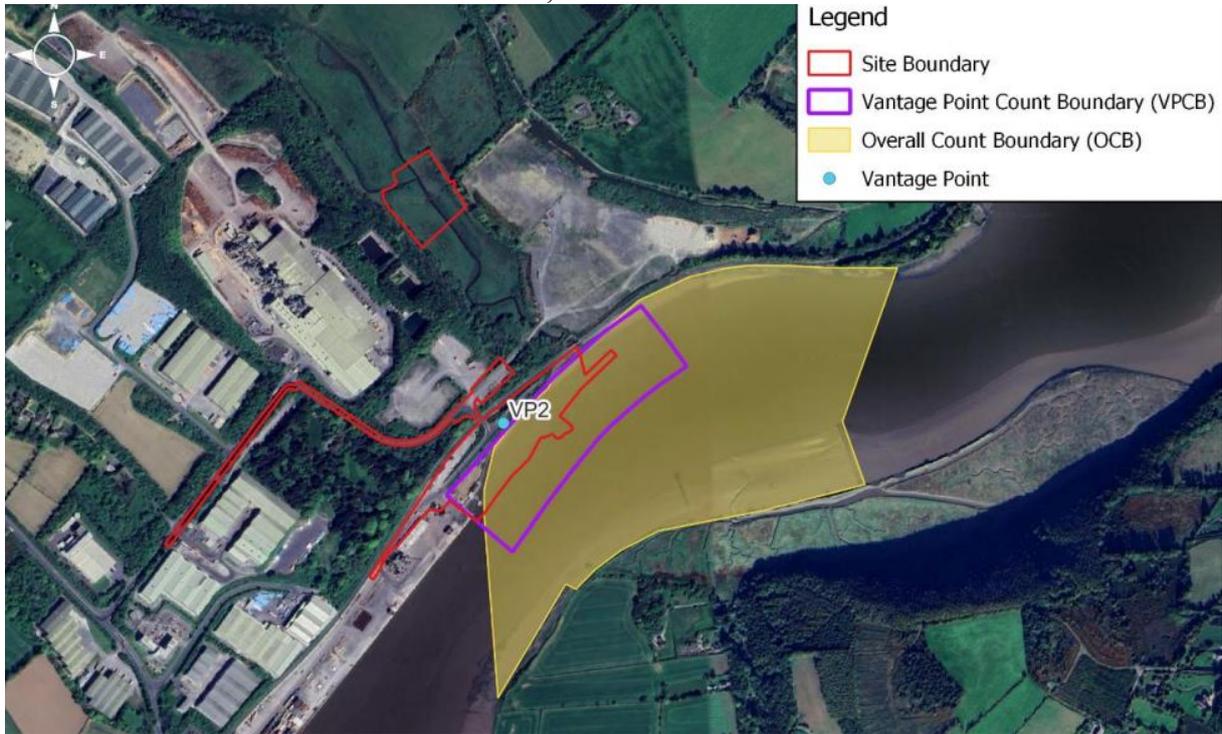


Fig: Wetland bird survey and viewsheds

- Marine mammal sightings have been recorded during all surveys since February 2021. In addition, MOR Environmental Ecologists undertook detailed surveys of proposed Biodiversity Enhancement Area in 2021, 2023 and 2024. Furthermore, specialist benthic assessments were undertaken by AQUAFACT International Services Ltd. ('Aquafact'), and a MOR Environmental Ecologist worked with Dr. Martin O'Farrell to undertake a review of fisheries information and data to inform the assessment.

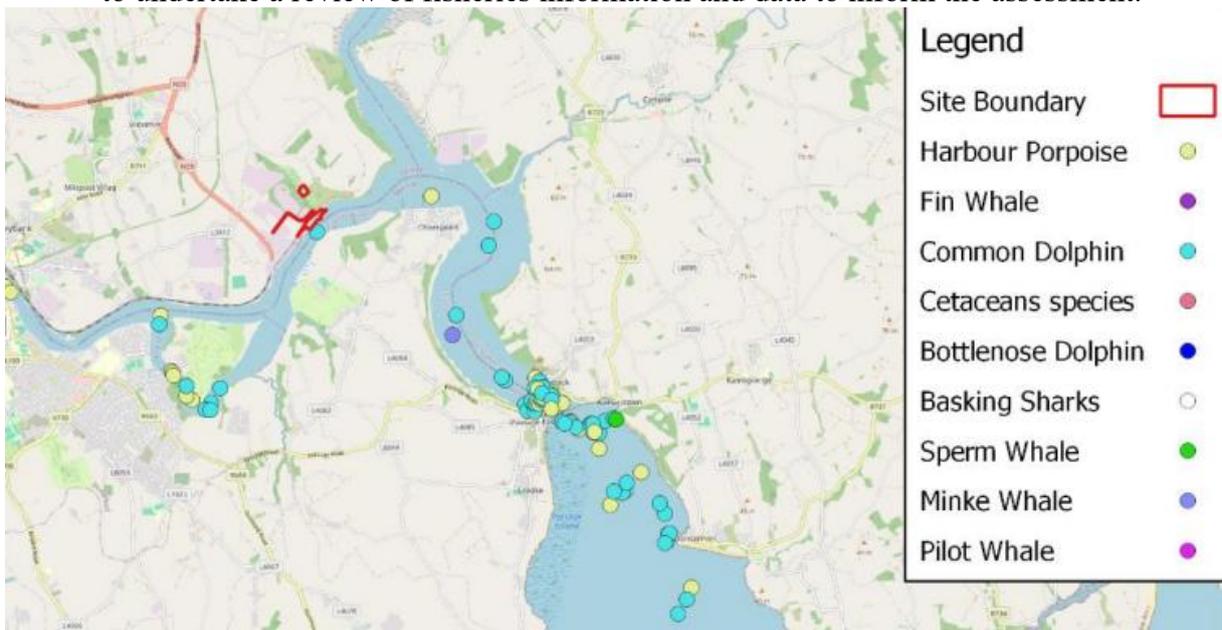


Fig: Irish Whale Dolphin Group Sightings

- The surveys determined that the Site was comprised primarily of buildings and artificial surfaces within the existing Belview Port and the Lower River Suir tidal river / estuary / muddy sand shores;
- Other habitats noted onsite included grassy verges, scrub, mixed broadleaved woodland, recolonising bare ground and sea walls;
- As part of the Proposed Development, an area of the Lower Suir Estuary (1.3ha) will be reclaimed, which will result in a loss of the SAC habitat.
- In order to offset the loss of SAC, the proposed Biodiversity Enhancement Area, ca. 1.8ha in size, will be developed to create optimal habitat for local wildlife, including otter and bird species.
- Biodiversity Management Plan included in EIAR appendices.



Fig: Biodiversity Enhancement Plan

- During the operational phase, it was concluded that the proposed development will result in similar activity and noise levels as the ongoing port-related activities and therefore, it was concluded that any species utilising the habitats within the vicinity of the site will not be adversely impacted, as these species are habituated to the port-related activities;
- The proposed development, either alone or in combination with other plans or projects, will not adversely affect the integrity of any European designated sites including ecological receptors following the implementation of appropriate mitigation measures.
- No reasonable scientific doubt exists in relation to this conclusion;

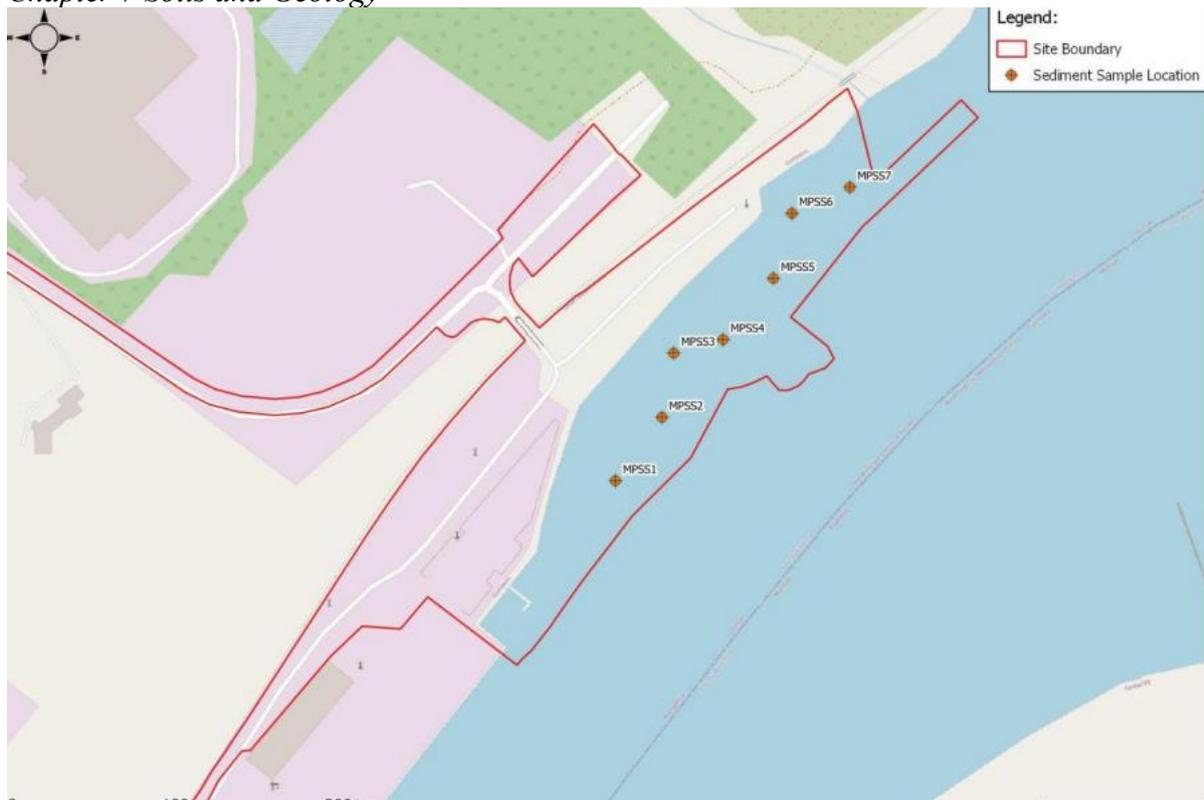


Fig: Sediment Sampling Location

- Proposed development will require reclamation of an area of c.1.3ha.;
- Propose development will require the importation of c. 160,000 tonnes of rock which will be carefully selected and tested to ensure it meets required specifications for engineering fill, including size, compaction properties and chemical stability;
- Imported materials to be sourced from local commercial quarries as much as practicable;
- Dredged material consisting of soft sediment with estimated volume of c.7,000m<sup>3</sup> toalso be used for reclamation works once determined to be suitable;
- Infill material to be systematically placed in designated area using heavy machinery, with care taken to minimise disturbance to riverbed and surrounding marine environment;
- General construction works will include excavation of c.2,000m<sup>3</sup> of materials for construction of substructures, including building and the installation of underground services;
- Excavated materials to predominantly comprise of soils and subsoils;
- Every effort will be made to reuse these materials on-site, however surplus materials that cannot be reused on-site to be removed off-site in strict accordance with all requirements of waste management legislation;
- During operational phase, employment of good environmental management practices by ORE operators and Port of Waterford serve to minimise the risk of pollution from EIAR) these storage and refuelling operations;
- The implementation of the mitigation measures will ensure that any effect arising from either the construction or operational phases of the proposed development on soils and geology will be not likely or significant.

## *Chapter 8 Water*

Site is partially located within the Lower Suir Estuary and therefore characterised by water present across the majority of the southern and southeastern area.

### *Groundwater*

- According to GSI, no sand and gravel aquifer present beneath site, but bedrock aquifer underlying site classified as (Rf) Regionally Important Aquifer – fissured bedrock;
- No public water source protection areas are located within or in immediate vicinity of site;
- Dewatering of groundwater not required during construction phase, there will be no groundwater abstraction required during the operational phase;
- There will be no significant effects to groundwater as a result of the proposed development

### *Flooding*

- A site-specific Flood Risk Assessment was completed for proposed development. This assessment concluded that the potential flood risk to proposed development will be negligible.
- It is considered that the proposed development will not result in any adverse effects to existing hydrological regime of area or increase flood risk elsewhere.
- Proposed development considered to be appropriate from flood risk perspective.
- Proposed development designed so that it will present no increased flood risk elsewhere.

### *Surface Water*

- Reclamation works will produce sediment plumes both directly from reclamation materials themselves, but also from disturbance of estuarine bed sediments in reclamation area.
- Site investigation results on sediments in area confirmed materials to be dredged have no significant contaminants and, as such have no effects on chemical quality of receiving surface waters;
- Potential risks for surface water quality will also be presented by other construction activities, such as the pouring of concrete and piling;
- High levels of sediment occurs naturally in estuary as consequence of estuary being fed by three major rivers and countless streams, from a combined catchment area of over 9,000km<sup>2</sup>;
- All construction activities will be undertaken in accordance with best practice guidelines and mitigation measures stipulated in EIAR;
- Overall, effects on surface water arising from reclamation and construction activities will have slight to moderate adverse temporary effects on surface water quality in estuary;
- During operational phase there is potential for impact on surface water bodies due to risk of accidents or spillages from accidental spill / leakage from either ORE operations or shipping vessels berthed at the quay;
- Two fuel tank reserves, storing up to 90,000L of marine gas oil are required to serve the future ORE operators.
- Design of proposed development will include controls that mitigate such risks, which include fully bunded tanks, forecourt oil interceptors in high-risk areas, by-pass oil interceptors at other locations, settlement tanks and monitoring chamber;

- During operational phase of proposed development, ORE Operator Facilities will implement environmental management procedures, similar to Port of Waterford in place under their ISO14001 Environmental Management System;
- Effects on surface water quality predicted not to be significant from operational phase of proposed development.

## 9. Air Quality

- During construction stage of proposed development potential for construction dust emissions to arise;
- In terms of construction dust, risk of impact on sensitive receptors following the implementation of mitigation measures determined to be low;



Fig: Location of dust sensitive receptors

- In light of risk reduction, residual effects remaining will be short-term and not significant. Construction traffic and traffic arising from operational phase of proposed development could potentially impact on air quality, however due to daily HGV and personal car trips being below relevant thresholds set by TII, any effect on air quality from onshore traffic was screened out;
- For operational phase, emissions arising from movement of Freight Ships, ORE-related vessels, port-owned machinery and port-side equipment owned by licensed stevedores were assessed for nitrogen oxides ('NOx') as a key pollutant;
- Assessment conclusion was that no significant effects on air quality or human health will arise from diesel and marine diesel usage;
- Overall, no significant effects on air, in terms of ambient air quality and dust nuisance, were determined arising from construction and operational phases of proposed development, alone or cumulatively. Slight positive indirect effects were identified, attributable to the proposed development's facilitation of ORE infrastructure;

- NO<sub>x</sub>, SO<sub>2</sub> and PM<sub>10</sub> emissions will not significantly increase in concentrations and therefore, no likely significant effect on human health or ecological receptors predicted;
- By enabling increased deployment of wind energy, the project is expected to contribute to reduction in reliance on fossil fuel-based electricity generation, thereby decreasing associated national emissions to air.

## 10 Climate

- Climate impacts were quantified through an analysis of greenhouse gas ('GHG') emissions, benchmarked against national and sectoral GHG mitigation targets as defined under relevant regulatory frameworks. GHG emissions arising from embedded carbon in construction materials, from the transport of materials to and from the site;
- Construction employee travel and from plant and equipment used in construction phase were also calculated for purpose of climate assessment.
- For operational phase, emissions arising from movement of freight ships, ORE-related vessels, port-owned machinery and port-side equipment owned by licensed stevedores were also calculated;
- In addition, operational phase electricity usage, HGV and employee travel emissions were quantified. GHG emissions associated with proposed development were assessed against national and sectoral emissions ceilings;
- Once operational, primary GHG emissions directly arising from proposed development will be transport-related;
- Although these emissions will not be significant, a number of mitigation measures will be put in place to further reduce GHG emissions related to proposed development.
- Considering construction and operational phases, assessment of GHG emissions concluded proposed development will have a 'not likely' and 'not significant' effect on the National Second Carbon Budget and relevant Sectoral Emissions Ceiling;
- Expected emissions associated with construction and operational phases will be more than offset by indirect positive contribution the proposed development will make in supporting the national decarbonisation efforts, particularly through support for ORE infrastructure and reduction of land-based transport emissions;
- Taking into account calculated emissions and substantial indirect benefits, the proposed development will have, it is considered the proposed development will have overall significant positive effect in context of National Carbon Budgets and relevant Sectoral Emissions Ceilings;
- The potential risks of climate change to the proposed development were assessed by completing a climate change risk assessment;
- By utilising available policy and guidance, the vulnerability of assets associated with the proposed development to potential climate hazards was determined;
- Due to location of the proposed development within an existing developed industrial area, there will be no significant effects on microclimate in terms of wind tunnelling and shading;
- The Climate Vulnerability Assessment for proposed development identified potential climate change-related hazards and risks to the proposed development;
- Key receptors include onsite assets, inputs (electricity and water), outputs (operating capacity) and transport links;
- Assessed hazards include temperature changes, wildfires, flooding, landslides, sea level rise and severe wind;

- A site-specific flood risk assessment was conducted for the site to inform design, concluding effects of coastal flooding and sea level rise on proposed development was predicted to be negligible.
- Based on results of Climate Vulnerability Assessment, potential effects of climate change on proposed development will be ‘not likely’ and ‘not significant’.

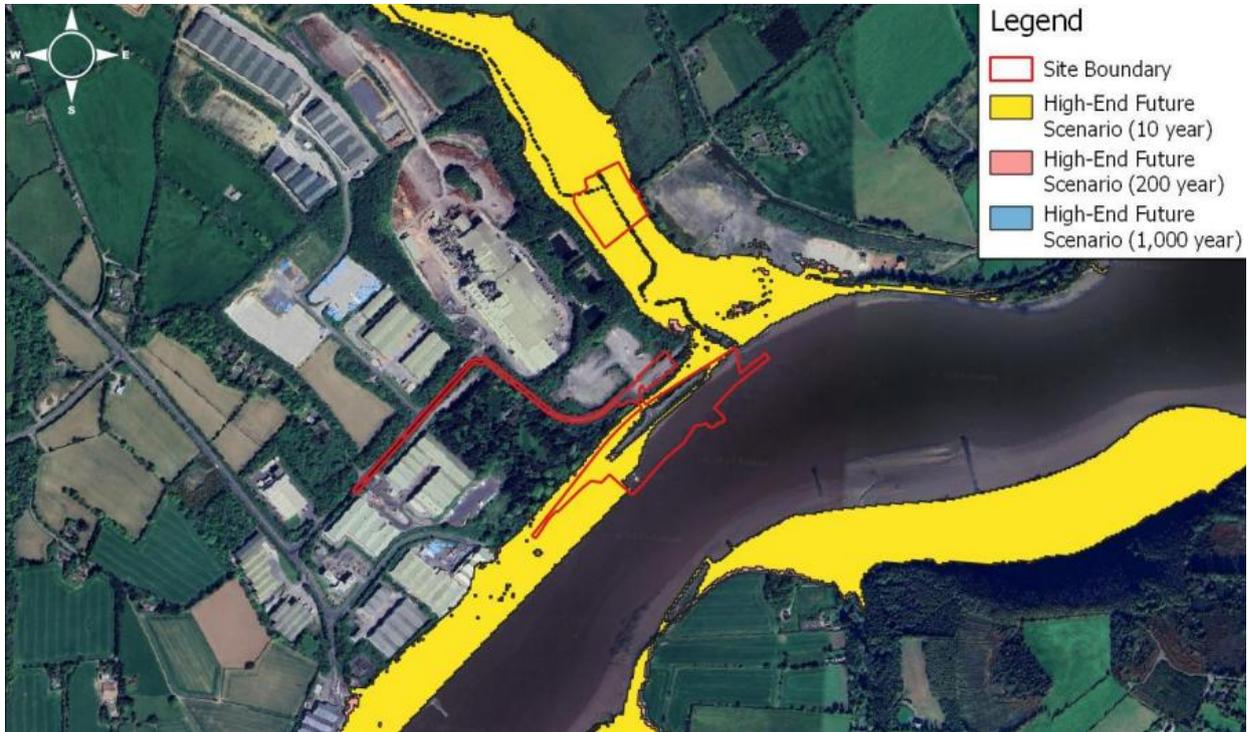


Fig: Climate Change High Range Scenarios

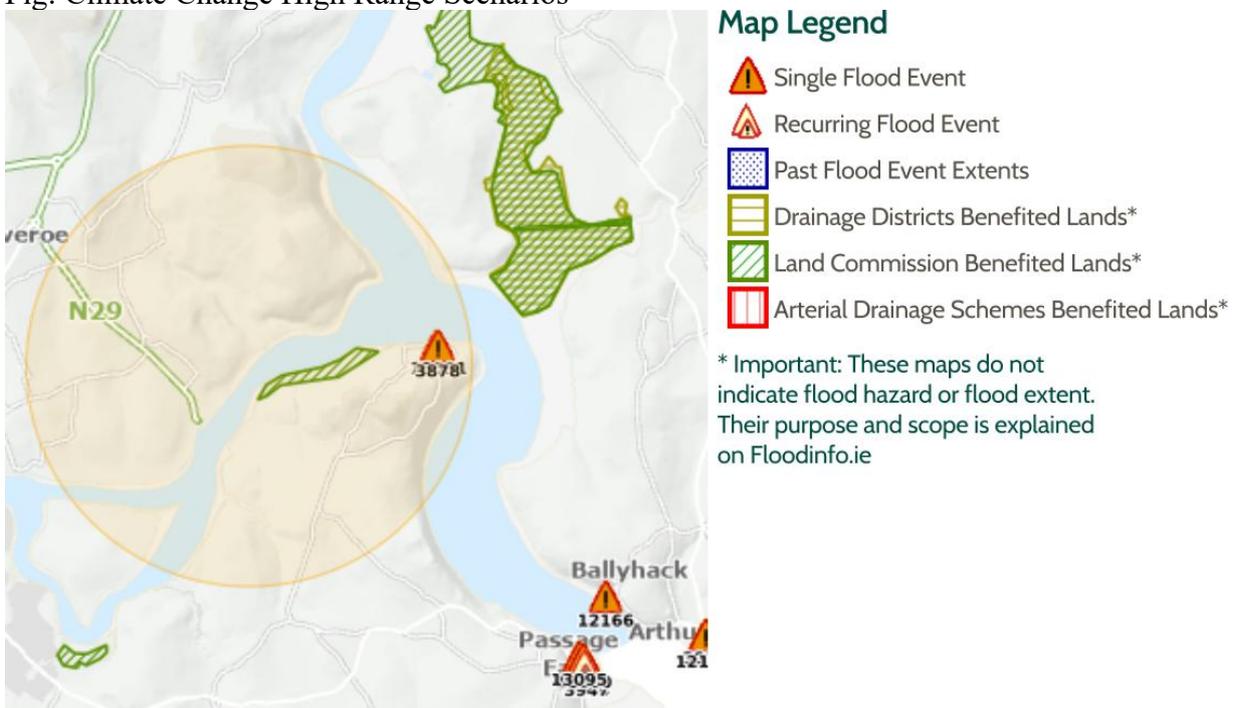


Fig: Past Flood Events

# 11 Terrestrial Noise and Vibration

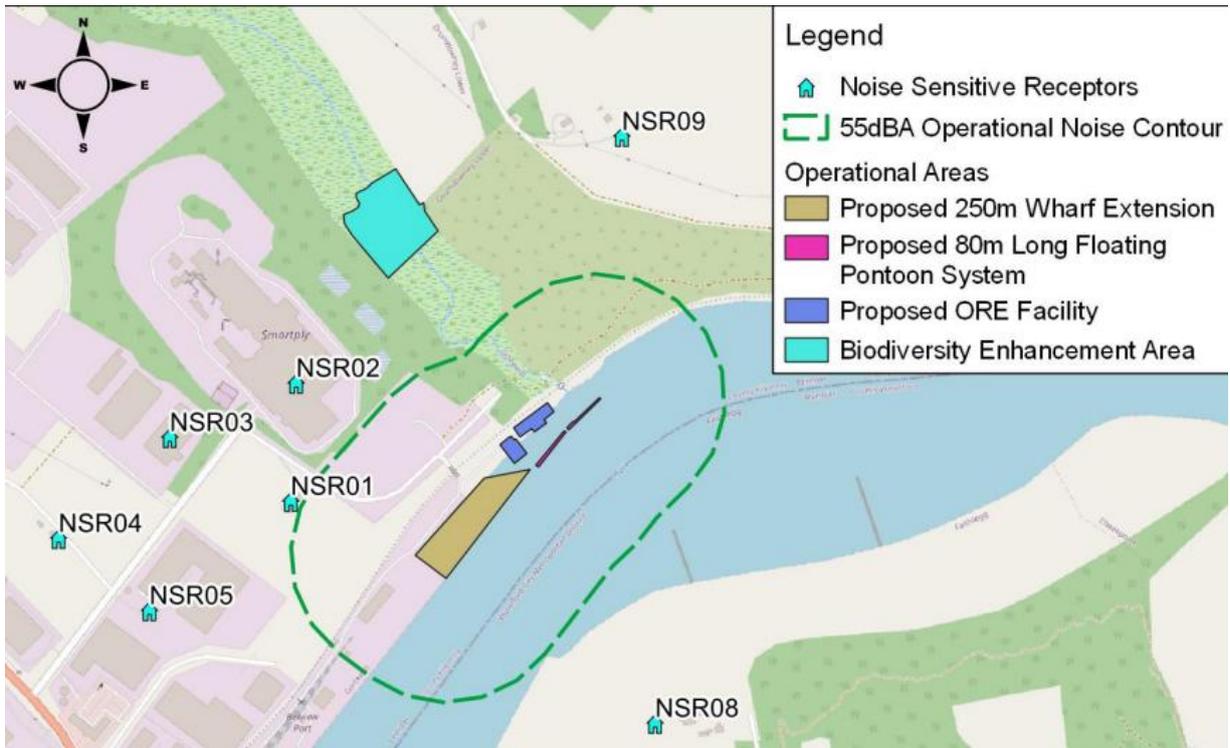


Fig: Noise Sensitive Receptors including 55dba operational noise contour

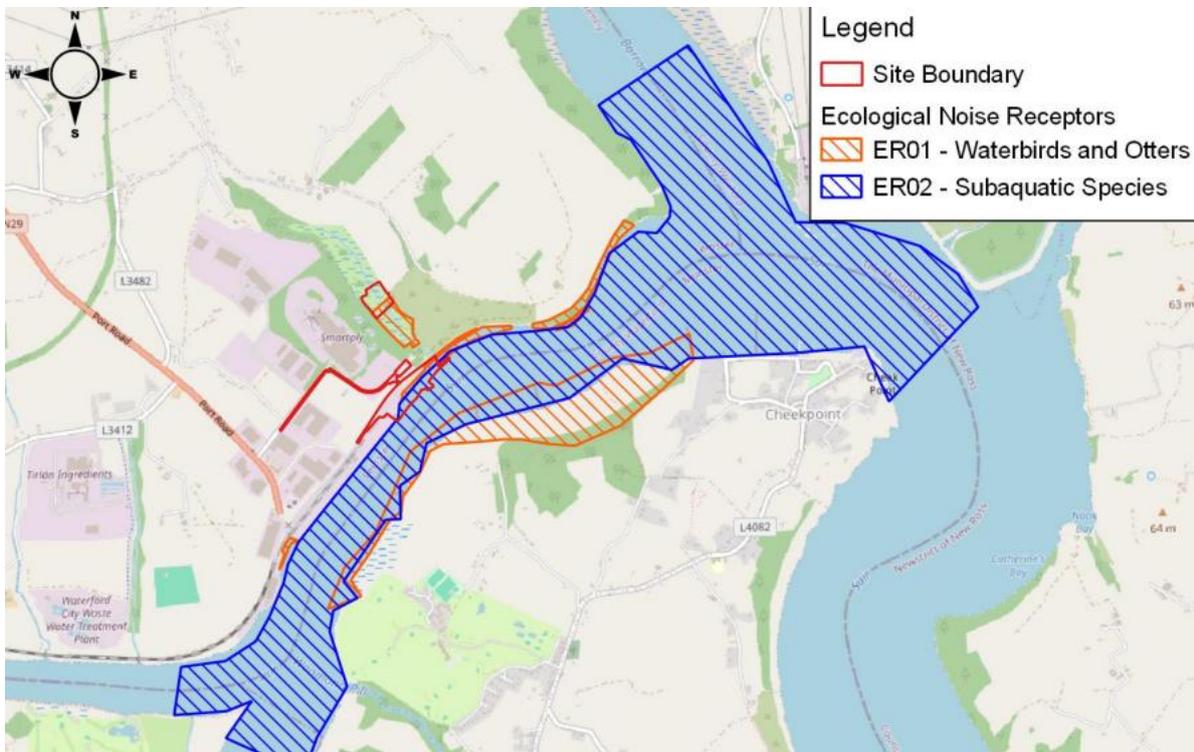


Fig: Ecological Noise Receptors Area



Fig: Noise Monitoring Locations

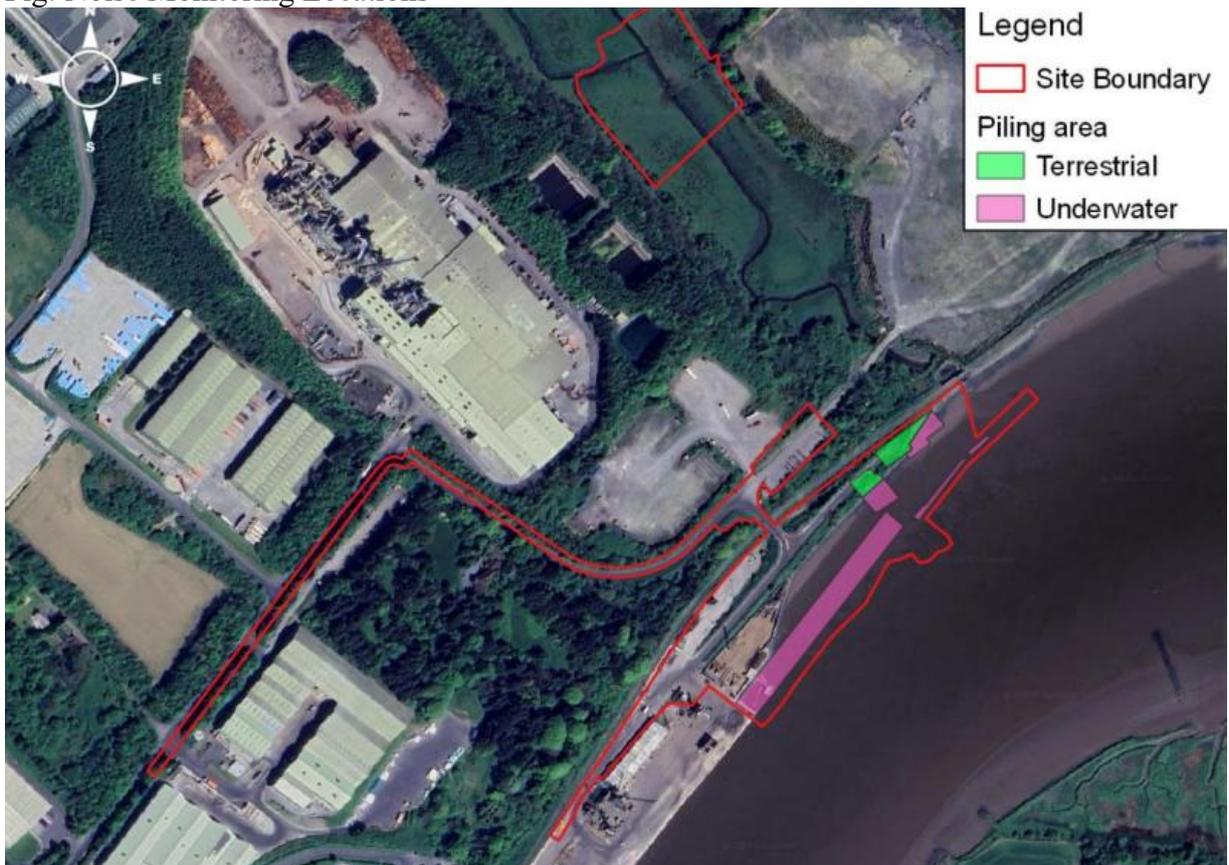


Fig: Piling Locations

- Comprehensive terrestrial noise and vibration impact assessment was conducted in accordance with best practice guidance statutory and non-statutory noise impact assessment criteria for construction phase and operational phase of proposed development;

- Detailed baseline noise survey completed at 4 no. representative locations to determine ambient noise environment in the vicinity of site;
- Baseline noise monitoring used for determining likely associated noise effects;
- Different scenarios modelled to determine effects of construction noise;
- Prior to commencement, contractor to submit a CEMP to council, detailing all noise control measures outlined with EIAR and as may be modified through planning process. These are to be implemented during construction.
- Implementation of mitigation measures will ensure construction noise effects are to be reduced to lowest possible levels at sensitive receptors in compliance with typical construction noise limits;
- Effects of construction noise on identified birds and otters in vicinity of site also assessed;
- Waterbirds, otters and other non-domestic animals will temporarily distance themselves from human-made noise sources and effected localities;
- Effects during construction will be temporary during louder activities and localised to study area; During construction phase, vibration can arise from piling activities;
- Neither of closest receptors assessed for vibration predicted to be affected, as outside the zone of influence for significant effects from piling activities;
- During operational phase, no significant plant / equipment noise effects from proposed development at sensitive receptors;
- Predicted operational noise from marine traffic will not result in change in behaviour / effects as per IEMA/IOA guidelines, as noise from marine movements will be similar to existing noise and characteristics currently occurring in ambient environment, based on the channel dimensions restricting the number of craft capable of been escorted in and out of the Port of Waterford;
- Proposed development will lead to increase in frequency of noise events associated with marine traffic;
- Standard noise nuisance limits will therefore continue to be complied with at sensitive receptors;
- Due to nature of proposed development, there will be no likely significant vibration arising during operational phase;
- The proposed development will not affect vibration already experienced at any sensitive receptor.
- Significant noise effects associated with traffic flow changes as a result of the Construction or operational phases of the proposed development;
- Assessment determined that there would be no likely significant effect on noise or vibration arising from the proposed development at either construction or operational phase;
- Port will continue with required monitoring during channel maintenance activities and will investigate noise complaints;
- Based on measured baseline environment, anticipated effects during construction phase and operational phases regarding environmental noise and vibration, along with types of sensitive receptors, proximity to sources, and proposed mitigation measures, no significant effects will arise.

## 12 Underwater Noise and Vibration

- Comprehensive underwater noise and vibration impact assessment conducted in accordance with best practice guidance, both statutory and non-statutory noise impact assessment criteria for construction phase and operational phase;
- Monitoring data that had been collected over a one-year duration from a hydrophone (device for measuring sound waves in water) that had been specifically located at Cheekpoint, c.2km from proposed development, was analysed for the purpose of this assessment;
- Noise levels from different types of sources utilising the port were identified during the monitoring period;
- Following a detailed review of construction phase, predicted peak level for worst-case scenario identified proposed piling works as primary underwater sound source contribution;
- In order to complete robust assessment, 2 no. piling scenarios were assessed;
- 1 no. based on pile diameter specified for proposed development, and other representing worst-case scenario;
- Predicted impact from piling based on pile diameter specified for proposed development below thresholds for the different subaquatic species;
- Human receptors in the water, (i.e. divers), have lower threshold for pressure in water than aquatic species such as fish, otters and dolphins, will take 150-200m for potential discomfort for humans if underwater, to be comfortable during piling works at site;
- Even for worst-case piling scenario, predicted noise effects were below threshold for different subaquatic species within 160m of piling works and 700m for human receptors, such as divers. During operational phase, effect will be confined to vessel traffic at port;
- Underwater noise levels will remain as currently. Increased sound pressure levels locally for a short period within the river channel as a vessel navigates the channel and berths;
- Assessment determined no likely significant effects on existing ambient underwater noise or vibration arising from proposed development at either construction or operational phases;
- Port has left the hydrophone installed.
- Ongoing monitoring of underwater sound pressure in the river will continue for up to three years after construction;
- Monitoring will provide information on background (absence of shipping) and ambient (shipping noise included), and will be used to validate baseline conditions post-development.

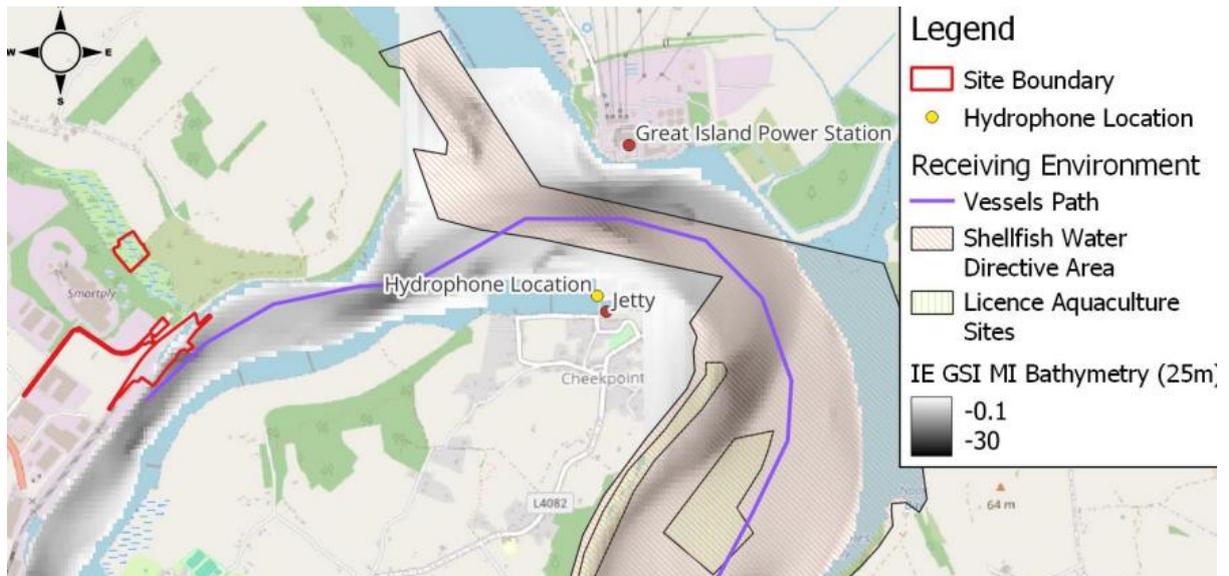


Fig: Receiving underwater environment

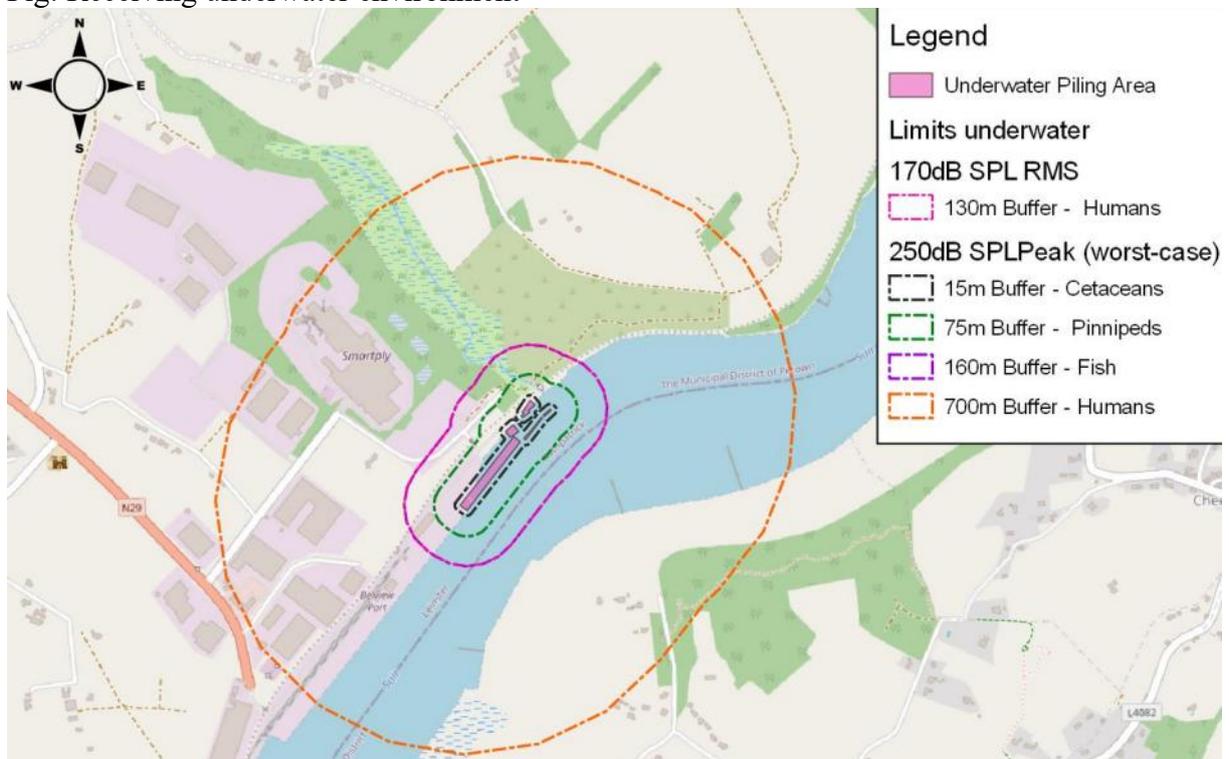


Fig: Buffers with minimum distance to be below thresholds

### 13 Landscape and Visual

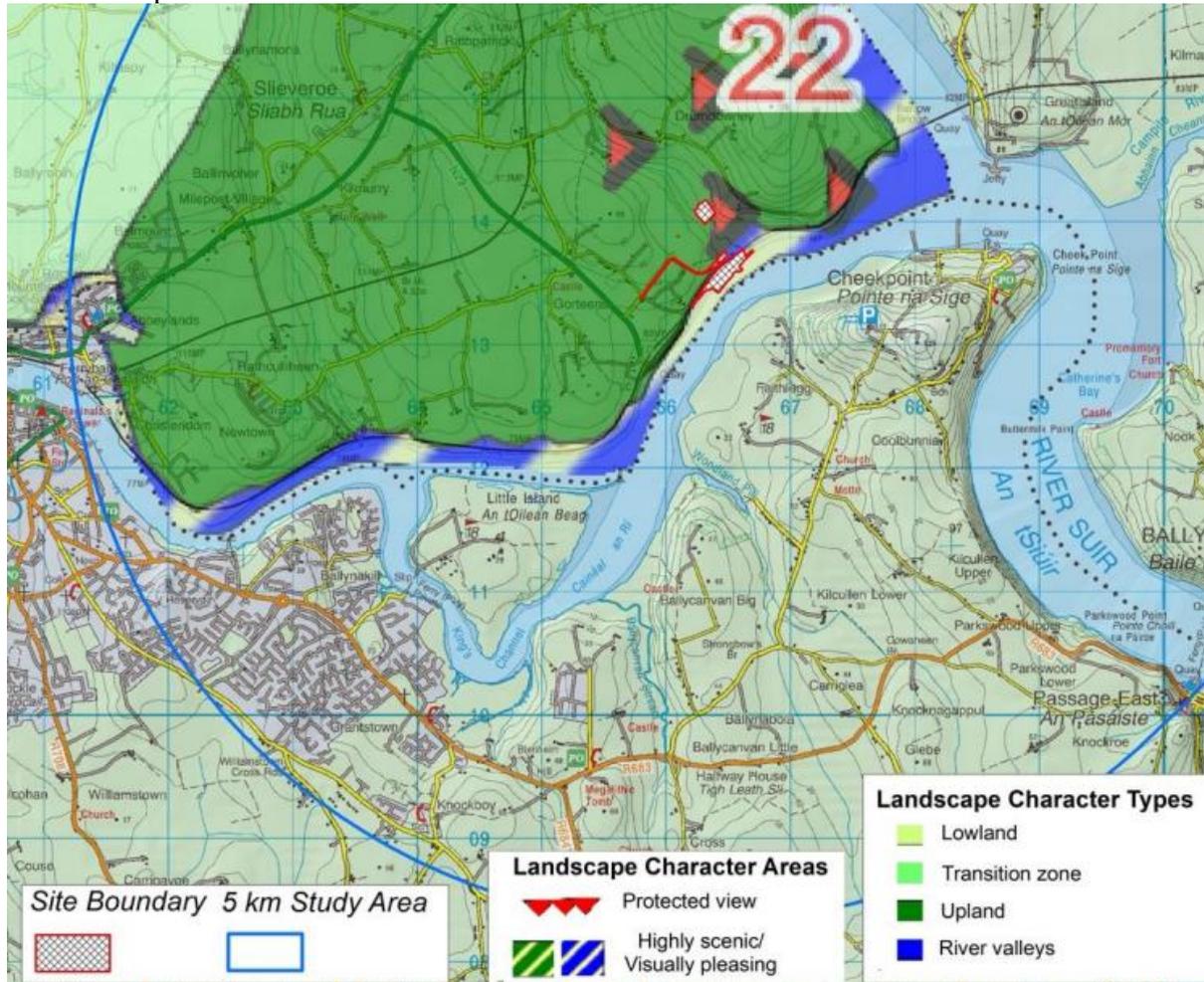


Fig: Landscape Character Area in Co.Kilkenny

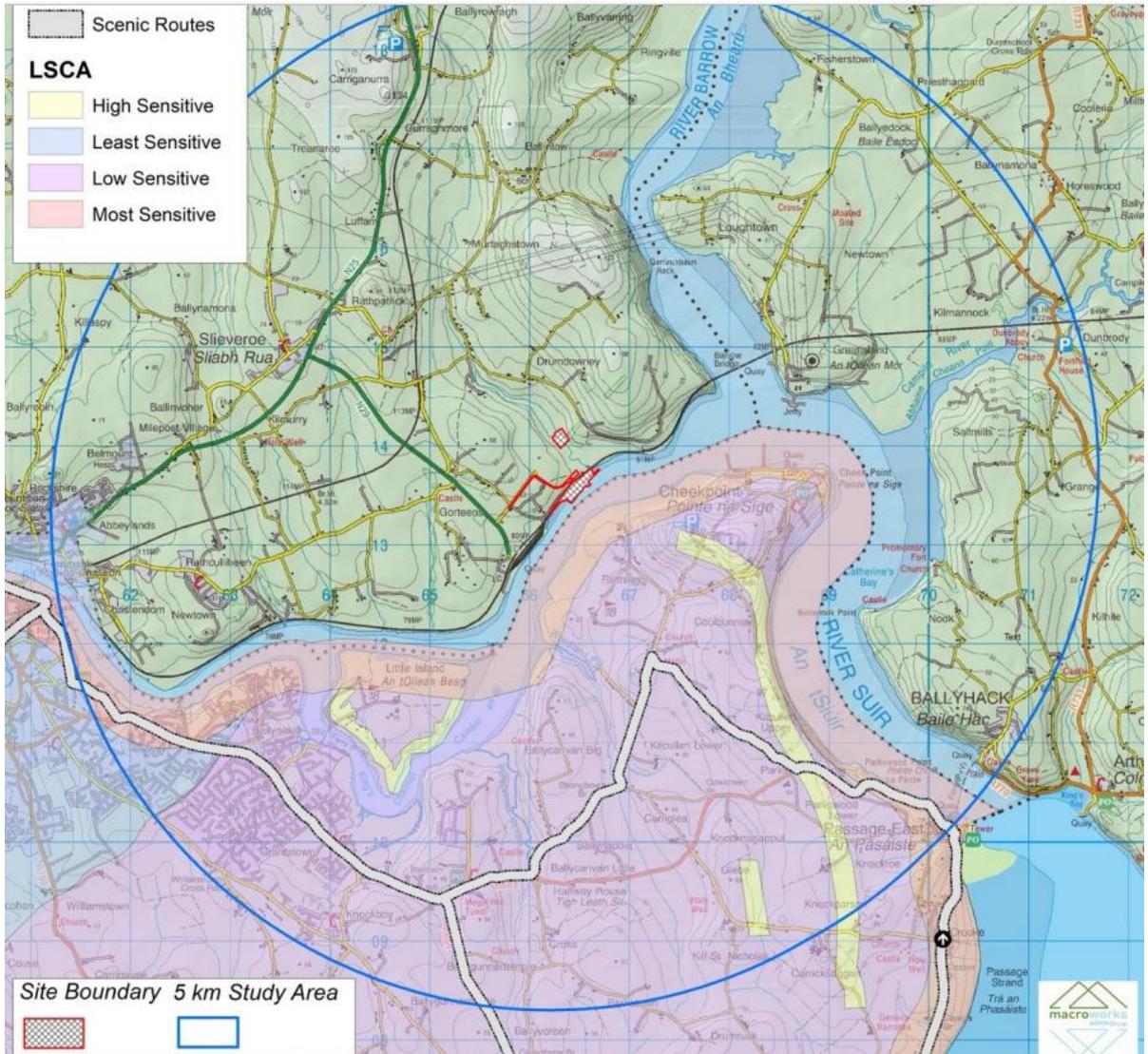


Fig: Landscape Character Area in Co. Waterford

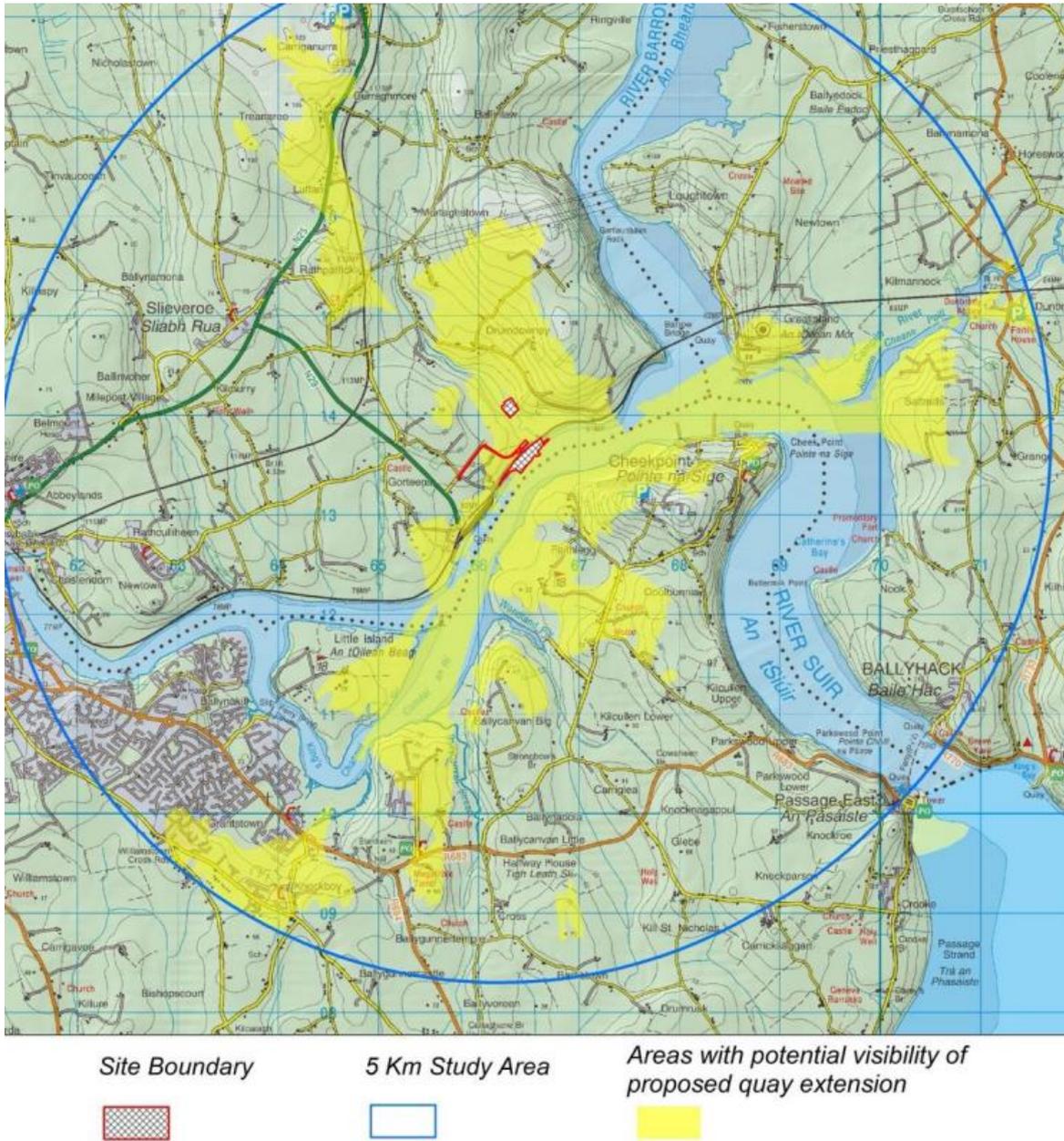


Fig: Zone of Theoretical Visibility

- Landscape Character Value and Sensitivity were assessed for site and surrounding area;
- Considered both the site and study area have landscape sensitivity of medium;
- Landscape Impact magnitude was assessed for both construction and operational phases;
- During construction, there will be permanent physical effects to land cover of site which will be not reversible, including land reclamation;
- Overall magnitude of landscape impact at operational phase w ‘medium’ given scale and intensity of industrial facility in landscape setting;
- A Visual Impact Assessment that involved assessing eleven viewpoints was undertaken. Photomontages were prepared to fully illustrate proposed development;
- For vast majority of viewpoints, proposed development not clearly visible due to intervening screening by terrain or vegetation;

- Main mitigation measure for proposed development will be cohesive siting with surrounding land uses of similar form and character;
- Area benefits from natural screening provided by landforms, vegetation, and built elements;
- Existing port is in narrow and enclosed section of the river corridor. The steep-sided hills to the east, west, and north of the site will serve to screen much of the study area from view. In the instance of Minaun Hill to the southeast, the higher elevation areas will also result in clear views of the proposed development and the surrounding area; see Figure 13-1 below.
- However, as an extension of an existing port facility, the proposed development will be much less likely to give rise to significant landscape and visual impacts than a new or separate facility.
- The proposed development cannot be readily screened from view, nor is this considered necessary in the context of existing port complex;
- Overall, it was considered that the landscape and visual impact will not result in any significant residual impacts;
- Both landscape and visual impacts were considered to be of 'Moderate' significance at most, even in the immediate vicinity of site;
- Moderate-level impacts would be deemed acceptable for receiving landscape.



Fig: Map showing viewpoints



Fig: Viewpoint 4 from photomontage. Proposed ORE Terminal from Checkpoint Pier.



Fig: Viewpoint 5 from photomontage. Proposed ORE Terminal from local Riverwalk SE of Checkpoint



Fig: Viewpoint 6 from photomontage. Proposed ORE Terminal at Belview from SW of Checkpoint, Deerpark Forest Reception Area

### 14 Terrestrial Cultural Heritage



Fig: Terrestrial Archaeological Assessment Area

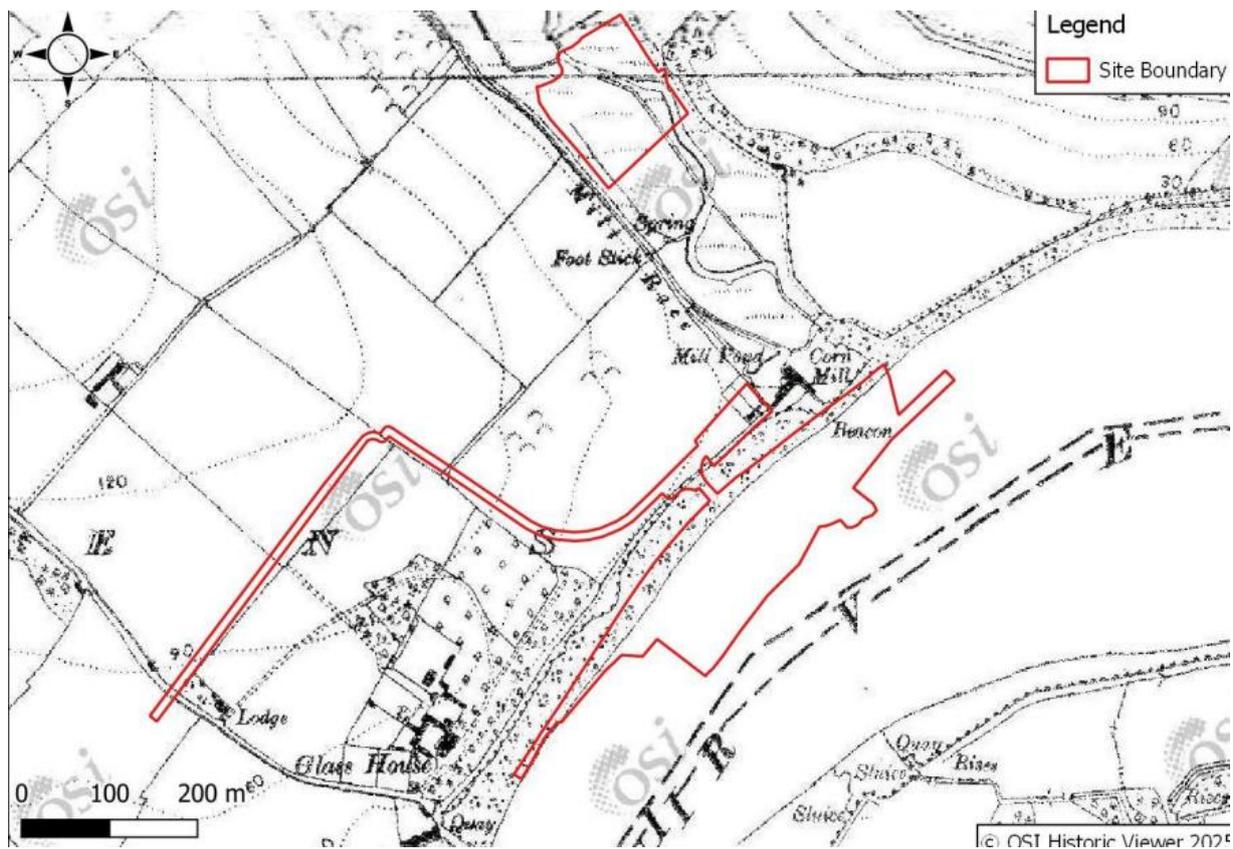


Fig: Last Edition OS six-inch Map with Glass House and Gorteens Corn Mill

- Assessment based on onsite inspection, cartographic and documentary research.
- No recorded archaeological sites listed in record of monuments and places for areas directly affected by proposed development or in immediate vicinity;
- 2 no. buildings listed in the Record of Protected Structures lie in vicinity of site;
- Gorteens Corn Mill (RPS D136) and Glass House (RPS C483);
- No other terrestrial archaeological sites or landscape anomalies that might be interpreted as archaeological sites were identified in course of study;
- Effect of proposed development on sub-surface terrestrial environment imperceptible;
- No physical effect on ruined Gorteens Corn Mill (RPS D136), which borders site but is enclosed by permanent security fence;
- No effect on mill stream or dock, already bridged by existing access road;
- No effect on ruins of Glass House (RPS C483), which lies outside site boundary;
- No effects on archaeological resource of the site during the operational phase.

15 Underwater Cultural Heritage;



Fig: View looking north from river channel in 2022, showing length of historic quay and ruined Gorteens Old Mill building inland from the riverbank



Fig: West facing view of river access steps located at upstream extent of quay wall

- In-depth assessment of potential effect of proposed development on underwater and foreshore cultural heritage carried out;

- Short stone quay wall on foreshore examined in 2002, uncovering more stonework beneath it;
- The stone quay, which lay parallel to the river, had uneven drystone construction;
- North-eastern end was covered with artificial infill, and top was repaired with cement;
- Re-examined in 2022 and recorded in detail in 2024 for current project;
- Proposed development will extend berths and rock armour that will cover historic stone quay and extend into river channel;
- Construction work will follow guidance from DHLGH including archaeological monitoring and use a terram membrane to protect quay;
- All ground and riverbed works will be monitored under DHLGH licence;
- No significant underwater archaeological effects predicted during operational phase following implementation of appropriate mitigation measures.

#### 16 Material Assets – Traffic and Transport;



Fig: Local Roads Network showing L7582 off the N29

- All construction traffic will travel via N29 / L7582 Industrial Access Road priority junction in order to gain access to construction site;
- Busiest period of construction works will occur during filling works, when it is expected to import 160,000 tonnes of fill material over 5-month period;
- During the filling phase of construction works, estimated there will be approximately 87 HGVs per day arriving at the site over a period of 5 months;
- Findings of detailed assessment confirmed even during peak construction phase, existing N29 / L3412 / L7482 crossroads junction will continue to operate within capacity with no queues and minimal delays during the AM and PM peak hour;
- Once operational, predicted on a peak day for proposed development, which will involve both ORE facilities operational and also unloading of large bulk carrier resulting 89 no. additional trips in AM peak hour to and from port.
- The detailed traffic modelling that was completed for all of surrounding junctions confirmed they will continue to operate within capacity with no queues and minimal delays during AM and PM peak hours;

- The NTA along with Waterford City and County Council and Kilkenny County Council, have launched a new bus network plan for Waterford.
- A new bus route from Belview Port to Waterford City has been included.
- Bus will operate during weekday peak times.
- Conservative approach taken when assessing worst-case scenarios' potential traffic and transport effects; however proposed development will not have a significant long-term effects on existing road network.

#### *17 Material Assets – Material Resources, Energy and Waste*

- Desk-based assessment undertaken to evaluate proposed development's impact on material resources, energy demand, and waste generation;
- During construction, engineering fill materials such as quarry rock will be required, sourced locally where practicable;
- National production figures indicate demand will not significantly affect national supply. Operationally, material resources will include marine gas oil for support vessels, maintenance equipment for ORE installations and standard office and welfare supplies;
- Increase in fuel and equipment demand expected to have imperceptible impact on national resources;
- Energy requirements during construction will be temporary and not significant;
- Port's existing 750kV substation will be replaced, and proposed development will increase port's total annual energy demand by 26%, reaching approximately 1.81 million kWh;
- Still only represents 0.15% of national energy demand for transport and storage sector. Photovoltaic panels will contribute up to 273,000 kWh annually, reducing reliance on grid electricity. Waste generated during construction will include typical construction and demolition ('C&D') waste. Reusable materials will be retained on-site, and all other waste will be managed by licensed contractors in compliance with legislation;
- The operational phase will generate office waste, hazardous waste (e.g. WEEE, oils), ORE maintenance waste and ship-generated waste;
- All waste will be segregated and managed in accordance with best practice and legal requirements;
- Volume of waste generated not expected to place significant burden on national waste infrastructure; Proposed development has 45-year design life, with potential for extension depending on ORE project lifespans.
- If decommissioned, site will revert to general port use, with waste policies updated accordingly. Overall effects on material resources, energy, and waste arising from the construction and operational phase of the proposed development on national material resources and infrastructure are considered not significant.

#### *18. Material Assets – Water and Wastewater*

Water for the proposed development will be supplied via existing East Waterford Water Supply Scheme, with a temporary connection during construction.

A pre-connection enquiry to enable the sewage system to be expanded to include proposed Development was submitted to Uisce Éireann on 5th July 2023. On 29th August 2023, Uisce Éireann issued Confirmation of Feasibility to the effect the required wastewater connection was feasible.

No significant impact on water infrastructure is anticipated. Wastewater during construction will be managed via temporary facilities.

Operational wastewater will discharge to the public sewer and be treated at the Waterford City Wastewater Treatment Plant, which has sufficient capacity. The proposed development will not generate process wastewater or trade effluent. The only water requirements will be for potable water and water for welfare / hygiene facilities within the ORE support facilities. The only discharge to sewer will consist of foul water from welfare and hygiene facilities. Therefore, no significant cumulative effects on EWWSS or Waterford City WWTP have been predicted. A new foul sewer line and pumping station is to be installed as part of the development.

Overall, no significant effects on water supply or wastewater infrastructure are predicted.

#### *19. Interaction of Environmental Impacts*

In accordance with EIAR best practice procedures, the relevant interactions between various aspects of the receiving environment have been addressed in specific chapters of main EIAR.

These interactions are then listed in Chapter 19 of the EIAR.

Waste produced as a result of demolition and construction work is a factor in number of different environmental effects, such as water pollution.

#### *20. Schedule of Environmental Commitments*

As part of the EIAR, all mitigation measures arising from each of the individual assessments for both the construction and operational phases were summarised in overall Schedule of Environmental Commitments that is presented at the end of Volume 2 of the EIAR.

Port of Waterford Company is fully committed to implementing all these commitments. The implementation of these measures will ensure the proposed development will not result in any significant adverse impacts on receiving environment.

#### *Conclusion*

Having regard to the submitted EIAR, it is considered that there is no likelihood of significant adverse long term impacts detrimental to the environment either individually or in combination with existing and proposed activities in the surrounding area.

### **Stage 2 Appropriate Assessment – Natura Impact Statement**

- A detailed assessment of the layout and nature of the proposed development, construction methods to be employed, and overall activities that will occur at the site during both the construction and operational phases has been carried out;
- Potential for significant effects on European sites and qualifying features of interest within the zone of influence of the Site has been examined in detail;
- The site is partially located within a section of the Lower River Suir SAC and is hydrologically connected to the River Barrow and River Nore SAC downstream of the site. Both sites are screened in, taken forward for further detailed consideration and are summarised below.



Fig: Lower River Suir SAC & River Barrow and River Nore SAC

- *Lower River Suir SAC*
  - The SAC is comprised of a number of Annex I habitats, including the priority habitats, alluvial forest and Yew woodland (Tables 5-5 and 5-6 below). Other habitats within the SAC include wet and dry grassland, marsh, reed swamp, improved grassland, tidal river, deciduous woodland and mudflats. The SAC is of conservation interest for the presence of a number of Annex II species including Freshwater Pearl Mussel, Otter, White-clawed Crayfish, Salmon, Twaite Shad and three species of Lampreys-Sea, Brook and River Lamprey. The site is one of only three known spawning grounds in the country for Twaite Shad. The site is also of ornithological importance for the number of Annex I bird species, E.U. Birds Directive, including Golden Plover, Whooper Swan and Kingfisher.
- *River Barrow Nore SAC*
  - Species-rich habitats (Annex I of the EU Habitats Directive), including estuaries, alluvial forests, petrifying springs, and intertidal mudflats and sandflats, can be found within this SAC. This SAC is of considerable conservation significance for multiple reasons:
  - Ornithological importance: This SAC supports Kingfisher, a nationally important bird population listed in Annex I of the EU Birds Directive. One SPA (River Nore), designated under the EU Birds Directive, is also located within the SAC; and;
  - This SAC supports multiple species listed on Annex II of the EU Habitats Directive, including Otter, River Lamprey and Salmon.
  - Effects to otter, atlantic salmon, sea lamprey, river lamprey, twaite shad, freshwater pearl mussel in Lower River Suir SAC all screened in. Same species in addition to Nore pearl mussel screened in in River Barrow Nore SAC.

- As detailed in Section 6.3, Stage 1 AA Screening conclusion states that five designated sites comprising of the Tramore Dunes and Backstrand SAC, Bannow Bay SAC, Tramore Back Strand SPA, Bannow Bay SPA and Seas Off Wexford SPA were screened out. Can be concluded the proposed development will not, either alone or in combination with other plans or projects, be likely to have significant effects on these European sites;
- The NIS contains fisheries Studies, habitat survey, otter survey, sub-tidal benthic survey (Bethnic Ecology Report prepared by Aquafact), invasive species survey and other site investigations including sediment samples (all parameters found to be within acceptable limits).

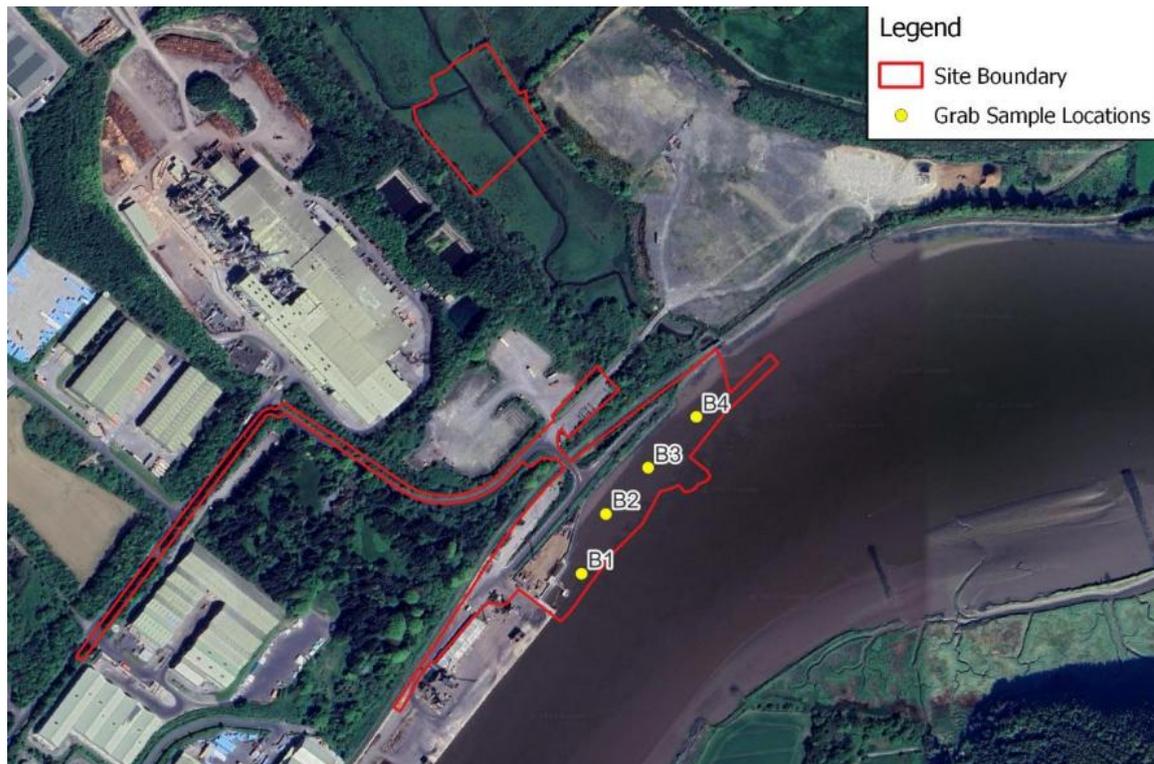


Fig: Grab sample locations

- It is noted in the NIS that the land reclamation works associated with the proposed development will require dredging, infilling and piling works within the boundary of the Lower River Suir SAC. Therefore, a total area of ca. 1.3ha of the Lower River Suir SAC will be reclaimed, which will result in a permanent loss of intertidal / benthic habitat within this area and an alteration to the tidal river. However, these habitats do not constitute qualifying features for which the Lower River Suir SAC is designated. Therefore, the qualifying habitats of the Lower River Suir SAC will not be directly lost as a result.
- Avoidance, design requirements and mitigation measures are detailed within NIS which will ensure any impacts on the Lower River Suir SAC and River Barrow and River Nore SAC or any other European site, having regard to their conservation objectives, will be avoided during all phases of proposed development, such that there will be no adverse effects on integrity of European sites.

### Conclusion

- Following examination, analysis and evaluation of relevant information, including nature of predicted impacts from proposed development and all associated works, has been objectively concluded with implementation of proposed mitigation measures, proposed development will not, either alone or in combination with other plans or projects, adversely affect the integrity or conservation status of any qualifying interests of Lower River Suir SAC and River Barrow and River Nore SAC or any other European site in light of best scientific knowledge.
- No reasonable scientific doubt exists in relation to this conclusion.
- Accordingly, progression to Stage 3 of Appropriate Assessment process (i.e. Assessment of Alternatives Solutions) was not considered necessary.

### Water Framework Assessment Report by Malone O'Regan

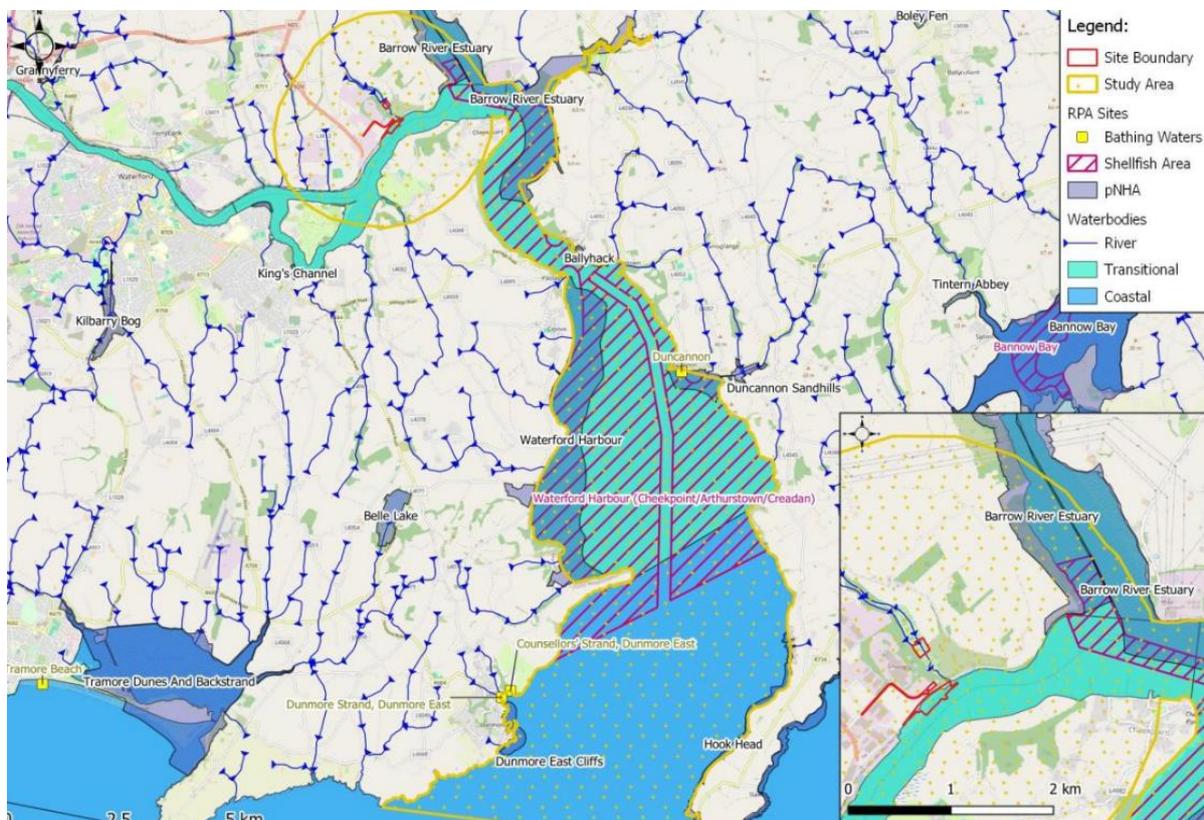


Fig: WFD Surface Waterbodies

The Site is located within the Suir Catchment (Catchment ID: 16), sub catchment Blackwater [Kilmacow]\_SC\_010 (sub catchment ID: 16\_29). There are no lake waterbodies within the study area. The area of planned wharf extension and land reclamation overlaps with the Lower Suir Estuary (Little Island - Cheekpoint) transitional waterbody. The waterbody is categorised as “heavily modified”. It is categorised under the WFD as having “moderate” ecological potential and is “failing to achieve good” chemical status, due to Benzo(b)fluoranthene concentrations, in the most recent 2016-2021 assessment window. It is considered “at risk” of not achieving the quality objectives under the WFD. The biodiversity enhancement area, located in the separated northern section of the Site, overlaps with a stream that is part of the Luffany\_010 river waterbody. It should be noted that the Luffany\_010 river waterbody comprises multiple, disconnected streams and rivers that flow into Lower Suir Estuary (Little

Island - Cheekpoint) transitional waterbody. The Luffany\_010 is categorised under the WFD as having “moderate” ecological status in the most recent 2016-2021 assessment window. It's at risk of not achieving the quality objectives under the WFD and is currently under review. No breakdown of the quality elements comprising this status was available for this assessment. Downstream of the Lower Suir Estuary (Little Island - Cheekpoint), the Barrow Suir Nore Estuary is a transitional waterbody. This waterbody is categorised under the WFD as having “moderate” ecological status, but “good” chemical status in the most recent 2016-2021 assessment window. It is considered “at risk” of not achieving the quality objectives under the WFD.

Groundwater bodies (‘GWB’) were screened to a radius of 2km from the Site boundary. The Site is underlain by the Waterford GWB (IE\_SE\_G\_149). It is classified by the EPA as having ‘good’ water quality status and is considered to be ‘not at risk’ of not meeting the WFD objectives.

From the GIS database, there are nine groundwater boreholes within a 2km vicinity of the site, excluding wells on the opposite side of the surface water bodies. There are no source protection areas identified within 2km

Without mitigation, it was predicted that the proposed development will have slight negative effects on the above waterbodies. Unplanned events, such as a hydrocarbon spill, could result in moderate to significant negative effects. However, such effects can be prevented firstly by avoidance through the design measures and secondly by the implementation of mitigation measures during both the construction and operational phases of the proposed development. Therefore, no change in residual quality status was predicted for those waterbodies.

The Lower River Suir SAC will potentially be significantly affected by the proposed development due to the alteration / loss of SAC area, however, through the implementation of mitigation measures and the creation of a biodiversity enhancement area to offset the loss, it was considered that residual negative effects would be minimal. Potential negative effects predicted for the remaining protected sites were associated with effects on the water quality of associated waterbodies, were all deemed not significant following the implementation of the mitigation measures.

In addition to the mitigation measures outlined in the WFDAR and the EIAR, the creation of the biodiversity enhancement area as part of the proposed development will offset the loss of area from the Lower River Suir SAC, by providing a new area of enriched biodiversity, close to the estuary.

The proposed development will not compromise the objectives and requirements of the WFD within the local area and within the river basin district or the ability of any waters to meet the objectives of the WFD and transposing legislation.

## **Construction Environmental Management Plan**

The Construction Environmental Management Plan (‘CEMP’) including Environmental Risk Plan, Emergency Management Plan, Waste Management Plan (WMP) submitted with this

application will be updated by the contractor, with detailed construction phase mitigation measures, including those listed in EIAR and NIS submitted with this application.

*Set up is summarised as follows:*

- 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 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 that 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.

*Decommissioning and Future Use:*

The Marine Area Consent (MAC) for the proposed development has a term of 60 years. At the end of this 60-year term, a new MAC will be sought in addition to all other appropriate consents. Given the nature of the proposed development, it is proposed that the development will be either continued or repurposed.

- ✓ Appointed Community Liaison Officer for duration of construction works and initial period of commissioning/operation;

## **PART V OVERALL CONSIDERED VIEW**

The Planning Authority of Kilkenny County Council is of the view that the c.250m extension to the existing wharf, provision of an Offshore Renewables Terminal is in compliance with international, national, regional and local policy for the provision of offshore renewable energy/wind turbines in a specifically designated area which will assist Ireland to be able to meet/work towards its renewable energy targets reducing its reliance on fossil fuels.

In terms of visual impact, the planning authority is of the view that there will be significant to profound impacts when viewed from Cheekpoint to the south east, and, Minaun Hill further south east (both Co. Waterford). Notwithstanding these visual impacts, other visual impacts are not as significant from within the study area/viewshed/available vantage points due to the setting, which is at sea level in a river valley/estuary with the landscape rolling in from all sides. The planning authority is of the view that notwithstanding these visual impacts, significant potential benefits which may accrue from the development, and these will exceed the cost of the impacts.

In terms of built heritage both underwater and on land, it is considered necessary to recommend the attachment of conditions which include the requirement for the photogrammetry survey recording of historic quay wall and monitoring during construction, details of vibration monitoring for the Glass House and Gorteens Old Mill positioned outside the redline boundary, both to be agreed prior to commencement of works. In relation to the 2 no. protected structures 'The Glass House' and 'Gorteens Old Mill', while outside the red line boundary, both are within the ownership of the applicant, and, are part of the historic fabric and industrial heritage of the wider Gorteens and Belview area. They also serve a role to inform the general public of the activities which took place in the wider area prior to the construction of the port in the early 1990's and resultant of all the aforementioned should not be lost as the port and surrounding lands develop further.

In terms of assessment by the Environment Section of the planning authority, as per 'Referrals', there are a number of areas which they would ask An Coimisiún Pleanála to consider further and request additional information or address by way of pre-commencement condition if applicable. These include details pertaining to conduction of greater site investigation works to inform mitigation approach, sathé emergency holding tank, provision of a Noise Management Plan, provision of A Refurbishment Demolition Asbestos Survey, (RDAS) inclusion of additional detail in the Construction Environmental Management Plan, measures to deal with excessive brightness at Grid 3 car parking, end of life treatment post decommissioning of proposed infrastructure, discharge of stormwater to an area upgradient of infill reclamation works between the proposed parking and build up of quarry material on the shoreside,

On the basis of the above being address to the satisfaction of the Coimisiún, it is considered that the principle of the proposed development is acceptable in addition to the detailed proposal.

## **PART VI CONDITIONS, COMMUNITY GAIN AND BONDS**

Should An Coimisiún Pleanála consider that in accordance with the studies concluded and their assessments, the proposed development will not have a significant impact on the conservation objectives of the Natura 2000 sites to which it is linked and will not have a significant impact on the environment and decide to grant permission, the following conditions should be considered for inclusion;

- ✓ All mitigation and monitoring details within the EIAR and NIS to be fully implemented;
- ✓ Noise threshold;
- ✓ Construction and Environmental Management Plan including but not limited to;
  - Construction hours
  - Maintenance of local road network
- ✓ Requirement for an Ecologist Clerk of Works;
- ✓ Control of storage and stockpiling material;
- ✓ Surface water management plan with controls including silt management etc.;
- ✓ Dust suppression and monitoring;
- ✓ Consultation with Area/District Engineer regarding pre and post condition survey, repair of damages at developers own cost and agreement for strengthening of haul routes;
- ✓ Traffic Management Plan;
- ✓ Advance notice for road closures and extra ordinary loads;
- ✓ Correct control of all fuels and chemicals on site;
- ✓ Surveying and monitoring of all archaeology;
- ✓ Full details around maintenance of turbines, potential future replacement of;
- ✓ A detailed Amenity Plan agreed with the planning authority prior to commencement of development;
- ✓ Conditions for applicant to liaise with the planning authority and the NBHS and NMS sections of the DHLGH for photogrammetry survey recording of historic quay wall and monitoring during construction;
- ✓ Condition for strategy of vibration monitoring for Gorteens Old Mill positioned outside the redline boundary of the current proposal to be compiled and submitted by way of condition. Such proposals require to be agreed prior to commencement of works;
- ✓ Condition for owners to submit a strategy for the maintenance and securing of 2 no. protected structures (The Glass House and Gorteens Old Mill) outside the red line boundary but within the ownership of the applicant;
- ✓ Condition requiring adequately sized, dimensioned and risk assessed fire water ring main to be provided within the existing port estate and the proposed development to ensure there is adequate provision of facilities for the fire authority;
- ✓ Condition regarding provision of turning point for HGVs inside the site boundary, and condition for demarcation of line for pedestrian movement within the site;
- ✓ Bond;
- ✓ Development Contribution condition;
- ✓ Provisional details of community benefit associated with development;

*Niall Sheehan*

04/12/2025

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Niall Sheehan  
Executive Planner



04/12/'25

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**N. Louw**  
**Senior Executive Planner**



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**Denis Malone,**  
**Senior Planner**  
08/12/25



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**Lar Power,**  
**Chief Executive**  
09/12/2025

**PART IIV APPENDICES**

**APPENDIX 1: Glass House**



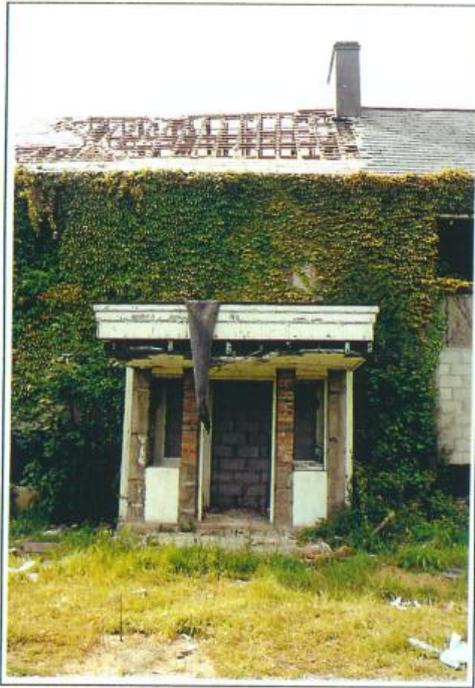
1. The front elevation of the Glass House



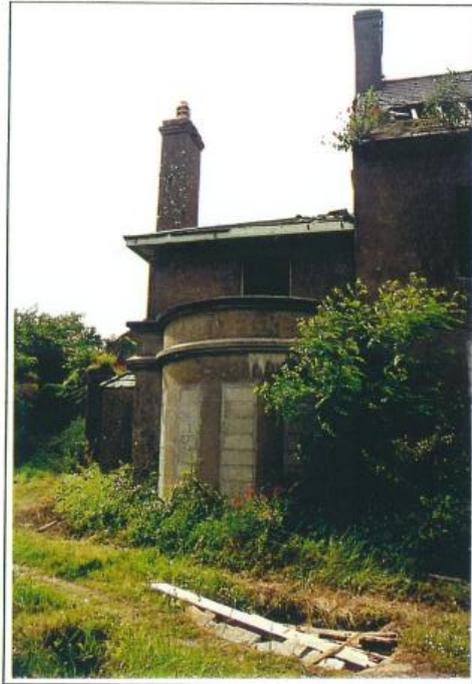
2. Western four bays of the main elevation. (Note extent of ivy and creeper growth and the removed sills)



3. Eastern three bays of the main façade. (Note the central chimney; these bays represent a later extension to the original core of the house)



4. Flat-roofed entrance porch on the main elevation



5. Two-storey addition on the western side of the main elevation



6. Rear elevation of the house - slated area of roof corresponds to the three-bay eastern addition to the original core of the building. (Note gable-fronted extensions.)

Fig: Photographs of Glass House

Planning ref: 00/1848

*(b) refurbishment and extensions to Glass House and associated outbuildings (a listed Heritage Site in the Draft County Development Plan) and their conversion to offices and a Port Administration Centre; the provision of personnel facilities; the provision of additional sidings and a downstream connection to the mainline railway; the provision of 15,350 m<sup>2</sup> of transit stores on the quays to accommodate bulk and break-bulk goods; the partial demolition of the existing "Cap" stores, the recladding and reroofing of the remaining store and the provision of additional stores to replace the demolished stores; a 1,050 metre downstream extension of the wharves for which permission exists; the use of specified berths to handle lift-on lift-off unitised loads, roll-on roll-off, live cattle exports, dry-bulk solids, breakbulk/semi-bulk and bulk liquids; dredging and reclamation works; bulk liquids storage tanks and bunds; ancillary*

*structures and services; loading and unloading facilities; a 1375 metre long training wall from Snowhill to Drumdowney Point and reclamation of the retained area.*

ABP report states

*On cultural heritage/human beings, it is noted that the Glass House would be restored and refurbished and a port heritage centre established. The cultural heritage of the area and of port activities would thus be documented and accessible to the general public.*

ABP decisions with condition on the Glass House as follows:

*24. The following requirements shall be complied with in relation to the Glass House and its associated outbuildings; -*

*(a) An experienced building conservation professional shall be engaged to advise and supervise, as necessary, at all stages in the conservation project. Any revisions deemed necessary by this conservation professional, following the carrying out of opening up works shall be discussed and agreed with the planning authority prior to the continuance of works.*

*(b) A full specification for the conservation/restoration works, based on the outline schedule in the Conservation Survey and Assessment, shall be submitted to the planning authority for written agreement prior to the commencement of works. The full specification shall include, inter alia, the following: -*

*(i) Details of the mortar and render mix, which shall omit the use of cement.*

*(ii) A prohibition on the raking out of mortar using power tools.*

*(iii) A direction to the contracted joiner to omit the use of horns or joggles at the corner of the window sashes, when following the window details on drawings 0013/50 – 52 and 56 – 59, except where repairs are being carried out to sashes which have such horns.*

*(iv) A direction to the contracted plasterer to run new cornicing, only where the original is deteriorated beyond repair. In this regard, the information centre room cast moulding shall be copied to make good the missing sections, which shall be done only after the original has been carefully cleaned to allow an accurate cast to be taken.*

*(c) In order to ensure that the removal of hard render over the original brick of the main house does not adversely affect the face of the brickwork, a non-invasive manual investigation of the condition of the brickwork shall be carried out by a brick specialist and a proposed surface render/treatment shall be agreed with the planning authority prior to the commencement of works.*

*(d) Door elevations, including the front door shall be submitted for agreement with the planning authority, prior to commencement of works. In this regard, the raised and fielded internal door shown in photograph 26 of the Conservation Assessment, shall be repaired and re-used and its moulding profile and panel arrangements shall be copied for use in new internal doors, except where the late 18th century softwood panels survive, where doors with a similar beading shall be adopted.*

*(e) Any repairable sashes in the windows in Building D shall be repaired and shall be augmented by the new work indicated in drawing 0013/59.*

*(f) Where historic crown or cylinder glass survives, it shall be carefully removed for reuse in the new sashes.*

*Reason: To preserve the architectural integrity of the buildings in the Glass House complex.*

## Record of Protected Structures

The cultural significance of this complex derives from it being one of the earliest glassworks in Ireland. No trace of the glassworks survives (it would have been located at some distance from the house due to the noxious production processes involved). Past conservation reports have noted the Glass House for its cultural significance, but is no less important for its historical and social significance. The cultural, historical and cultural special interest are three categories included in the Architectural Heritage Guidelines for Planning Authorities, which supported protection of structures. An extract from the Guidelines detailing these three special interest categories is noted below:

### *Historical interest 2.5.8*

*The notion of historical interest underpins a general belief that it is worthwhile to preserve and conserve structures, sites and information from past centuries. The level of importance of the historical connection and its relationship to the existing fabric of the structure should be assessed. The historical interest relating to a structure or parts of a structure may be identified in various ways.*

- a) A structure may have historical interest as the location of an important event that occurred in, or is associated with it, or by its association with a historic personality. Some events or associations may be so important that the place retains its significance regardless of subsequent alteration.*
- c) Historical interest can be attributed where light is thrown on the character of a past age by virtue of the structure's design, plan, original use, materials or location.*
- d) A structure may be a memorial to a past event;*

*Some unusual structures may have historical or socio-historical interest,*

*h) Special historical interest may exist because of the rarity of a structure. Either few structures of an identifiable type were built at a particular time, or few have survived. In either case, the extant structure may be one of the few representative examples of its time that still exists in the national, regional or local area. The rarity of surviving examples of a building type can ensure that special historical interest accrues to them. A planning authority should consider protecting any examples of rare structures in its area, bearing in mind the degree to which past interventions may have altered their character.*

### *Cultural interest 2.5.13*

*The characteristic of cultural interest permeates the architectural heritage and can, in the broadest terms, include aesthetic, historical, scientific, economic or social values of past and present generations.*

*c) other structures that illustrate the development of society, such as early schoolhouses, library buildings, swimming baths or printworks. If these associations are not related to specific aspects of the physical fabric of a structure, consideration could be given to noting them by a tourism plaque or other such device.*

### *Social interest 2.5.16*

*A community may have an attachment to a place because it is an essential reference point for that community's identity, whether as a meeting place or a place of tradition, ritual or ceremony. The configuration, disposition or layout of a space or group of structures, where they facilitate behaviour that would otherwise be difficult or impossible, may be of social interest. This category of special interest may sometimes not be directly related to the physical fabric of a particular structure or structures and may survive physical alteration*

## APPENDIX 2

### Suggested conditions for Chief Fire Officer

The recommended condition, requirement, and observation on this Port of Waterford Company Planning Application to An Coimisiun Pleanala are as follows -

#### Fire Authority – Condition – as per Section 13 of the Fire Services Acts 1981 and 2003

Condition	Reason
<p>1. The fire authority require for an adequately sized and risk assessed fire water ring main to be provided within the existing port estate and the proposed development to ensure there is adequate provision of facilities for the fire authority, in the event of fire, for firefighting within and around the port infrastructure and estate for the purpose of protection of life from fire, whether such outbreak has occurred or not.</p> <p>2. The fire water ring main shall be –</p> <ol style="list-style-type: none"> <li>a. Adequately sized – diameter and maintained;</li> <li>b. With fire hydrant outlets adequately dispersed and sized – large volume;</li> <li>c. With fire service couplings to BS 336 adequately dispersed;</li> <li>d. All Fire hydrant outlets and couplings (including pressure reducing valves) shall be accessible to fire appliances at all material times;</li> <li>e. All Fire hydrant outlets couplings shall be adequately protected from weathering and saltwater erosion;</li> <li>f. Where necessary, pumps - duty and stand-by including emergency back-up power, pump house(s) and monitoring capability integrated;</li> <li>g. Provided and maintained by the relevant port authorities in agreement with the Chief Fire Officer of the Authority having Jurisdiction (AHJ) <i>e.g. Kilkenny Fire Authority.</i></li> </ol> <p>3. The fire water ring main (<i>size – diameter and locations to be determined</i>) may be an extension of the existing large volume Irish Water trunk water main from the N25 which is already providing fire water provision to risk premises such as Tirlan, Kilkenny Cheese and Royal A-ware developments.</p> <p><b>or</b></p>	<p>In order to comply with Regulation B1 to B5 of Part B (Fire Safety) of the Second Schedule to the Building Regulations 1997 to 2024.</p> <p>In order to comply with Regulation B12 of Part B (Fire Safety) of the Second Schedule to the Building Regulations 1997 to 2024.</p> <p>To ensure there is all material times an adequate and immediate supply of fire water for the protection of the entire risk area, developments including all building(s), infrastructure and boat(s).</p> <p>To ensure an adequate provision of facilities for the fire authority, in the event of fire, for firefighting within and around the development for the purpose of protection of life from fire, whether such outbreak has occurred or not.</p> <p><b>Reference(s)</b></p> <ol style="list-style-type: none"> <li>a) Dublin Port Company fire water seawater ring main project in collaboration with Dublin City Council and Dublin Fire Brigade with consultants Byrne O’Cleirigh Engineering Consultants and contractors DM Mechanical;</li> <li>b) Fire Services Acts 1981 and 2003, Number 30 of 1981 and Number 15 of 2003 - As amended;</li> <li>c) Building Regulations 1997, SI 497 of 1997 - As amended.</li> </ol>

This fire water ring main may alternatively be a dedicated 'seawater' feed and/or augmented water main – there shall be provision for adequately sized pumps (*duty and stand-by*) to extract seawater to pump and fill (*flow rate – m<sup>3</sup> per hour and pressure – bar*) the fire water ring main at all material times, where this 'seawater' approach to be considered and adopted in consultation with the Fire Authority.

4. The fire water ring main and provisions shall be maintained operational at all material times.
5. Consultation with the fire authority shall be required and agreement in writing with the Chief Fire Officer for any proposal under this condition.

Note: Stated in EIAR that the applicant will prepare an application for a Fire Safety Certificate for all of the buildings included in the Proposed Development and will submit the certificates to the Building Control Authority.

## **APPENDIX 3:**

### **Stage 2 Appropriate Assessment Natura Impact Statement (NIS) (Detailed Summary)**

An Appropriate Assessment Screening report has been carried out which concluded that significant effects on the River Barrow and River Nore SAC cannot be ruled out and therefore a Stage 2 Assessment, Natura Impact Statement, has been prepared in relation to the project and accompanies the planning application. Please see summary of assessment from Kilkenny County Council underneath.

Given the distance separating the Site from the Tramore Dunes and Backstrand SAC, Bannow Strand SAC, Tramore Back Strand SPA, Bannow Bay SPA and Seas Off Wexford SPA, and the intervening lands separating the Site from the European sites and the lack of impact pathways, the proposed development may not result in adverse effects to these European Sites and they have therefore been screened out from further consideration.

Elements of the project are outside the administrative area of Kilkenny County Council. The Board should satisfy itself that adequate detail has been given, in terms of various method statements and design details yet to be provided in order to ensure a full Appropriate Assessment can be carried out by An Coimisiún to determine if the development is likely to have direct, indirect or 'in combination' impacts on the habitats and/or species for which the nearest Natura 2000 sites are designated, in particular the Lower River Suir, and, the River Barrow and River Nore SAC.

#### *Lower River Suir SAC*

The SAC is comprised of a number of Annex I habitats, including the priority habitats, alluvial forest and Yew woodland (Tables 5-5 and 5-6 below). Other habitats within the SAC include wet and dry grassland, marsh, reed swamp, improved grassland, tidal river, deciduous woodland and mudflats. The SAC is of conservation interest for the presence of a number of Annex II species including Freshwater Pearl Mussel, Otter, White-clawed Crayfish, Salmon, Twaite Shad and three species of Lampreys-Sea, Brook and River Lamprey. The site is one of only three known spawning grounds in the country for Twaite Shad. The site is also of ornithological importance for the number of Annex I bird species, E.U. Birds Directive, including Golden Plover, Whooper Swan and Kingfisher.

#### *River Barrow Nore SAC*

Species-rich habitats (Annex I of the EU Habitats Directive), including estuaries, alluvial forests, petrifying springs, and intertidal mudflats and sandflats, can be found within this SAC. This SAC is of considerable conservation significance for multiple reasons:

- Ornithological importance: This SAC supports Kingfisher, a nationally important bird population listed in Annex I of the EU Birds Directive. One SPA (River Nore), designated under the EU Birds Directive, is also located within the SAC; and,
- This SAC supports multiple species listed on Annex II of the EU Habitats Directive, including Otter, River Lamprey and Salmon.

Effects to otter, atlantic salmon, sea lamprey, river lamprey, twaite shad, freshwater pearl mussel in Lower River Suir SAC all screened in. Same species in addition to Nore pearl mussel screened in in River Barrow Nore SAC.

The NIS contains fisheries Studies, habitat survey, otter survey, sub-tidal benthic survey (Bethnic Ecology Report prepared by Aquafact), invasive species survey and other site investigations including sediment samples (all parameters found to be within acceptable limits).

It is noted in the NIS that the land reclamation works associated with the proposed development will require dredging, infilling and piling works within the boundary of the Lower River Suir SAC. Therefore, a total area of ca. 1.3ha of the Lower River Suir SAC will be reclaimed, which will result in a permanent loss of intertidal / benthic habitat within this area and an alteration to the tidal river. However, these habitats do not constitute qualifying features for which the Lower River Suir SAC is designated. Therefore, the qualifying habitats of the Lower River Suir SAC will not be directly lost as a result.

### *Construction*

With regard to the Construction Phase, the main potential sources for underwater and terrestrial noise emissions which could effect otters. The major underwater noise sources will include capital dredging, piling works and infilling works. The most significant underwater noise source will be piling works, in particular impact piling, which represents the worst-case event with predicted peak source levels up to 250dB re 1 $\mu$ Pa @ 1m. Other activities such as dredging, vessel movements, support vessels, jack-up barge operation and vibratory piling will generate lower noise levels (typically 150–170dB re 1 $\mu$ Pa @ 1m). Whereas the noise sources for terrestrial noise emissions will include the demolition works, the wharf construction works and the building works. Therefore, as otter are designated for Lower River Suir SAC and the River Barrow and River Nore SAC, further consideration for potential noise effects will be required. In addition, designated fish species are also known to utilise the Lower Suir Estuary and the Waterford Estuary. Similar to otter, underwater noise emissions could result in effects on fish within the immediate vicinity of the site. The consequences of the Proposed Development on fish assemblages will be species specific

### *Otters*

With regard to otters, in order to address the potential for short-term disturbance, consultation with the NPWS will be undertaken prior to the commencement of construction to determine the need for, and secure, where required, a derogation licence for the works.

Given the location of the proposed development within the Port of Waterford and the high levels of human activity, any species utilising the area are likely to be habituated to elevated noise levels or will avoid this area.

Lighting will be required during the construction phase, particularly during the winter months when daylight hours will be short, and as such, mitigation measures will be implemented during the construction phase to ensure no significant adverse effects will occur to any otter foraging

or commuting in the area. It should be noted that the existing Port of Waterford already contains extensive lighting infrastructure for safety and security purposes.

As such, it was considered that otters utilising the site are likely to be habituated to a degree of artificial lighting. Following completion of works, otters will be expected to reoccupy the area, consistent with the high levels of activity recorded within the port in baseline surveys.

### *Fish*

The estuarine environment supports a range of fish species, some of which may utilise the area for feeding, migration, or as nursery habitat.

Piling and dredging activities have the potential to generate underwater noise and vibration that could result in temporary disturbance or displacement of fish, particularly diadromous species such as salmonids during their migration periods. As part of the assessments undertaken for the proposed development, a detailed underwater noise impact assessment was undertaken. The noise assessment concluded that in a worst-case scenario, using 250dB SPLPeak, the potential injury zone fish species would be within a 180-200m range from the piling event. Therefore, in order to ensure no impacts occur as a result of underwater noise, mitigation measures will be implemented.

During the capital dredging works, it was considered that any potential disturbances to fish will be very localised and restricted to the immediate vicinity of operations.

In addition, although capital dredging has the potential to increase suspended sediment levels, which could lead to short-term reductions in water quality and temporary impacts on foraging efficiency, fish are mobile animals which, depending on species, can rest on the bottom or occupy the water column at varying distances from the bottom or surface.

Either way, it can be expected that fish species can swim at normal or burst speeds (typically up to seven body lengths per second) away from any sudden disturbance in their immediate vicinity.

Therefore, the entrainment of fish during the capital dredging was therefore considered unlikely, as any fish that may be disturbed will move to adjacent areas to avoid the disturbance. Furthermore, given the existing baseline conditions within the Port of Waterford, including regular vessel movements, maintenance dredging, and elevated background disturbance, fish populations within this section of the estuary were considered to be habituated to a dynamic environment.

Impacts arising from the proposed development were therefore predicted to be localised and temporary in nature. Adherence to best practice construction methodologies and mitigation measures will further minimise potential effects. No significant long-term impacts on estuarine fish populations were anticipated.

### *Mitigation Measures*

Mitigation measures to reduce and mitigate against noise disturbance, will be implemented in line with recommendations made for pile driving by Department of Arts, Heritage and the Gaeltacht ('DAHG');

During the capital dredging works, the contractor will implement clear ‘soft-start’ or ‘ramp up’ procedures, whereby sound energy input to the marine environment will be gradually or incrementally increased from levels unlikely to cause significant behavioural impact on marine mammals, fish or otter to the full output necessary for completion of the activities;

During the piling works, a suitably qualified marine mammal observer (‘MMO’) will be appointed to monitor for marine mammals and otter and will log all relevant events using standardised data forms prepared by the DAHG;

The following measures will be implemented to mitigate against impacts on species such as marine mammals, birds and fish species utilising the estuaries.

- Pile driving activities will only commence in daylight hours where effective visual monitoring, as performed and determined by the MMO, will be achieved
- An agreed and clear onsite communication signal will be used between the MMO and the Works Superintendent as to whether the relevant activity may or may not proceed, or resume following a break;
- The MMO will conduct Pre-Start-Up Monitoring, which will be a constant effort monitoring at least 30 minutes before the sound-producing activities are due to commence. Pile driving shall not commence until at least 30 minutes have elapsed with no marine mammals detected within the Monitored Zone.
- In commencing a pile driving operation where the output peak sound pressure level (in water) from any source, including equipment testing, exceeds 170 dB re: 1µPa @1m an appropriate Ramp-up Procedure (i.e., “soft-start”) will be used. The procedure for use will be informed by the risk assessment undertaken, giving due consideration to the pile specification, the driving mechanism, the receiving substrate, the duration of the activity, the receiving environment;
- According to the operational parameters of the equipment and materials concerned, the underwater acoustic energy output will commence from a lower energy start-up (i.e., a peak sound pressure level not exceeding 170 dB re: 1µPa @1m) and thereafter will be allowed to gradually build up to the necessary maximum output over a period of 20-40 minutes
- In all cases where a Ramp-Up Procedure will be employed, the delay between the end of ramp-up and the necessary full output will be minimised to prevent unnecessary high-level sound introduction into the environment;
- If there is a break in pile driving sound output for a period greater than 30 minutes (e.g., due to equipment failure, shut-down or location change) then all Pre-Start Monitoring and a subsequent Ramp-up Procedure (where appropriate following Pre-Start Monitoring) will be undertaken.
- Where possible, the following measures will be implemented for lighting at the site during the construction phase;
  - Avoidance of excessive lighting;
  - Lighting will be aimed only where it will be needed;
  - Lighting will be turned down / off when not required; and;
  - Accessories such as baffles, hoods or louvres will be used to reduce light spill.

### *Surface Water*

Storm water discharge from the existing container and bulk terminals is channelled through road gullies and surface drains and collected in an underground gravity piped network. The collected storm water is discharged through a series of settling tanks and fuel interceptors to the River Suir. Facilities are provided whereby surface water may be sampled, tested and held in emergency holding tanks in the event of accidental spillage. The proposed development will necessitate the extension of the existing 600mm diameter pipe which discharges storm water from the Port to the Lower River Estuary and the provision of a new replacement outfall in a new location within the proposed revetment as indicated on the drawings. The construction methodology will ensure that the discharge capacity of the existing outfall will be retained both during the construction works and on completion of the works.

Storm water generated by the wharf extension and reclaimed area will be collected via heavy duty drainage channels and gullies to discharge to an underground drainage network which will be routed through a settling tank and a hydrocarbon bypass interceptor before being discharged to the Lower River Estuary through a new outfall pipe. The works will include modifications to the existing storm drainage to facilitate the extended wharf structure and associated work areas.

Quayside rainwater from the roofs of the new ORE buildings will be collected via rainwater downpipes and discharged to the proposed storm water piped network. Storm water from the proposed ORE yards will be directed into the new network through road gullies and channels. The drainage system will be routed through a settling tank to a hydrocarbon bypass interceptor before being discharged to the Lower River Estuary through the proposed new outfall pipe. All storm water generated in these areas will discharge through a settling tank to a bypass interceptor. The settling tank will have a V-notch weir fitting, composite sampling equipment and 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 where the discharge will be contained until appropriate measures are agreed with the Environmental Section of Kilkenny County Council.

The proposed development will also necessitate the extension of the existing 600mm diameter pipe which services the Smartply site. This pipe will be diverted and extended to outfall to the Lower River Estuary in a new location in the proposed revetment as indicated on the drawings. The construction methodology will ensure that the discharge capacity of the existing outfall will be retained both during the construction works and on completion of the works.

Should pollutants from the Proposed Development enter the Lower Suir Estuary / Lower River Suir SAC, through the surface water run-off discharging from the Site into the Lower Suir Estuary, these pollutants could potentially adversely affect the water quality within the Lower Suir Estuary and the downstream River Barrow and River Nore SAC. This can subsequently adversely affect the Annex I/II species protected under the Lower River Suir SAC and River Barrow and River Nore SAC.

With regard to capital dredging, based on site investigations undertaken, the estuarine sediments to be dredged will have no prominent contaminants beyond chloride, which is

naturally elevated within estuarine environments due to the marine influence/seawater mixing into the estuarine waters. This is further supported by more than 30 years of sediment testing data carried out for the Dumping at Sea licence, issued by the EPA. All of this data was assessed on 3 no. previous occasions by the EPA, with the conclusion of no adverse environmental effects. As such, any effects arising from chemical changes to surface water were predicted to be not significant. It was therefore concluded that the capital dredging works will not result in any significant effects to the conservation objectives of the Lower River Suir SAC and the River Barrow and River Nore SAC.

Reclamation works will consist of the deposition of clean imported material sourced from local quarries and demolition material from the ramp, as well as the reuse of dredged material from the capital dredging. Such reuse will only occur when material has been deemed suitable for this function, with unsuitable material to be handled as waste and appropriately removed offsite.

As the material will be checked and screened, whether imported or reused dredge material, any resulting chemical changes have been predicted to be imperceptible. Reclamation works will also produce sediment plumes both directly from the reclamation material itself, but also from disturbance of any estuarine bed sediments in the reclamation area. As such, any effects predicted for reclamation will be greater than dredging works.

Given the estuary is an environment with high concentrations of suspended solids, a slight effect was predicted to arise from reclamation activities as a result of suspended solids release / disturbance. The piling works undertaken as part of the proposed development will potentially produce sediment plumes. In addition, precast concrete will be utilised in most instances, with no concrete pours occurring in the water column, as pouring of concrete will largely be associated with the casting of the in-situ concrete pile heads.

Therefore, in order to ensure no significant effects to the conservation objectives of the Lower River Suir SAC and the River Barrow and River Nore SAC, mitigation measures both general and specific construction including for dredging, piling, general construction activities will be put in place.

Details of capacities in all flood risk events including calculations provided as part of accompanying Engineering Report by Malone O'Regan.

#### *Mitigation Measures*

Mitigation measures will be put in place for:

- the importing of stone where it will be processed on-site at the source quarry, where it will be crushed and graded to achieve uniform size and washed to remove fine particles that could otherwise contribute to increased turbidity or sediment dispersion, analytical testing will also be conducted to confirm fill materials will not introduce harmful elements, engineering fill materials will be unloaded using controlled methods.
- to remove the risk from potential contamination and emergency procedures to be implemented in the event of an accidental release or spill of potentially contaminating substances.

- to ensure no adverse effects to occur as a result of stockpiling of excavated material on-site during the construction phase.
- to ensure no adverse impacts occur as a result of the pouring of concrete

During the construction phase of the proposed development, the following mitigation measures will be implemented:

- Silt fences will be installed at strategically selected onshore locations;
- Continuous water quality monitoring will be conducted in the Lower Suir Estuary;
- The Contractor will provide method statements for weather and tide / storm surge forecasting and continuous monitoring of water levels in the Lower Suir Estuary;
- The contractor's emergency procedures will take into account the Port of Waterford's Pollution Plan.

An Ecological Clerk of Works (ECoW) will be appointed to the project to ensure that the mitigation and best practice measures will be fully implemented.

With mitigation measures it can be concluded that proposed development will not have any adverse effects on either the surface water or groundwater quality of the nearby watercourses, or on the Lower River Suir SAC and River Barrow and River Nore SAC, and their designated conservation interests.

### *Operations*

With regard to the Operational Phase, noise emissions (both above and underwater) will be associated with vessels berthing, loading / unloading, and departing from the new berth. These activities will increase the frequency of short-term underwater noise events but will not raise overall sound levels, which will remain consistent with existing shipping in the estuary. Such noise may cause temporary behavioural responses in otter, fish and marine mammals; however, as these levels are already characteristic of port operations, additional impacts were predicted to be minor and localised (unlikely that otter or fish species will be affected by the proposed development due to the fact that species within the area are habituated to anthropogenic noise emissions). Given that the Port of Waterford is a major working port that operates 24 hours a day, 7 days a week, year-round, any species utilising this section of the Lower Suir Estuary was considered to be habituated to anthropogenic noise sources from the current shipping movements.

The proposed development will operate on a 24-hour basis. As such, lighting will be required for safety and security purposes. Although lighting has the potential to disturb species, the proposed development has been designed to include a sensitive lighting strategy that will be implemented across the entirety of the proposed development to minimise light spillage. The lighting strategy involves avoiding excessive lighting and the use of 2700 Kelvin light temperature bulbs, as this will reduce the blue light component. All lighting will be downward-facing and only directed where needed. There will be no light spillage outside of the site boundary, so species within the wider area will not be impacted by on-site lighting. No significant dust impacts predicted at operations stage. Lighting Report by Lighting Reality/Kavanagh Lighting.

Range of mitigation measures for the operational phase which include the maintenance of interceptors, relevant procedures governing hydrocarbon management, regular checks of integrity of underground pipework, tanks, bunds, containers; loading and unloading of fuels; loading and unloading of fuels in protected areas.

*Cumulative/In combination*

No current or previously granted plans or projects were identified in the immediate vicinity that were considered to have the potential to have any in-combination with the proposed development to result in significant impacts on the integrity of European sites.

Two planning applications (Reg. Ref. 2560391 Drumdowney Solar Farm Ltd & Reg. Ref. 2560254 Suir Shipping Limited) that had recently been submitted to Kilkenny County Council (no decision as of yet) were identified during the desk-based review, and, implementing a precautionary approach, these applications were considered as part of potential in-combination effects with the proposed development. Given the fact that the aforementioned projects will not result in any adverse effects to European sites, it can be concluded that the proposed development will not result in any in-combination contribution to adverse effects on the integrity of any European sites

Dust deposition arising from construction activities could potentially enter the Lower River Suir SAC through wind-blown transport or surface water runoff. Dust entering the SAC could lead to increased turbidity, smothering of intertidal or subtidal habitats, and indirect effects on aquatic species through degradation of water quality.

No high-impact or regulated invasive species were identified onsite. However, as the construction works will take place within the Lower River Suir SAC, biosecurity measures will be implemented onsite to ensure that no invasive species will be introduced, which is in line with the Development Management Requirements for Invasive Species in Section 9.2.10 of the Kilkenny County Development Plan

Having regard to all of the aforementioned, progression to Stage 3 of the Appropriate Assessment process (i.e. Assessment of Alternatives Solutions) was not deemed to be required.

## APPENDIX 4:

### **Environmental Impact Assessment Report (Detailed Summary)**

The EIAR is presented in the required format comprising of; a Non-Technical Summary and Main Report(s)

The main report is set out as follows:

Chapter	1	Introduction;
Chapter	2	Planning Context and Need for Explanation;
Chapter	3	Description of Proposed Expansion;
Chapter	4	Assessment of Alternatives;
Chapter	5	Population and Human Health;
Chapter	6	Biodiversity;
Chapter	7	Soils and Geology;
Chapter	8	Water;
Chapter	9	Air Quality;
Chapter	10	Climate;
Chapter	11	Terrestrial Noise and Vibration;
Chapter	12	Underwater Noise and Vibration;
Chapter	13	Landscape and Visual;
Chapter	14	Terrestrial Cultural Heritage;
Chapter	15	Underwater Cultural Heritage;
Chapter	16	Material Assets – Traffic and Transport;
Chapter	17	Material Assets- Energy and Waste;
Chapter	18	Material Assets – Water and Wastewater;
Chapter	19	Interaction of Environmental Impacts;
Chapter	20	Schedule of Environmental Commitments;

#### *Chapter 1 Introduction*

The introduction sets out a summary description of the applicant, the project, the location, the EIAR content, outlines the legislative context and a brief background to the project and describes the consultation process.

#### *Chapter 2 Planning Context and Need for Expansion*

This chapter sets out the summary of planning history; national, regional and local policy; need for proposed development.

#### *Chapter 3 Description of Project*

This chapter provides a detailed description of the various components of the proposed development including the construction, operational phase.

#### *Chapter 4 Assessment of Alternatives*

Sets out that the proposed development can only be located at a port location given the requirement for quayside facilities and berthing for facilities. Stated that the location of Belview Port, a Tier 2 port requires a significant extension.

Sets out the design rationale for a 250m open wharf design setting out unsuitability of 400m and 200m options due to various concerns.

Sets out the short-term consequences of the 'Do Nothing' alternative which would prevent the delivery of strategic planning objectives for the local area which would result in an inefficient use of a strategically located and well serviced existing perch.

#### *Chapter 5 Population and Human Health*

The EIAR States that:

- the proposed development will have a neutral-to-slight, positive, long-term effect with regard to indirect local and regional employment.
- the construction phase will have a short-term positive effect in the local area with c.100 temporary construction jobs created during 18–24-month construction programme. Stated there will also be a short-term positive effect on existing businesses operating in the area through the potential for local enterprises to provide materials and services during construction. States that the once operational, the proposed development will provide up to 100 full-time jobs.
- the proposed development will also support indirect jobs in the local area, both through ORE supply chain and the increase in port-related activities estimating that up to four indirect jobs to be created for every port-based job.
- the residual effects will be a positive, long-term impact on the local economy and employment as well as on the wider economy.
- all effects such as noise, vibration, air quality, visual and waste management which have the potential to directly affect human health were assessed throughout the EIAR, with a conclusion of 'no significant' effects.

Overall, it was determined that there would be no significant effects on human health or population arising from any phase of the Proposed Development.

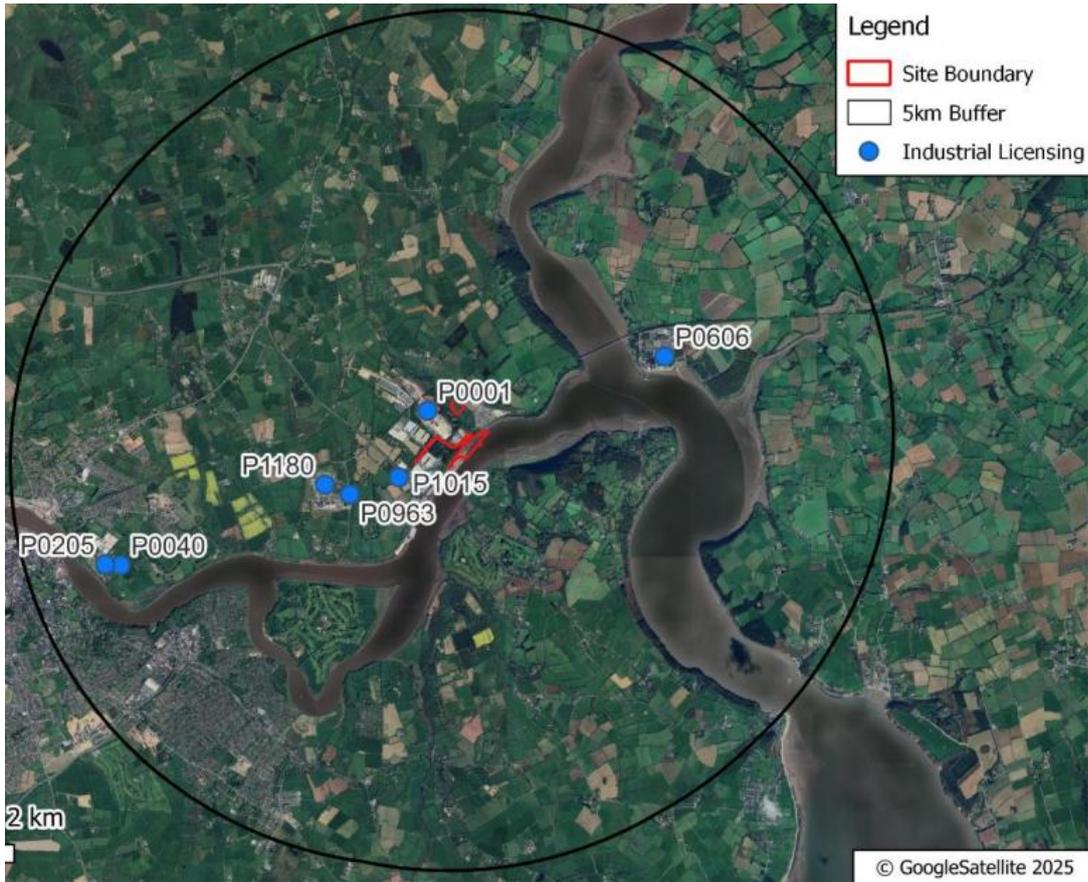


Fig: Industrial Licences within 5km of boundary

The below table gives further information on IE licensed facilities within 5km of the proposed development. No IPC operations were identified within 5km.

Licence Number	Name	Licensable activity	Orientation from Site	Distance
P0001	SmartPLY Europe Designated Activity Company	Industry	North	Ca. 0.3km
P0040	Anglo Beef Processors Ireland Unlimited Company t/a ABP Proteins Waterford	Industry	Southwest	Ca. 3.9km
P0205	Anglo Beef Processors Ireland Unlimited Company trading as ABP Waterford	Industry	Southwest	Ca. 4.1km
P0606	SSE Generation Ireland Limited (Great Island)	Industry	Northeast	Ca. 2.4km
P0963	Tirlán Limited	Industry	Southwest	Ca. 0.9km
P1015	Glanway Limited	Industry	South	Ca. 0.5km
P1180	Kilkenny Cheese Limited	Industry	Southwest	Ca. 1.2km

Fig: IE licensed facilities within 5km

Proposed Development will not require an IE licence, it was considered that there will be no significant likely effects from its operation

Summary of Industrial Emission Licences within 5km of proposed development provided

### *Chapter 6 Biodiversity*

Chapter 6 outlines the assessment on the receiving environment, in particular biodiversity. The Site is located partially on land within the existing Belview Port and partially within the River Suir, which forms part of the Lower River Suir SAC and close to the River Barrow Nore SAC. The assessment includes the following surveys:

- Bat, terrestrial mammals and their habitats
- Birds
- Otter
- Wetland Birds;
- Aquatic Habitat;
- Marine mammal.

In addition, applicants/agents Ecologists undertook detailed surveys of the proposed Biodiversity Enhancement Area in 2021, 2023 and 2024

Specialist benthic assessments were undertaken by AQUAFAC International Services Ltd. ('Aquafact'), and a MOR Environmental Ecologist worked with Dr. Martin O'Farrell to undertake a review of fisheries information. Bat and Waterbird Reports were also undertaken.

Overall, it was determined that the existing Belview Port was of limited ecological value for any species. However, the Lower Suir Estuary and habitats within a wider area were considered to provide suitable foraging and commuting habitat for otter (no otter holts or couches were identified within the accessible areas), wetland birds and fish. Marine mammals were noted commuting through this section of the Lower Suir Estuary in low numbers.

The on-site habitats were not considered to provide optimal foraging or resting habitat for these species.

As part of the Proposed Development, an area of the Lower Suir Estuary (1.3ha) will be reclaimed, which will result in a loss of the SAC habitat. In order to offset the loss of SAC, the proposed Biodiversity Enhancement Area, ca. 1.8ha in size, will be developed to create optimal habitat for local wildlife

Habitats within the wider area are subject to noise emissions from the existing port-related activities. During the Operational Phase, it is concluded that the proposed development will result in similar activity and noise levels as the ongoing port-related activities (subsumed into the background noise) and therefore, it was concluded that any species utilising the habitats within the vicinity of the Site will not be significantly impacted, as these species are habituated to the port-related activities.

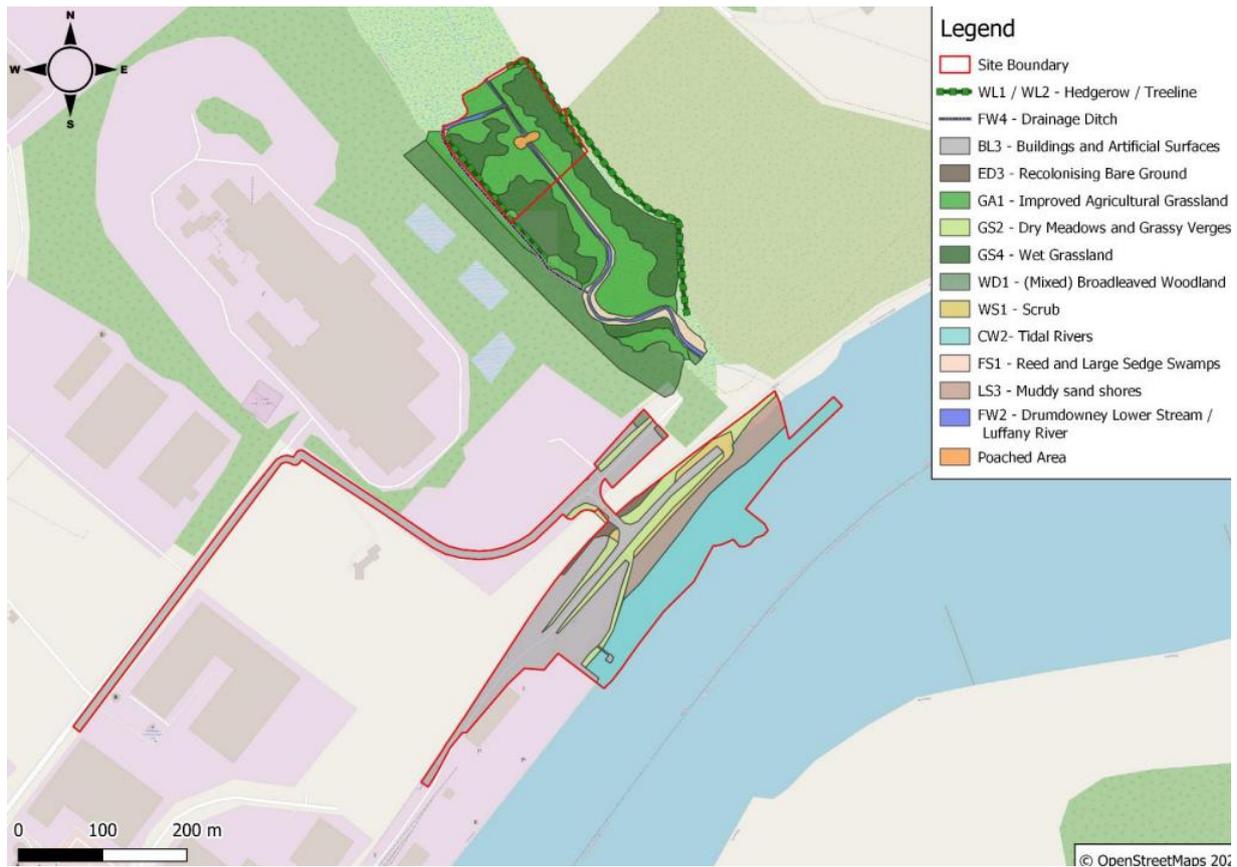


Fig: Habitat Map

With regard to invasive species, no high-impact invasive species or plant species listed on the Third Schedule of the 2011 European Communities (Birds and Natural Habitats) Regulations (i.e., species of which it is an offence to disperse, spread or otherwise cause to grow in any place) were identified within the site.

It has been objectively concluded that with implementation of proposed mitigation measures, the proposed development will not, either alone or in combination with other plans or projects, adversely affect the integrity or conservation status of any of the qualifying interests of any European Designated sites, any potential ecological receptor or local biodiversity in light of best scientific knowledge. No reasonable scientific doubt exists in relation to this conclusion.

#### *Chapter 7 Soils and Geology*

Proposed Development will require the reclamation of an area of ca. 1.3ha.

This will require importation of c.160,000 tonnes of rock. The rock will be carefully selected and tested to ensure it meets the required specifications for engineering fill, including size, compaction properties and chemical stability.

These imported materials will be sourced from local commercial quarries as much as practicable.

Capital dredging will be required at the downstream end of the wharf extension to achieve the proposed berth depth of -10mOD Poolbeg. There will be a need to remove c.7,000m<sup>3</sup> 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. In minimising the off-site removal of dredged material, and to support the circular economy, it is proposed to reuse the dredged materials within the site. The Guidance on the Beneficial Use of Dredge Material in Ireland (2013), specifies beneficial reuses of dredged material and suitability based on soil characterisation.

Soil characterisations outlined from laboratory analyses detailed in previous sections of this chapter classified material in the vicinity of the Site as uncontaminated, predominantly sand and mud with some areas of mixed gravel and soft sediments. Therefore, as much as practicable, all dredged material will be reused for land reclamation within and adjacent to the area of the site. As these will be capital dredging works associated with the proposed development, they will not be subject to the conditions of the Dumping at Sea permit Reg. No. S0012, issued by the EPA, that currently regulates the maintenance dredging operations undertaken by Port of Waterford. Capital dredging will have a potentially temporary negative effect on geology, ranging from imperceptible to moderate.

Given the location of the proposed development, there will be a significant amount of piling works required during the construction works. The main piling works will be associated with the construction of the suspended deck wharf extension, as this will have piled foundations. There will be a need to install c.220 steel piles to support the quay extension. There will also be a need to install ca. 20 steel piles to support a piled foundation for the 2 no. pontoons. These works will most likely be undertaken from a barge positioned near the shoreline, although this will only be confirmed during the detailed design stage. These piling works will result in localised temporary disturbance of fluvial sediment.

It was predicted that the localised pile installations will result in producing localised sediment plumes. Precast concrete will be utilised in most instances, with no concrete pours occurring in the water column, as pouring of concrete will largely be associated with the casting of the in-situ concrete pile heads. As such, the effects from piling works will not likely exceed land reclamation effects in significance; therefore, a slight to moderate adverse temporary effect was predicted to arise.

Reclamation will require the importation of ca. 160,000 tonnes of rock. The rock will be carefully selected and tested to ensure it meets the required specifications for engineering fill, including size, compaction properties and chemical stability.

- Engineering fill materials will be unloaded using controlled methods to avoid accidental spillage into the marine environment;
- Placement of the engineering fill materials will occur gradually, with continuous up-and-downstream monitoring of water quality parameters, such as suspended solids (or a turbidity as its proxy) and pH, to ensure compliance with environmental thresholds; and,
- Adaptive Management of these reclamation works will be implemented. This approach will be based on modelling-monitoring-adaptation. In practice, this means that if any environmental thresholds are significantly exceeded, additional mitigation measures will be considered.

These imported materials will be sourced from local commercial quarries as much as practicable. Dredged material consisting of soft sediment with an estimated volume of c.7,000m<sup>3</sup> will also be used for reclamation works once determined to be suitable.

The infill material will be systematically placed in the designated area using heavy machinery, with care taken to minimise disturbance to the riverbed and surrounding marine environment.

Reclamation works will consist of the deposition of clean imported material sourced from local quarries and demolition material from the ramp, as well as the reuse of the dredged material from the capital dredging. Reclamation activities will occur in the latter half of the 3-month “Capital Dredging & Land Reclamation Works” period of the construction phase.

In order to minimise the impacts on land and soils during the land reclamation works, the following measures will be implemented:

General construction works will include excavation of c.2,000m<sup>3</sup> of materials for the construction of substructures, including building and the installation of underground services. Excavated materials will be predominantly comprised of soils and subsoils.

Every effort will be made to reuse these materials on-site, but any surplus materials that cannot be reused on-site will be removed off-site in strict accordance with all requirements of the Waste Management legislation. During the operational phase, employment of good environmental management practices by the ORE operators and the Port of Waterford will serve to minimise the risk of pollution from these storage and refuelling operations. The implementation of the mitigation measures will ensure that any effect arising from either construction or operational phases of the proposed development on soils and geology will be not likely and not significant.

During the operational phases of the proposed development, the ORE Operator Facilities will operate under environmental management procedures that are in line with the current POW procedures. The ORE Operators will prepare and provide these to the POW in advance of operations.

In addition, the port extension area will be operated in accordance with the Port of Waterford’s environmental management procedures, as set out under its ISO 14001– certified EMS. The following mitigation measures will be employed to prevent any potential impact on soils and geology:

- The integrity and water-tightness of underground pipes, tanks, bunds and containers will be checked at regular intervals in accordance with relevant guidelines;
- Suitable absorbent materials will be kept on-site to deal with any spills; and,
- Loading and unloading of fuels will be carried out in an area protected against spills and runoff in accordance with relevant EMS procedures.

The Port of Waterford has an ongoing maintenance dredging programme that includes primarily areas directly related to trade vessels (berths) and access to the Port of Waterford (navigational channel), however, it also includes areas that are maintained for smaller harbour users, such as Cheekpoint Harbour, which is a community harbour facilitating local fishing and recreational vessels. The primary purpose of this maintenance dredging is to maintain the port’s infrastructure to navigationally safe levels. The EPA strictly regulates these works under the port’s current 8-year Dumping at Sea Permit (S0012-03) that runs until the end of 2025. There is currently an application with the EPA for a new permit covering the period between 2026-2033 inclusive.

The capital dredging required for the proposed development will be localised and reasonably short in duration. Therefore, as the assessment on the Site has shown no likely significant effects on soils and geology, the cumulative effects arising from the ongoing maintenance dredging works were determined to be not likely and not significant.

## Chapter 8 Water

Water Framework Directive Assessment Report by Malone O'Regan in addition to Chapter 8 of EIARs.



Fig: Streams and watercourses around the site as per Water Framework Directive Assessment Report by Malone O'Regan

The Site is partially located within the Lower Suir Estuary and is characterised by water present across majority of the southern and southeastern area.

### *Groundwater*

According to the GSI, there is no sand and gravel aquifer present beneath site, but bedrock aquifer underlying the site is classified as a (Rf) Regionally Important Aquifer – Fissured bedrock.

The Site is not within a Zone of Contribution / Source Protection Zone for any public or private water supplies, and there are no mapped group water schemes close to the area.

No public water source protection areas located within or in immediate vicinity of site. Dewatering of groundwater will not be required during the construction phase, and there will be no groundwater abstraction required during the operational phase. There will be no significant effects to groundwater as a result of the proposed development.

## Flooding

### Legend:

#### Flood Extents

- Fluvial - Indicative 1% AEP (100-yr) Event
- Fluvial - Extreme Event
- Coastal - Indicative 0.5% AEP (200-yr) Event
- Coastal - Extreme Event
- Pluvial - Indicative 1% AEP (100-yr) Event
- Pluvial - Extreme Event
- Groundwater Flood Extents
- Lakes / Turloughs

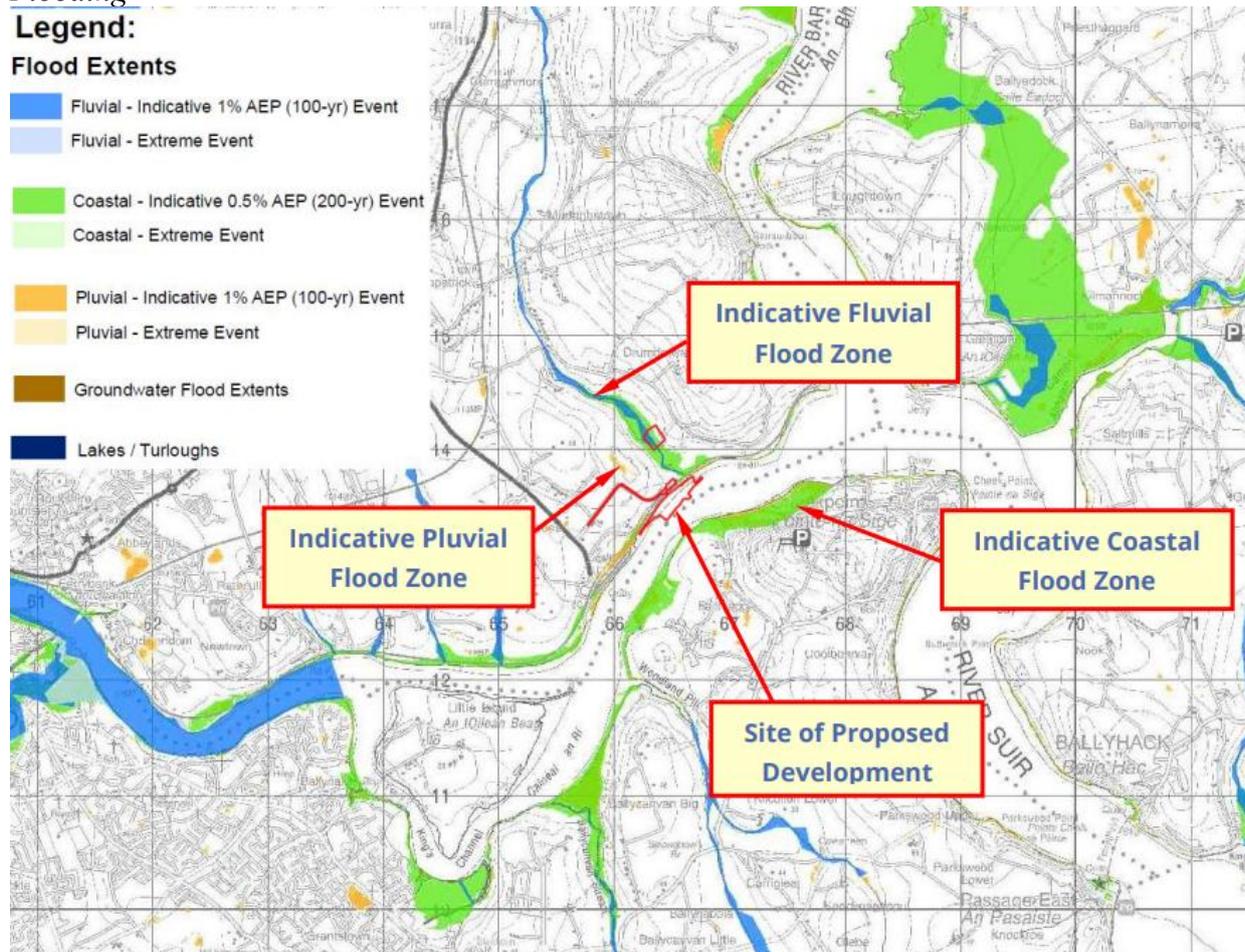


Fig: OPW PFRA Mapping

*A Site-Specific Flood Risk Assessment (FRA) by IE Consulting was completed.*

Screening for the above indicates that the primary potential flood risk to the site of the proposed development can be attributed to an extreme tidal/coastal flood event in the River Suir Estuary and/or an extreme fluvial flood event in the Luffany Stream. In particular, the potential flood risk to the site of the proposed wharf extension can be attributed to an extreme tidal/coastal flood event in the River Suir Estuary. The potential flood risk to the site of the proposed Biodiversity Enhancement Area can be attributed to an extreme tidal/coastal flood event in the River Suir Estuary and an extreme fluvial flood event in the Luffany Stream.

The OPW CFRAMS flood maps also provides information on predictive water levels & flows for the 10% AEP (1 in 10 year), 1% AEP (1 in 100 year) and 0.1% AEP (1 in 1000 year) fluvial flood events at various node points (hydrological estimation points) within the River Suir Estuary for the present-day scenario and mid-range future climate change scenario.

The assessment and analysis undertaken as part of this Site Specific Flood Risk Assessment indicates that the site of the development as proposed falls within a tidal/coastal Flood Zone 'A' and Flood Zone 'B'.

A limited area of the site of the proposed wharf extension falls within a present-day scenario 0.5% AEP (1 in 200 year) and 0.1% AEP (1 in 1000 year) OPW NCFHM tidal/coastal flood zone. The location of the proposed Biodiversity Enhancement area falls within a present-day scenario 0.5% AEP (1 in 200 year) and 0.1% AEP (1 in 1000 year) OPW NCFHM tidal/coastal

flood zone. The site of the proposed Biodiversity Enhancement Area does not fall within a predictive, indicative, historic or anecdotal fluvial, pluvial or groundwater flood zone.

The FRA indicates mid-range future climate change scenario 0.1% AEP+CC (1 in 1000 year + climate change) tidal/coastal flood depths at the location of the proposed wharf extension primarily in the range of 0.0m – 1.5m, and, mid-range future climate change scenario 0.1% AEP+CC (1 in 1000 year + climate change) tidal/coastal flood depths at the location of the proposed Biodiversity Enhancement Area in the range of 0.0m - >2.0m.

Reference to the proposed site layout drawings and associated details provided by Malone O'Regan Consulting Engineers indicate that the proposed new wharf extension shall be constructed to a finished ground level ranging from 6.285m OD (Poolbeg) at the face of the wharf, falling to 5.975m OD (Poolbeg) at the back of the wharf. The finished ground level of the proposed new wharf extension shall therefore be constructed to a level of 0.705m – 0.395m above the predictive present day scenario 0.1% AEP (1 in 1000 year) flood level of 5.58m OD (Poolbeg), and to a level of 0.355m-0.045m above the predictive mid-range future climate change scenario 0.5% AEP+CC (1 in 200 year + climate change) flood level of 5.93m OD (Poolbeg). The potential tidal/coastal flood risk to the proposed new wharf extension is therefore considered to be negligible.

The building structures associated with the proposed new wharf extension shall be constructed to a finished ground floor level of 6.35m OD, which is 0.77m above the predictive present-day scenario 0.1% AEP (1 in 1000 year) flood level of 5.58m OD, and 0.27m above the predictive mid-range future climate change scenario.

The marshalling area at the back of the proposed new wharf extension shall be constructed to a finished ground level ranging from 5.80m OD (Poolbeg) – 6.20m OD (Poolbeg), which is 0.22m – 0.62m above the predictive present-day scenario 0.1% AEP (1 in 1000 year) flood level of 5.58m OD (Poolbeg).

The FRA has concluded that the type and form of development as proposed is 'Water Compatible Development' and the site of the development as proposed falls within a tidal/coastal Flood Zone 'A' and Flood Zone 'B', therefore the development as proposed is deemed to be appropriate and is not subject to the Justification Test.

In the context of 'The Planning System & Flood Risk Management Guidelines' the proposed wharf extension and proposed Biodiversity Enhancement Area works are considered to be water compatible development and are therefore not subject to the requirements of the Justification Test.

In summary, the potential flood risk to the development as proposed is negligible. The development as proposed would not result in an adverse impact to the existing hydrological regime of the area or increase flood risk elsewhere. The development as proposed is therefore considered to be appropriate from a flood risk perspective.

## Surface Water

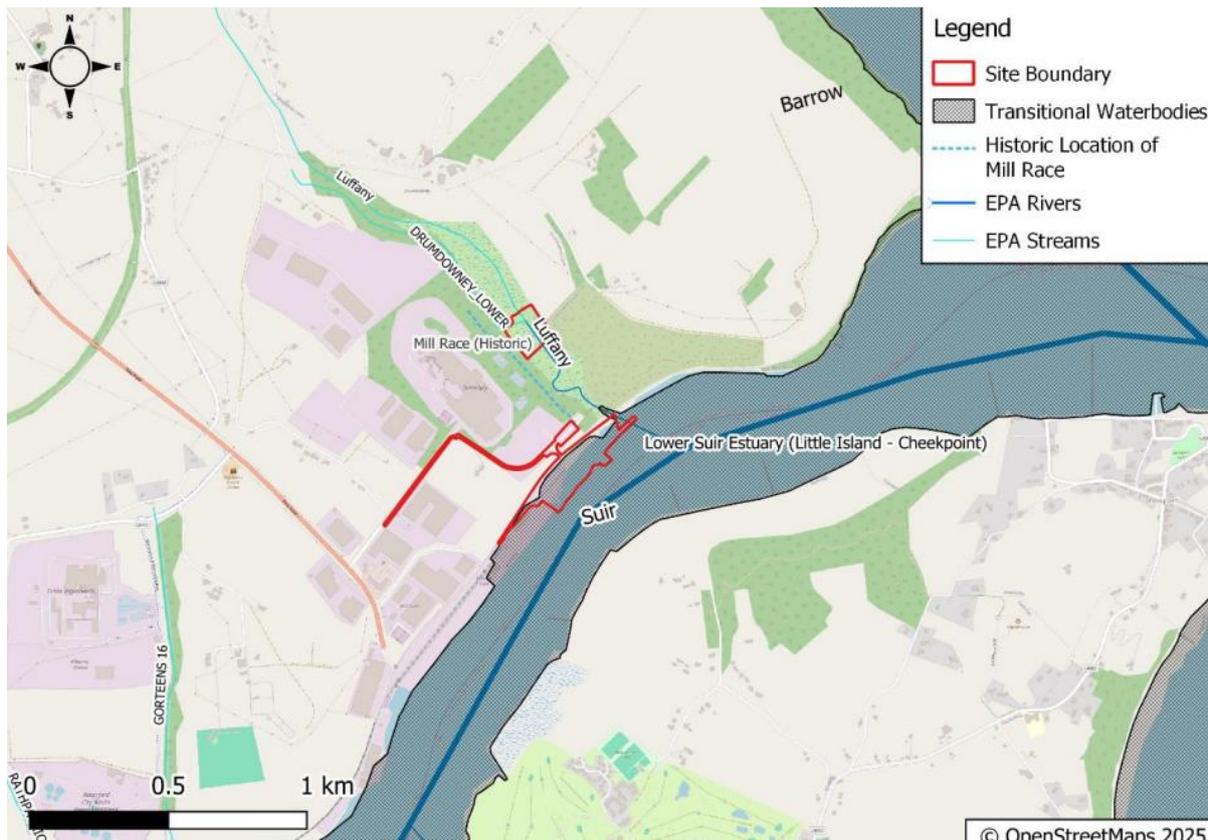


Fig: Watercourses close to the site

Reclamation works will produce sediment plumes both directly from reclamation materials themselves and also from the disturbance of estuarine bed sediments in the reclamation area. Site investigation results on sediments in this area confirmed materials to be dredged have no significant contaminants and, as such, will have no effects on the chemical quality of the receiving surface waters.

Potential risks for surface water quality also presented by other construction activities, such as the pouring of concrete and piling. High levels of sediment naturally occur in the estuary, as a natural consequence of the estuary being fed by three major rivers and streams, from a combined catchment area of over 9,000km<sup>2</sup>

All construction activities to be undertaken in accordance with best practice guidelines and the mitigation measures stipulated in the EIAR.

Overall effects on surface water arising from reclamation and construction activities will have slight to moderate adverse temporary effect on surface water quality in the estuary.

During operational phase, potential for an impact on surface water bodies due to risk of accidents or spillages from any accidental spill/leakage from either ORE operations or shipping vessels berthed.

2 no. fuel tank reserves, storing up to 90,000l of marine gas oil, required to serve the future ORE operators.

Design of proposed development will include controls that will mitigate such risks, which will include fully bunded tanks, forecourt oil interceptors in high-risk areas, by-pass oil interceptors at other locations, settlement tanks and monitoring chambers.

During the operational phase, the ORE Operator Facilities will implement environmental management procedures, similar to those of the Port of Waterford in place under their ISO14001 Environmental Management System.

Effects on surface water quality predicted not to be not significant from the operational phase.

The EPA maintains multiple monitoring stations within the Lower Suir Estuary, with 2024 and 2025 data available at both the Glass House Quay station (TW30002102SR4004), adjacent to the current Port of Waterford wharf and the Snowhill House station (TW30002102SR4005), downstream of the current wharf. The results tables presented below (Table 8-1 and Table 8-2) are sourced from these monitoring stations.

Due to the nature of the proposed development and the associated construction methodologies, suspended solids were identified as the water quality parameter most susceptible to impact during the construction phase. This section provides an assessment of baseline conditions with respect to suspended solids.

The Lower Suir Estuary is characterised by diurnal tidal cycles, which contribute to substantial natural variability in suspended sediment concentrations. This inherent variability, along with observed baseline levels of suspended solids, is described and analysed herein to inform the impact assessment.

The most recent EPA station samples for suspended solids are from 2016 – over nine years ago. As such, the data is not considered a relevant / current baseline for suspended solids within the estuary. Details of Delft Hydraulics' modelling of suspended solids are available in the EIAR and statistical analysis of turbidity, a proxy for suspended solids, during 2023 maintenance dredging is presented also.

Surface water effects related to the proposed development will propagate downstream, dispersing / diluting with distance from the proposed development. As the Faithlegg merges with the Lower Suir Estuary upstream of the site, it is scoped out of further assessment as it lacks a valid pathway to be affected.

The New Ross Port transitional waterbody is also located upstream of the Lower Suir Estuary (though at a different section of the waterbody). Any mixing will be confined to the boundary between the waterbodies. As such, the overall effects on the whole New Ross Port waterbody will be imperceptible, and any effects near this mixing boundary will be of similar or lower magnitude to effects in the Lower Suir Estuary.

Given that the majority of the proposed development occurs in, over or adjacent to the Lower Suir Estuary, with much of the site being open water or hardstanding, limited pathways to groundwater exist.

Additionally, any groundwater affected by the proposed development will be under estuarine influence. Given the location of the Site and proposed operational activities, only a minimal amount of groundwater would be affected by the proposed development. As such, any negative effects on groundwater were predicted to be imperceptible.

The proposed development will also alter the hydromorphology of the Lower Suir Estuary. Dredging works will temporarily deepen the existing navigation channel, while reclamation activities will result in a permanent narrowing of the channel by c.60m to facilitate the construction of new port infrastructure. The EPA already categorises the Lower Suir Estuary as a heavily modified waterbody, with maintenance dredging and large vessel transit already occurring within the waterbody.

Whilst there will be narrowing of the channel, flood risk assessment indicates that there will be no change to flood risk resulting from the proposed development, indicating a limited change in the overall flow of the waterbody. This is corroborated by the ABPmer report, which concluded that the predicted changes to flow speeds were predicted to be generally small and confined to the area immediately adjacent to and upstream of the proposed development.

Overall, in terms of hydromorphology, the proposed development will be in line with existing trends and activities within the waterbody, with any effects resulting from it being permanent and neutral or imperceptibly negative. As part of the proposed development, biodiversity enhancement measures will occur in a distinct area of the Site to the north (See Chapter 6), which overlaps with parts of the Luffany\_010 river waterbody. These works will comprise the creation of pond complexes, planting and surface feature installations aimed at improving biodiversity.

These works will also include the installation of fencing to exclude cattle from areas currently accessible to them, which will result in positive effects on the relevant parts of the Luffany\_010 through the reduction of nitrogen-rich livestock manure and urine that can adversely impact on water quality.

In the long-term, the overall improvement of ecosystems and the exclusion of livestock will result in a moderate positive effect on the water quality of the Luffany\_010 and the area surrounding its outflow in the Lower Suir Estuary.

The effects arising from the proposed development will primarily be associated with suspended solids disturbance/release in receiving waters and stormwater discharge from new areas of hardstanding at the site to receiving waters. Whilst effects of current industrial activities fall within existing background water quality for the Lower Suir Estuary, planning approval has been given to a number of warehouses and a new industrial facility (KCC Planning Ref. No.: 2460103; ACP Ref No.: ABP-321962-25) in the lands west of the site. As such, for their period of construction, land drainage in their vicinity will likely result in some increase in the suspended solids to the Luffany\_010 and Lower Suir Estuary. However, such effects will cease following the completion of construction and potential cumulative effects will only arise should the proposed development's construction phase co-occur with construction phase of another development.

The Smartly outfall pipe will be moved to a new location as part of the construction works. It is proposed that these works would be completed offline so the existing Smartly operations would continue as normal prior to making the connection to the new pipe. These works will be undertaken in close collaboration with Smartply. The emissions arising from the relocated Smartply pipe will continue to be regulated by the EPA under their IE licence and as such will not result in any alteration to the current arrangements, i.e. during the operational phase, there will be no effect.

### *Chapter 9 Air Quality*

During the construction stage, there will be the potential for construction dust emissions. Risk of impact on sensitive receptors following the implementation of mitigation measures determined to be low.

Residual effect remaining will be not likely, short-term and not significant. Construction traffic and traffic arising from the operational phase of the proposed development could potentially impact on air quality.

Due to the daily HGV and personal car trips being below relevant thresholds set by TII, any effect on air quality from onshore traffic was screened out.

For the operational phase, emissions arising from movement of freight ships, ORE-related vessels, port-owned machinery and port-side equipment owned by licensed stevedores were assessed for nitrogen oxides ('NOx'). Concluded that no significant effects on air quality or human health will arise from diesel and marine diesel usage. Overall, no significant effects on air, in terms of ambient air quality and dust nuisance, arising from the construction and operational phases, alone or cumulatively.

Slight positive indirect effects, attributable to the facilitation of ORE infrastructure.

NOx, SO2 and PM10 emissions not significantly increase in concentrations and therefore, no likely significant effect on human health or ecological receptors predicted.

Project is expected to contribute to reduction in reliance on fossil fuel-based electricity generation, thereby decreasing associated emissions to air.

Other table sources of potential emissions to air within the vicinity of the proposed development include:

- Traffic associated with the nearby roads, including the L7582 industrial access road and the N29;
- Operations currently active at the Port of Waterford;
- Industrial facilities, including SmartPly Europe, Suir Shipping and O'Brien's Cement, that are active around Belview Port;
- Agricultural activities;
- Residential dwellings.

Emissions from these sources are already included in the background air quality at the site.

A Dust Management Plan ('DMP') will be prepared for the Site and agreed with the Planning Authority prior to the commencement of site works. The DMP will be implemented during the Construction Phase of the Proposed Development

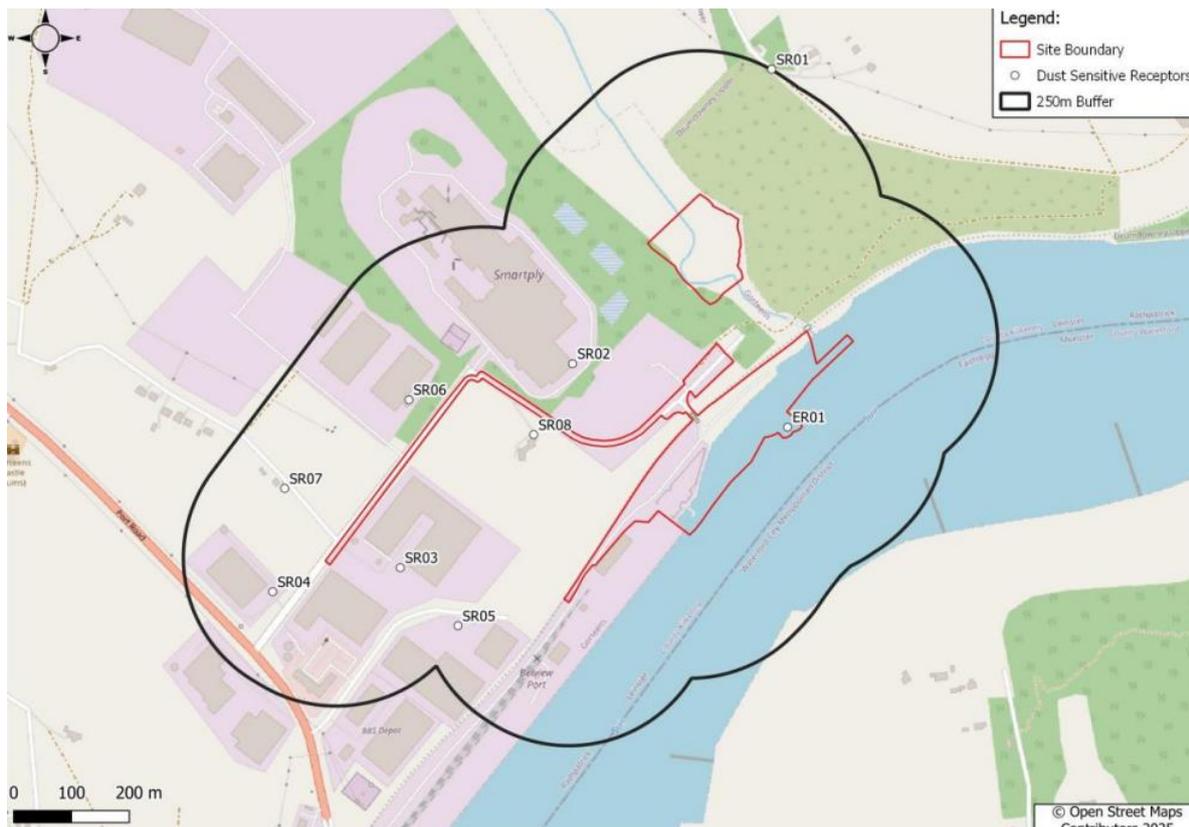


Fig: Dust Sensitive Receptors

The site is located within an active port that is surrounded by numerous industrial and port-related facilities. These facilities operate in tandem with the current Port of Waterford operations. It was considered that during the construction and operational phase of the proposed development, these facilities will continue to operate under normal activity levels. Furthermore, it was considered that during the construction phase, the port will carry out normal operations, which include shipping traffic, maintenance dredging and port-related activities.

Background annual mean for NO<sub>2</sub> is c.19%, for PM<sub>10</sub> is c.30% and for PM<sub>2.5</sub> is 39% of the relevant AQSs, i.e. well below the relevant AQSs with ample remaining capacity of the environment to absorb additional emissions. Further, the EPA's AG4 Air Dispersion Modelling Guidance defines the requirement for assessing cumulative emissions to air if annual emissions exceed 250 tonnes per annum of a given pollutant. As emissions of NO<sub>x</sub>, the key pollutant, will increase by c.320.77 tonnes per annum (refer to section 9.5.5 above), further cumulative assessment is required. The most significant source of NO<sub>x</sub> emissions outside of activities already captured by background industrial emissions is from maintenance dredging / ploughing of the channel. Port records from 2019 indicate that combining ploughing and dredging activities utilises 5,002,840kWh. Assuming a worst-case scenario for the maintenance vessels (a NO<sub>x</sub> emission of 17g/kWh), this represents 85.0 tonnes of NO<sub>x</sub> across the maintenance period, or 0.092% contribution to the 2030 NO<sub>x</sub> ceiling. Cumulatively, it was predicted that the current port operations, the proposed development and the maintenance dredging operations will emit c.406 tonnes of NO<sub>x</sub> annually, or 0.44% of the national ceiling cumulatively. Given this, it was considered that the emissions associated with the proposed development's operational phase will not likely have a significant effect cumulatively with other emission sources in the area. Cumulative effects of dredging operations on ambient air quality (i.e. concentrations of the pollutants), together with the port's activities, can be screened

out, due to dredgers being travelling sources, operating outside the immediate location of the proposed development, at a sufficient distance from all other sources detailed in Section 9.5.5. to allow sufficient dispersion of pollutants. It should be noted that the Port of Waterford have previous planning applications that have been granted within the environs of the port. However, these works have already been undertaken and, as such, are not considered likely to result in any in-combination effects with the proposed development during the construction phase.

#### *Chapter 10. Climate*

Impacts were quantified through an analysis of Greenhouse Gas (GHG) emissions, benchmarked against national and sectoral GHG mitigation targets as defined under relevant regulatory frameworks.

GHG emissions arising from embedded carbon in construction materials, from transport of materials to and from the site, construction employee travel and from the plant and equipment used in the construction phase were calculated for the purpose of the climate assessment.

For operational phase, emissions arising from movement of freight ships, ORE-related vessels, port-owned machinery and port-side equipment owned by licensed stevedores were calculated. In addition, operational phase electricity usage, HGV and employee travel emissions were quantified. GHG emissions associated with the proposed development were assessed against the National and Sectoral Emissions Ceilings.

Once operational, primary GHG emissions directly arising will be transport-related. Although emissions will not be significant, number of mitigation measures in place to further reduce GHG emissions

Considering the construction and operational phases, the assessment of GHG emissions concluded proposed development will have a ‘not likely’ and ‘not significant’ effect on the National Second Carbon Budget and relevant Sectoral Emissions Ceilings.

Expected emissions associated with construction and operational phases offset by indirect positive contribution in supporting the national decarbonisation efforts.

Considering calculated emissions and substantial indirect benefits proposed development will have an overall significant positive effect on the National Carbon Budgets and relevant Sectoral Emissions Ceilings.

Potential risks of climate change to proposed development were assessed by completing a climate change risk assessment.

Utilising available policy and guidance, vulnerability of assets associated with proposed development to potential climate hazards determined.

Due to the location within an existing developed industrial area, no significant effects on microclimate in terms of wind tunnelling/shading.

Climate Vulnerability Assessment identifies potential climate change-related hazards and risks. Key receptors include onsite assets, inputs (electricity and water), outputs (operating capacity) and transport links.

Assessed hazards include temperature changes, wildfires, flooding, landslides, sea level rise and severe wind for which risk was considered low.

Site-specific flood risk assessment was conducted to inform the design, concluding effects of coastal flooding and sea level rise predicted to be negligible;

Based on the results of the potential effects of climate change on the proposed are considered ‘not likely’ and ‘not significant’.

## 11. Terrestrial Noise and Vibration



Fig: Noise Sensitive Receptors (Dwellinghouses)  
(monitoring locations at NSR01, NSR08, NSR09)

A comprehensive terrestrial noise and vibration impact assessment was conducted in accordance with best practice guidance and both statutory and non-statutory noise impact assessment criteria for the Construction Phase and Operational Phase of the proposed development.

A detailed baseline noise survey was completed at four representative locations to determine the ambient noise environment in the vicinity of the site.

This baseline noise monitoring was used as a basis for determining the likely noise effects associated with the proposed development. Different scenarios were modelled to determine the effect of construction noise.

Prior to the commencement, contractor to submit CEMP to planning authority detailing all noise control measures outlined with the EIAR and as may be modified to be implemented during construction. Implementation to ensure construction noise effects reduced to the lowest possible levels at the sensitive receptors and in compliance with typical construction noise limits.

Effects of construction noise on identified birds and otters in the vicinity of the site were also assessed. Waterbirds, otters and other non-domestic animals will temporarily distance themselves from human-made noise sources and effected localities.

Effects during construction will be temporary during louder activities and localised to study area. During construction phase, vibration can arise from piling activities; neither of closest

receptors assessed for vibration predicted to be affected, as they are outside the zone of influence for effects from piling activities.

During Operational Phase, no significant plant / equipment noise effects from proposed development at sensitive receptors. Predicted operational noise from marine traffic will not result in a change in behaviour / effects as per the Institute of Environmental Management and Assessment ('IEMA') / Institute of Acoustics ('IOA') guidelines, as noise from marine movements similar to existing noise levels and characteristics currently occurring in the ambient environment, based on the channel dimensions restricting the number of craft capable of been escorted in and out of the Port of Waterford.

Proposed development will lead to increase in the frequency of noise events associated with marine traffic.

Standard noise nuisance limits will continue to be complied with at sensitive receptors. Due to nature of the proposed development, there will be no likely significant vibration arising during the operational phase.

Proposed development will not affect vibration already experienced at sensitive receptor.

No significant noise effects associated with traffic flow changes as a result of Construction or Operational Phases of the proposed development.

Assessment determined no likely significant effect on noise or vibration arising from the proposed development at either the Construction or Operational Phases.

Port will continue with required monitoring during channel maintenance activities and will investigate any noise complaints.

Based on measured baseline environment, anticipated effects during construction and operation regarding environmental noise and vibration, along with the types of sensitive receptors, their proximity to sources, and the proposed mitigation measures, no significant effects will arise.

#### *Operational Noise*

It was expected that the operational noise from the Proposed Development ship traffic will not result in a change in behaviour / effects with respect to IEMA / IOA guidelines for fauna, as the noise from the ship movements will be similar to the existing noise levels based on the channel dimensions restricting the number of larger ships in or out. However, the proposed development will lead to an increase in the frequency of noise events associated with ship traffic, with the approximate capacity increase of 50% provided by the two new berths.

The additional c.250m extension to the existing wharf, along with the additional shipping capacity, will also facilitate additional port-side crange, container storage, stevedore / shunting operations, forklift movements, HGV loading and unloading, along with general workers' movement and communications. General works on the land side of the wharf are typically controlled to daytime hours of operation (7am to 8pm). The general noise on the wharf is typically LAeq,T of 40dB to 64dB onsite. These works already occur on the site; however, the movement of these activities further north and east along the riverside has been assessed. A reference distance of 80m was used to predict the distance to achieve 55dBA. Based on the typical noise arising, a 55dBA contour of the noise emissions from the site down to typical noise levels is presented in Figure 11-9 below. Based on the contour, the expansion of the port landside facilities, all of the NSRs are outside the 55dBA predicted noise contours.

Operational noise and vibration can result in behavioural disturbance effects, stress and displacement from feeding grounds for various species. It was considered that there are ecological receptors located within and near the proposed development. However, the proposed development will not present new types of noise, and the noise emissions will be similar to existing noise levels recorded in the vicinity. According to the IOA / IEMA Guidance presented in Figure 11-2 above, the potential noise effects from the proposed development will be slight, long-term negative effects for the Operational Phase.

The proposed development operational activities will be in line with existing activities occurring both port side and river side at Belview Port. Based on a review of these activities during visits to the site, no significant sources of vibration are present. Therefore, the proposed future operation will not have a vibration impact on the closest receptors.

There are facilities across the wider port site that operate in tandem with the current Port of Waterford operations. It was considered that during the Construction and Operational Phases of the Proposed Development, these facilities will continue to operate under normal activity levels. Furthermore, it was considered that during the Construction Phase, the port will carry out normal operations, which include shipping traffic, maintenance dredging and port-related activities.

A review was undertaken of the Kilkenny County Council ePlan, Waterford City and County Council ePlan, Wexford County Council Planning Applications website, the National Planning Application Database and An Coimisiún Pleanála Mapping Search to assess any plans or projects that have the potential to result in in-combination effects with the proposed development.

It should be noted that the Port of Waterford have previous planning applications that have been granted within the environs of the Site. However, these works have already been undertaken and, as such, are not considered likely to result in any in-combination effects with the proposed development.

Therefore, no current or previously granted plans or projects were identified in the immediate vicinity that were considered to have the potential to have any in-combination with the proposed development that will result in significant impacts on the integrity of European sites. Two planning applications that had recently been submitted to Kilkenny County Council were identified during the desk-based review and implementing a precautionary approach as neither has been consented, these applications were assessed for potential in-combination effects with the proposed development. These are planning application 2560391 (solar farm at Drumdowney), planning application 2450103 (integrated plasterboard manufacturing facility). Furthermore, the volume of vehicles associated with the proposed development will not increase significantly, resulting in a negligible likely effect

## *12. Underwater noise and vibration*

Comprehensive underwater noise and vibration impact assessment was conducted in accordance with best practice guidance, statutory and non-statutory for Construction Phase and Operational Phase. Monitoring data collected over a one-year duration from a hydrophone (device for measuring sound waves in water) specifically located at Cheekpoint, c.2km from the proposed development, analysed for the purpose of this assessment. Noise levels from different types of sources utilising the port were identified during the monitoring period. Following detailed review of construction phase, general noise levels from construction of the Proposed Development will be contained in the shipping channel close to the source due to the shallow water column (silty floor to water surface), and the acoustic absorption within the mud and silts and will not therefore propagate out to the wider bay / open sea area to any significant extent.

Predicted peak level for worst-case scenario identified proposed piling works as primary underwater sound source contribution. In order to complete a robust assessment, two piling scenarios were assessed; one based on the pile diameter specified for the proposed, and the other representing a worst-case scenario. The predicted impact from piling based on the pile diameter specified for the proposed is below the thresholds for the different subaquatic species. Human receptors in water, typically divers, have lower threshold than aquatic species such as fish, otters, dolphins, for the sound pressure in the water, and it will take 150-200m for the potential discomfort for humans if underwater, to be comfortable during piling works. Even for the worst-case piling scenario, the predicted noise effects were below the threshold for the different subaquatic species within 160m from piling works and 700m for human receptors, such as divers.

Pile driving activity will be carried out as efficiently as possible to reduce the duration of the piling activity. Pile installation works will be limited to 08:00 – 18:00 Monday to Friday, and 8:00 – 14:00 on Saturdays. Prior to commencing piling, or re-starting piling following a notable break (30 minutes or longer), lower drops will be used, prior to ramping up to full drops on the pile. This will substantially reduce the noise emission and enable any species within the area of effect to vacate.

During operational phase, effect confined to vessel traffic at the port.

Underwater noise levels, related to vessels, will remain as they are currently, i.e. elevated levels for a short period in the outer bay as a vessel navigates the channel and elevated levels for short periods (10 to 30 minutes) while the vessel berths in the port.

Underwater noise levels to remain as they are currently, i.e. increased sound pressure levels locally for a short period within the river channel as a vessel navigates the channel and for short periods while the vessel berths in the port.

Underwater noise levels during the Operational Phase of the proposed development will not change the underwater noise levels in any measurable way. No mitigation measures were therefore deemed to be required for the Operational Phase.

A review was undertaken of the Kilkenny County Council ePlan, Waterford City and County Council ePlan, Wexford County Council Planning Applications website, the National Planning Application Database and An Coimisiún Pleanála Mapping Search. At the time of writing this report, there are no other plans or proposed developments that will require underwater construction within the vicinity of the Site or within the wider Waterford Estuary at the proposed commencement of construction activities. The Port is carrying on normal operations, which include shipping traffic and port activities. Maintenance dredging is also carried out at

the Port of Waterford. The operation of dredgers on silty material results in underwater noise levels in the same range as shipping traffic. The cumulative effect of maintenance dredging noise was therefore not regarded as likely to have a significant effect in the overall context of the Proposed Development.

Assessment determined that there would be no likely significant effects on existing ambient underwater noise or vibration arising from the proposed at either construction or operational. Port has left the hydrophone installed. Ongoing monitoring of underwater sound pressure in the river will continue for up to three years after construction phase finalised. Monitoring will provide information on background (absence of shipping) and ambient (shipping noise included), and will be used to validate baseline conditions post-development.



Fig: Hydrophone monitoring location at Cheekpoint

A hydrophone was installed by the Port of Waterford on 15th January 2023, and it remains deployed. The location of the hydrophone, c.2km east of the site, is positioned to determine the ambient background sound levels of the receiving environment. Although underwater sound can travel long distances, the levels recorded at the monitoring position are close enough to detect in-water sources of noise associated with port activities, while ensuring the hydrophone is not within the near or transitional fields of any such source. The position also enables an understanding of general ambient sources of noise in the receiving water.

It is usual to take measurements at several hundred metres or kilometres in deep water and extrapolate the measured levels to what has become known as a 1m source level

### 13. Landscape and Visual

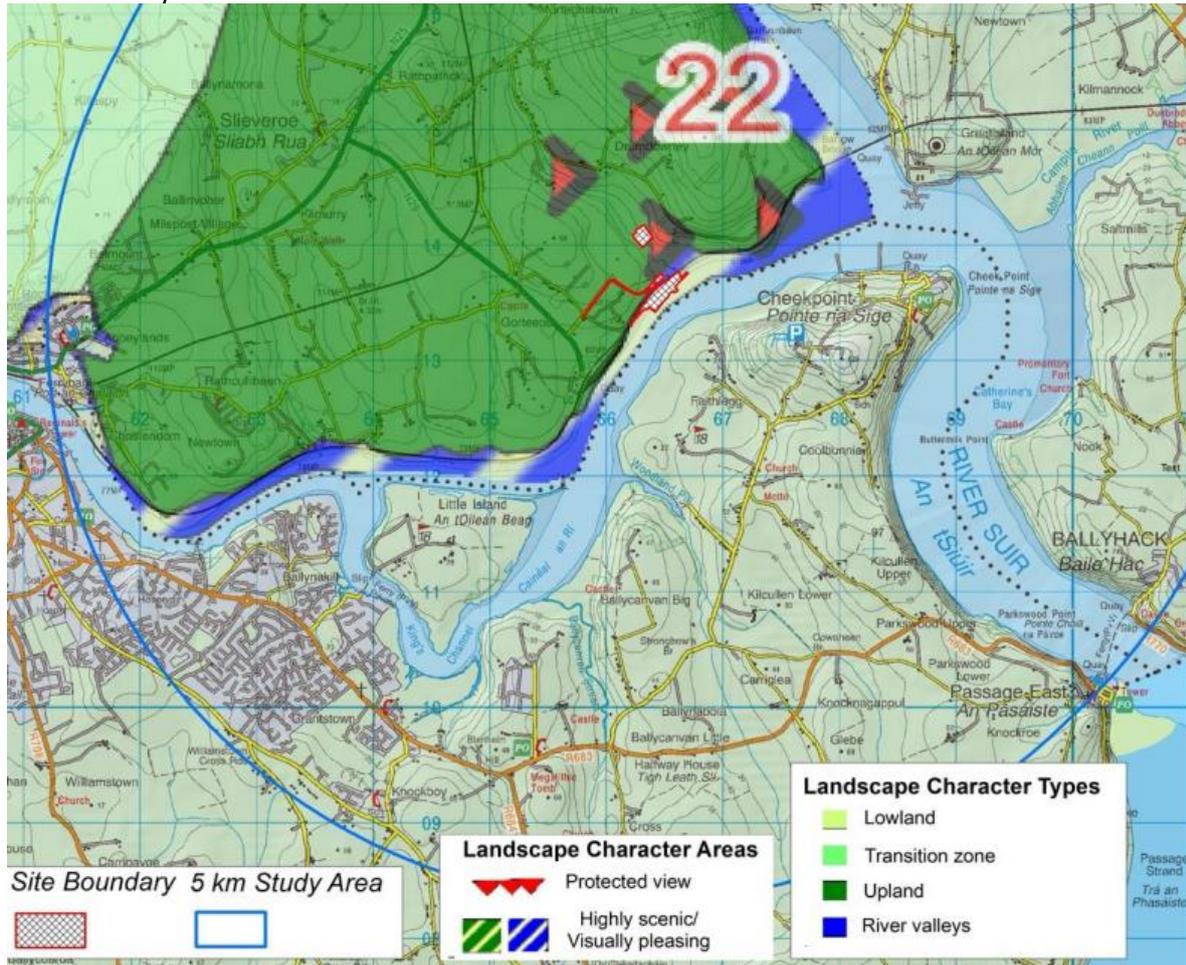


Fig: The host landscape is noted as Upland and River Valley with Protected View 22 looking across where the River Barrow and River Suir meet (at the beginning of the estuary)

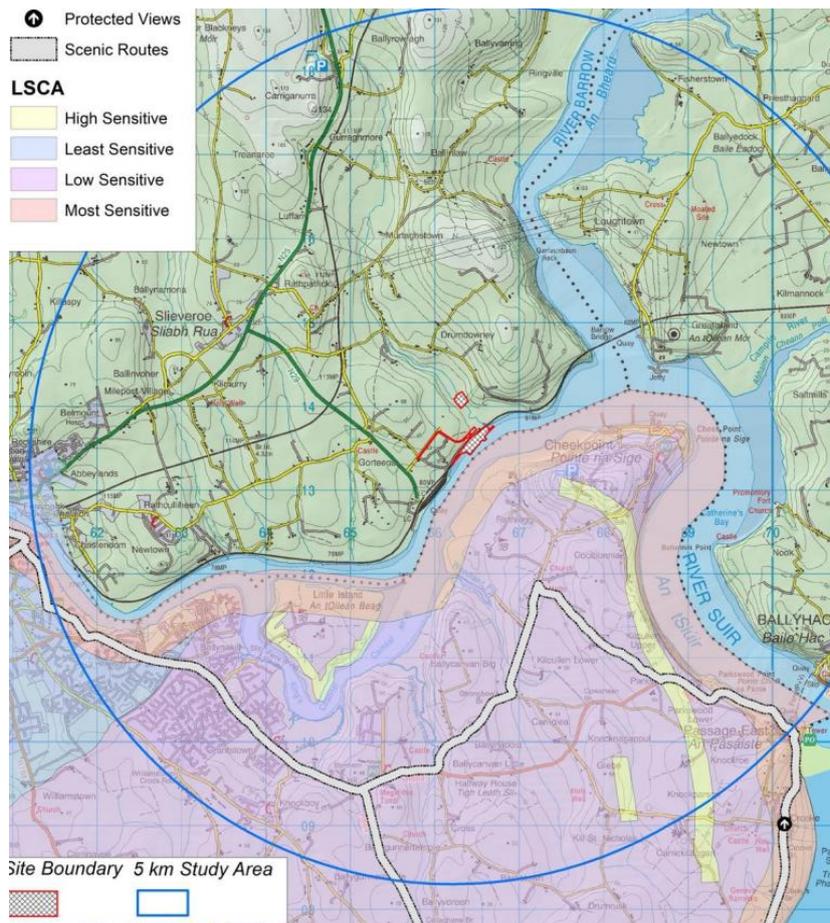


Fig: Study Area for visually affected areas of Co. Waterford with landscape classifications. The area around Cheekpoint estuary/coast is noted as ‘Most Sensitive’

It is noted that the landscape to Co. Wexford across the River Barrow is River Valley which is considered a landscape sensitive to development in their county development plan.

The Landscape Character Value and Sensitivity were assessed for site and surrounding area. This is summarised as follows. The landscape is a complex landscape that comprises a mix of land uses, many of which are associated with Belview / Waterford Port complex. While some portions of the study area present as a rural hinterland setting, this is principally a landscape strongly influenced by industrial, commercial and transport infrastructure land use and residential and urban areas. Within the central study area, there is a range of industrial, residential and rural land uses that weave together in a manner that has depth and diversity, but not necessarily a high degree of land use integrity. Nevertheless, land is well utilised with few neglected or degraded areas.

The draft Ferrybank Belview Framework Plan provides mapped zoning objectives to facilitate the proposed scheme, while the surrounding waterways are typically designated higher sensitivity in the respective county development plan; however, it is not considered that the northern bank is highly sensitive and instead is heavily influenced by numerous contrasting anthropogenic landscape features. The area of Co. Kilkenny to the north of the site transitions from industrial and port-related uses to rural and residential, dissected by the N29 and N25 corridor north to west, with the R711 to the southwest into Ferrybank and Waterford.

To the south of the Site, on the southern side of the county border, the Co. Waterford bank of the Suir and Barrow, and Little Island/Kings Channel generally feature higher landscape integrity and more traditional landscape amenity. The historic value of Waterford Castle and Faithlegg House, with modified grounds to host the respective golf courses, retaining some of the demesne/parkland characteristics which contribute to the wider landscape characteristics, in particular when viewed from the elevated Minaun Hill. Minaun Hill and Cheekpoint feature a slightly more rural landscape, including several woodland / forestry blocks over the steeper sections of the headland. Cheekpoint is a small, stacked settlement which faces northeast to the confluence of the Suir and Barrow. The waterside amenity of Cheekpoint is buffered from Waterford Port and Great Island Power Station by the vegetated headland of Drumdowney Upper, one of the areas in the northern central study area with a more cohesive rural character. This is reiterated by the presence of the scenic designations within the study area, being located over Drumdowney Upper, and in Waterford across the upper sections of the headland between the R683 and Faithlegg.

The eastern shore of the River Barrow and eastern periphery of the study area are the most uniform rural components of the study area, with the exceptions to this being the Great Island Power station and the slightly higher landscape values at Dunbrody Abbey and Kilmokea Manor, both of which are set more than 3km from the Site. The Wexford CDP does not identify specific scenic designation but rather categorises different features likely to have higher sensitivity, including routes with views of waterways.

Considered both site and study area have a landscape sensitivity of medium.

Landscape Impact magnitude was assessed for both the construction and operational phases. During construction phase, there will be permanent physical effects to land cover which will not be reversible, including land reclamation.

Overall, the magnitude at the operational phase will be 'medium' given the scale and intensity of industrial facility in landscape setting.

A Visual Impact Assessment that involved assessing eleven viewpoints was undertaken.



Fig: Viewpoints as per Landscape and Visual Impact Assessment.

Viewpoints were selected based on the following:

- Key Views (from features of national or international importance) ('KV');
- Designated Scenic Routes and Views ('SR/SV');
- Local Community views ('LCV');
- Centres of Population ('CP');
- Major Routes ('MR'); and,
- Amenity and heritage features ('AH').

A summary of impacts on all selected viewpoints is tabulated in Chapter 13 Landscape of EIAR.

Photomontages were prepared to fully illustrate proposed development. For the vast majority of the viewpoints, proposed development not be clearly visible due to intervening screening by terrain or vegetation.

Main mitigation measure for proposed development will be cohesive siting with surrounding land uses of similar form and character.

Area benefits from natural screening provided by landforms, vegetation, and built elements. The existing port is a narrow and enclosed section of river corridor. Steep sided hills to east, west, and north serve to screen much of the study area from view.

With regard to Minaun Hill, Co. Waterford to the southeast, the higher elevation areas also result in clear views of proposed development and surrounding area.

As an extension of existing port facility, proposed development will be much less likely to give rise to significant landscape and visual impacts than new or separate facility.

Proposed development cannot be readily screened from view and is this is not unacceptable in the context of existing working port complex.

Cumulative effects, these have been predicted to be no more than low in the immediate surroundings of the proposed development, along V22 in Co. Kilkenny, reducing to Low-negligible and Negligible in the wider landscape, limited to locations where the proposed development will be visible in combination with the wider Belview / Waterford Port Context. This results in a final significance of no more than slight at select locations along V22, while the majority of views presented in this assessment would experience a final significance of Slight-Imperceptible or Imperceptible

Overall, it is considered that landscape and visual impact of proposed development will not result in any significant residual impacts.

Both landscape and visual impacts considered of 'moderate' significance, even in immediate vicinity of site. Moderate-level impacts deemed acceptable for receiving landscape.

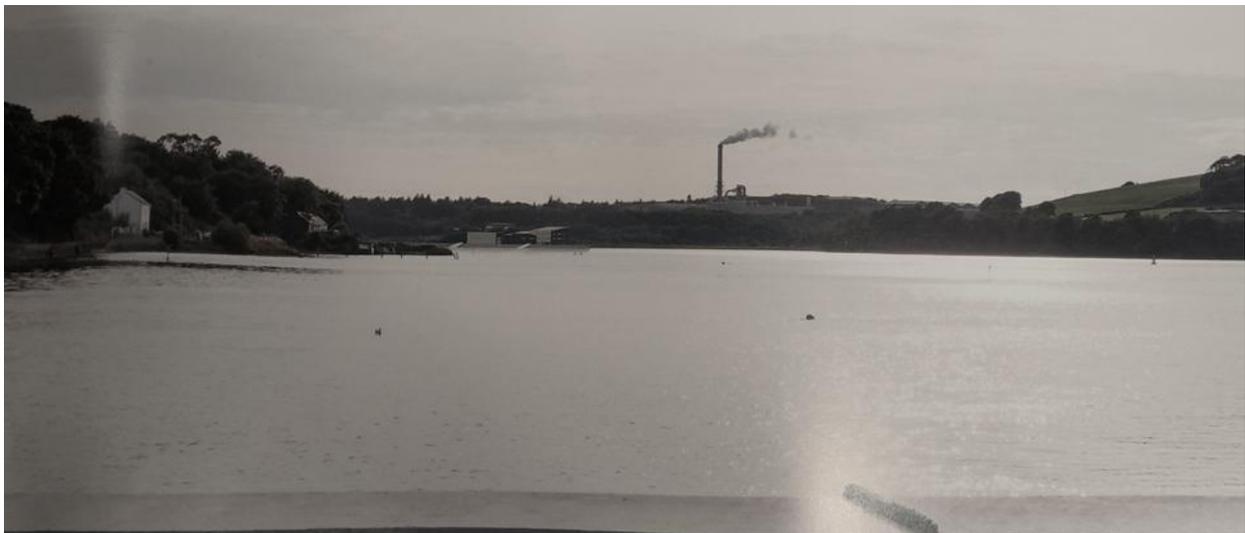


Fig: Viewpoint 4 from photomontage. Proposed ORE Terminal from Cheekpoint Pier.



Fig: Viewpoint 5 from photomontage. Proposed ORE Terminal from local Riverwalk SE of Cheekpoint



Fig: Viewpoint 6 from photomontage. Proposed ORE Terminal at Belview from SW of Cheekpoint, W of Minaun Hill

## 14. Terrestrial Cultural Heritage



Fig: Terrestrial Archaeological Assessment Areas

Assessment was based on onsite inspection, cartographic and documentary research.

No recorded archaeological sites listed in the Record of Monuments and Places for the areas directly affected by proposed development or in immediate vicinity.

2 no. buildings listed in the Record of Protected Structures (RPS) in the vicinity of site. A mill (RPS D136) and glass house (RPS C483).

No other terrestrial archaeological sites or landscape anomalies that might be interpreted as archaeological sites were identified in the course of the study.

Effect of proposed development on sub-surface terrestrial environment imperceptible.

No physical effect on the ruined corn mill (RPS D136), which borders the site enclosed by a permanent security fence.

No effect on the mill stream or dock, which are already bridged by the existing access road. Additionally, there will be no effect on the ruins of Glass House (RPS C483), which lies outside the site boundary.

No effects on archaeological resource of site during the operational phase.

Given that the proposed terrestrial elements of the proposed development will take place on already significantly altered (late 20th century) terrain, no specific archaeological mitigation was considered to be necessary.

The protected structures adjacent to the site as listed above were assessed by Kilkenny County Council Architectural Conservation Officer) who is recommended conditions be attached for a strategy of vibration monitoring for Gorteens Old Mill shall be compiled.

### *15. Underwater Cultural Heritage*

In-depth assessment of potential effects of proposed development on underwater and foreshore cultural heritage carried out.

The survey work undertaken included an underwater dive survey of the existing quays and downstream at the railway bridge on 22nd June 2022 under Archaeological Licence 22D0060. A further supplementary intertidal and measured survey of the old quay extent at Gorteens townland was undertaken on the 21st June 2024.

No other archaeological features were identified during the surveys; however, the riverside works will also extend the berths into the river channel to the northern edge of the navigation channel, into areas that have not yet been developed. As such, although unlikely, the area will have the potential to contain possible archaeological materials. Similarly, the capital dredging works will take place within an area of the river, adjacent to the existing port; however, in an area not previously subject to dredging. As such, although unlikely, there may be the potential that materials in this area could contain possible archaeological materials.

A short stone quay wall on the foreshore was examined in 2002, uncovering more stonework beneath it. The stone quay, which lay parallel to the river, had uneven drystone construction.



Fig: Photo in EIAR containing length of historic quay and ruined Gorteens Old Mill taken in 2022

The north-eastern end was covered with artificial infill, and the top was repaired with cement. It was re-examined in 2022 and recorded in detail in 2024 for current project.

No other archaeological features were identified during the surveys; however, the riverside works will also extend the berths into the river channel to the northern edge of the navigation channel, into areas that have not yet been developed. As such, although unlikely, the area will have the potential to contain possible archaeological materials. Similarly, the capital dredging works will take place within an area of the river, adjacent to the existing port; however, in an area not previously subject to dredging. As such, although unlikely, there may be the potential that materials in this area could contain possible archaeological materials.

Proposed development will extend berths and rock armour that will cover the historic stone quay and extend into the river channel.

Construction work will follow guidance from the Department of Housing, Local Government and Heritage ('DHLGH'), including archaeological monitoring and use of a terram membrane to protect the quay. Archaeological monitoring of specific initial construction activities undertaken within the nearshore and foreshore area, including capital dredging and the placement of the first layer of rock infill, will be completed in accordance with a series of measures

All ground and riverbed works will be monitored under a DHLGH licence.

No significant underwater archaeological effects predicted during the operational phase following implementation of appropriate mitigation measures.

It is stated that the historic quay shall be recorded in detail and covered. It is advised that a photogrammetry survey of the quay wall be undertaken prior to covering of same: the applicant shall liaise with both the Planning Authority and the NBHS and NMS sections of the Department of Housing, Local Government and Heritage in this regard

#### 16. Material Assets – Traffic and Transport

A Traffic Impact Assessment undertaken by Roadplan Consulting was submitted with the application.

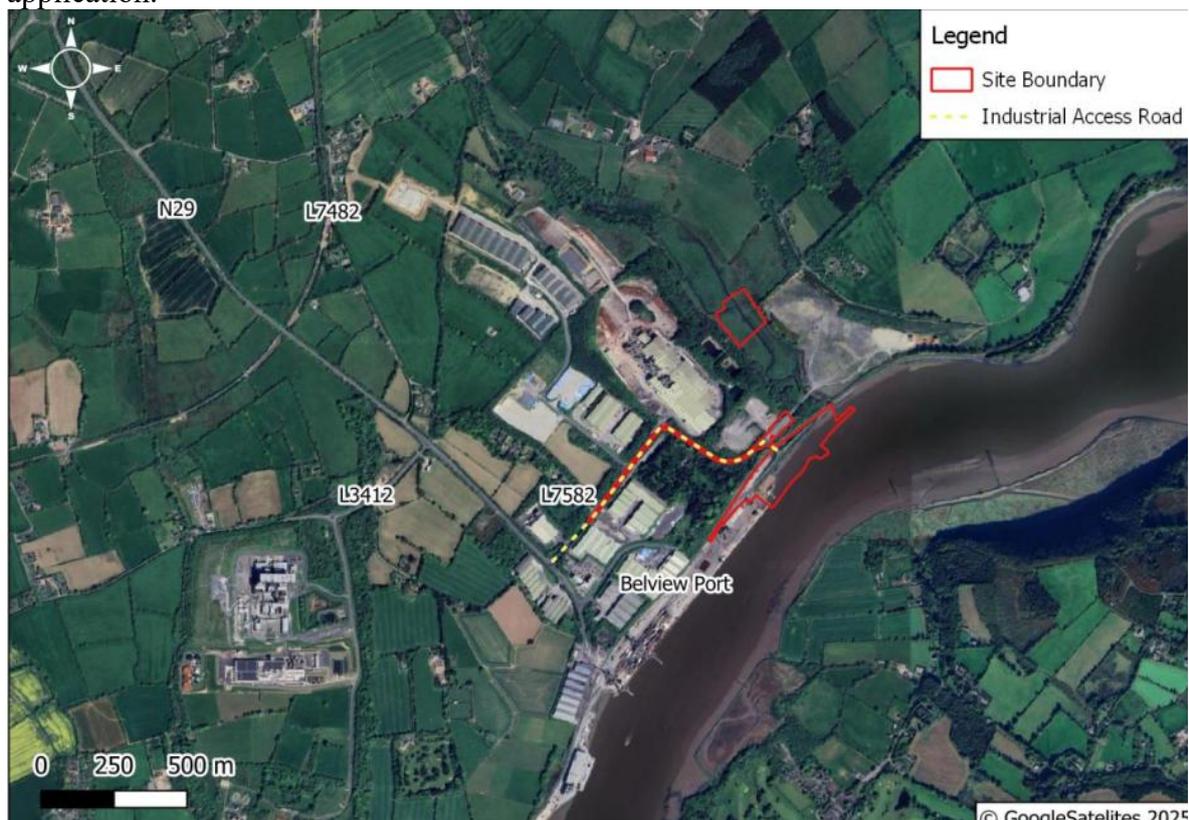


Fig: N29 and L7582 leading to Belview Port/application site

All construction traffic will travel via N29/L7582 Industrial Access Road priority junction in order to gain access to the construction site. A 30kmph speed limit zone applies.

Busiest period of construction works will occur during the filling works, when it is expected to import 160,000 tonnes of fill material over a 5-month period.

During filling phase of construction works, estimated approximately 87 HGVs per day arriving at the site over a period of 5 months.

Findings of detailed assessment confirmed even during peak construction phase, existing N29 / L3412 / L7482 crossroads junction will continue to operate within capacity with no queues and minimal delays during the AM and PM peak hour.

Once operational, predicted that on a peak day proposed development will involve ORE facilities operational and also the unloading of a large bulk carrier, it will result in an additional 89 trips in the AM peak hour to and from.

Detailed traffic modelling completed for all of the surrounding junctions and roundabouts (computer programme PICADY for the priority junction and ARCADY for the roundabout was carried out) confirmed that they will continue to operate within capacity with no queues and minimal delays during the AM and PM peak hours. The National Transport Authority (NTA), along with Waterford City and County Council (WCC) and Kilkenny County Council (KKCC), have launched a new bus network plan for Waterford. A new bus route from Belview Port to Waterford City has been included. The bus will operate during weekday peak times.

A conservative approach was taken when assessing the worst-case scenarios' potential traffic and transport effects; however, overall, it was assessed that the proposed development will not have a significant long-term effect on the existing road network. The road network with the proposed development operational will still operate within capacity in 2029, 2034 and 2044. With regard to parking, traffic generated by the proposed development will approach the port at the downstream entrance to the port. Parking for ORE employees, 70 no standard spaces, will be provided across two locations. The elevated site north of the railway will accommodate 35 spaces and a further 35 spaces will be provided at quayside level adjoining the railway. Spaces for people with special requirements are proposed at each facility building, 6 no in total. Pedestrian routes from car parking areas to the ORE facilities buildings are to be provided.

#### *17. Material Assets –Energy and Waste*

Desk-based assessment undertaken to evaluate proposed development's impact on material resources, energy demand, and waste generation.

During construction phase, engineering fill materials such as quarry rock required, sourced locally where practicable. National production figures indicate demand will not significantly affect the national supply.

Operationally, material resources will include marine gas oil for support vessels, maintenance equipment for ORE installations and standard office and welfare supplies. Increase in fuel and equipment demand is expected to have an imperceptible impact on national resources. Energy requirements during construction will be temporary and not significant.

The port's existing 750kV substation will be replaced, and the proposed development will increase the Port's total annual energy demand by 26%, reaching approximately 1.81 million kWh. This still represents only 0.15% of national energy demand for transport and storage sector.

Photovoltaic panels will contribute up to 273,000 kWh annually, reducing reliance on grid electricity. Waste generated during construction will include typical construction and

demolition ('C&D') waste. Reusable materials will be retained on-site, and all other waste will be managed by licensed contractors in compliance with legislation.

Operational Phase will generate office waste, hazardous waste (e.g. WEEE, oils), ORE maintenance waste and ship-generated waste.

All waste to be segregated and managed in accordance with best practice and legal requirements.

In terms of waste, the Port carries out maintenance dredging under a Dumping at Sea Permit, issued by the EPA, Reg. No. S0012. However, there will be no cumulative or in-combination effect, as this Permit refers to the sediments that are deposited at a designated location defined within this Permit, in the coastal waters outside the Waterford Estuary. Volume of waste generated is not expected to place a significant burden on national waste infrastructure.

Proposed development has a 45-year design life, with potential for extension depending on ORE project lifespans.

In terms of indirect effects, the proposed development will provide infrastructure for, and support to, the production of renewable energy. The indirect effect will therefore be to increase the contribution of renewable electricity to the national energy balance and reduce the dependence of the Irish national grid on imported energy. This will result in a slight positive indirect effect.

If decommissioned, site will revert to general port use, with waste policies updated accordingly. Overall, effects on material resources, energy, and waste arising from construction and operational phase on national material resources and infrastructure are not considered significant.

#### *18. Material Assets – Water and Wastewater*

Water for the proposed development will be supplied via existing East Waterford Water Supply Scheme, with a temporary connection during construction.

A pre-connection enquiry to enable the sewage system to be expanded to include the Proposed Development was submitted to Uisce Éireann on 5th July 2023. On 29th August 2023, Uisce Éireann issued a Confirmation of Feasibility to the effect that the required wastewater connection was feasible.

No significant impact on water infrastructure is anticipated. Wastewater during construction will be managed via temporary facilities.

Operational wastewater will discharge to the public sewer and be treated at the Waterford City Wastewater Treatment Plant, which has sufficient capacity. The proposed development will not generate process wastewater or trade effluent. The only water requirements will be for potable water and water for welfare / hygiene facilities within the ORE support facilities. The only discharge to sewer will consist of foul water from welfare and hygiene facilities. Therefore, no significant cumulative effects on the EWWSS or the Waterford City WWTP have been predicted. A new foul sewer line and pumping station is to be installed as part of the development.

Overall, no significant effects on water supply or wastewater infrastructure are predicted.

### *19. Interaction of Environmental Impacts*

In accordance with EIAR best practice procedures, the relevant interactions between various aspects of the receiving environment have been addressed in the specific chapters of the main EIAR.

These interactions are then listed in Chapter 19 of the EIAR.

Waste produced as a result of demolition and construction work is a factor in a number of different environmental effects, such as water pollution.

### *20. Schedule of Environmental Commitments*

As part of the EIAR, all of the mitigation measures arising from each of the individual assessments for both the construction and operational phases were summarised in an overall Schedule of Environmental Commitments that is presented at the end of Volume 2 of the EIAR. Port of Waterford Company is fully committed to implementing all these commitments. The implementation of these measures will ensure that the proposed development will not result in any significant adverse impacts on receiving environment.