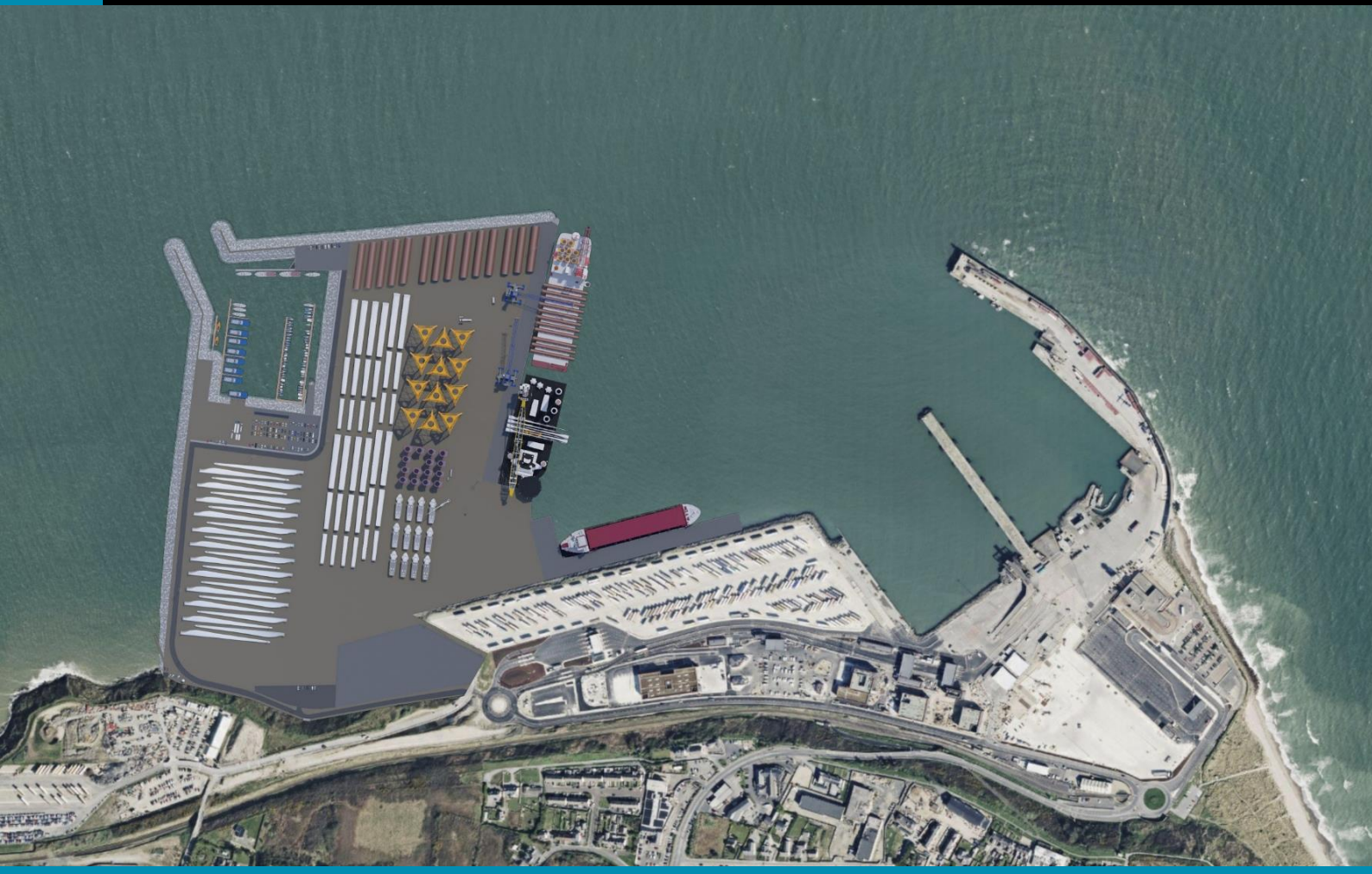
Iarnród Éireann
Irish Rail

Rosslare ORE Hub

EIAR Non-Technical Summary

Volume 1



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NICHOLAS O'DWYER an RSK company

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LIST OF ABBREVIATIONS

CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
cSPA	Candidate Special Protection Area
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EU	European Union
GDG	Gavin and Doherty Geosolutions Limited
GHG	Greenhouse Gas
GW	Gigawatt(s)
ha	Hectare(s)
HGV	Heavy Good Vehicles
IÉ	Iarnród Éireann - Irish Rail
INIS	Invasive Non-Indigenous Species
IEMA	Institute of Environmental Management and Assessment
KER	Key Ecological Receptors
MAP	Maritime Area Planning Act
LoLo	Lift-on, Lift-off
M	Metres
MMO	Marine Mammal Observers
MU	Management Unit
m CD	Metres Chart Datum
NO_2	Nitrogen Dioxide
NOD	Nicholas O'Dwyer Limited
NTS	Non-Technical Summary
O&M	Operations and Maintenance
oCEMP	Outline Construction Environmental Management Plan
ORE	Offshore Renewable Energy
PM	Parts per Million
REAR	Rosslare Europort Access Road
PDB	Proposed Development Boundary
RNLI	Royal National Lifeboat Institution
RoRo	Roll-on, Roll-off
SAC	Special Area of Conservation
S.I.	Statutory Instrument
SPA	Special Protection Area
SSC	Suspended Solids Concentration
TII	Transport Infrastructure Ireland
WFD	Water Framework Directive
ZoI	Zone of Influence

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1 INTRODUCTION

1.1 INTRODUCTION

Nicholas O'Dwyer Limited (NOD) and Gavin and Doherty Geosolutions Limited (GDG), and associated specialists (i.e., MERC Partners, Cork Ecology, SMEC Ltd, Archaeological Diving Company Limited., Pinnacle Consulting Engineers Limited, AWN Consulting, NASH Maritime Limited, and Macro Works Limited) have prepared an Environmental Impact Assessment Report (EIAR) on behalf of Iarnród Éireann - Irish Rail (IÉ) for the Rosslare Offshore Renewable Energy (ORE) Hub (hereafter referred to as the "ORE Hub" or the "Proposed Development"). The Proposed Development consists of a range of integrated infrastructure elements designed to support the full lifecycle of ORE projects.

The EIAR has been prepared to support an application by IÉ for development permission which is made to An Coimisiún Pleanála under section 291 of the Planning and Development Act 2000 to 2025 (Planning Acts), as inserted by section 171 of the Maritime Area Planning Act 2021 (S.I. No. 488 of 2022), as amended (MAP Act).

1.2 THIS DOCUMENT

This document is the Non-Technical Summary (NTS) of the EIAR for the ORE Hub. It outlines the Proposed Development, describes the likely significant environmental effects, and explains the measures proposed to avoid or mitigate adverse environmental effects. A NTS of the EIAR is required by the EU Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by 2014/52/EU) (the amended EIA Directive) and Irish legislation. The purpose of the NTS is to present the key findings of the EIAR in clear, accessible language so that members of the public, stakeholders, and decision-makers can understand the potential environmental effects of a proposed development without needing technical expertise. This requirement ensures transparency and supports public participation in the planning process.

1.3 SITE LOCATION

The Proposed Development is located in a site immediately adjacent to the Rosslare Europort, which is situated in County Wexford. The port lies southeast of Wexford Town and is strategically positioned at the southern end of the Irish Sea, offering direct maritime access to key offshore wind development zones in the Celtic Sea and Irish Sea.

Rosslare Europort is bounded by the Irish Sea to the east, the village of Rosslare Harbour to the west, and a mix of residential, commercial, and transport infrastructure in the immediate vicinity. The port is accessible via the N25 national primary road and is connected to the national rail network, providing multimodal transport options for cargo and personnel.

The Proposed Development Boundary (PDB) (i.e., the area where development permission is sought to construct and operate the Proposed Development) encompasses a total area of 80.3ha, lying mostly within the marine area, and includes areas for dredging and land reclamation. The site of the Proposed Development is defined by the red line PDB shown in Figure 1.1.

Figure 1.1: Site location and Proposed Development Boundary

2 THE EIAR

2.1 REQUIREMENT FOR AN EIAR

An EIA Screening statement for the Proposed Development was prepared in June 2022. The EIA Screening identified that, as the Proposed Development is of a class listed under Schedule 5 of the Planning and Development Regulations 2001, as amended[1], it is subject to mandatory EIA and therefore requires an EIAR to be prepared and submitted with the application for development permission.

2.2 PURPOSE OF THE EIAR

The EIAR presents the findings of a systematic assessment of the likely environmental effects of proposed developments, informing both the public and relevant authorities. It includes the information required by Article 5(1) and Annex IV of the amended EIA Directive, as transposed in Schedule 6 of the Planning and Development Regulations 2001 (as amended). The EIAR is prepared to support An Coimisiún Pleanála in carrying out the EIA for the Proposed Development and aid decision-making on development permission.

2.3 EIAR APPROACH

The EIAR reports on the likely significant effects of the Proposed Development on the existing (or baseline) environment, alone and cumulatively with other projects, during construction and operation, and proposes appropriate mitigation and monitoring measures where required. The baseline describes the existing environmental conditions against which impacts of a project and effects on sensitive receptors or features are assessed. The baseline was established through desk-based studies, stakeholder engagement and consultation, and specialist surveys and monitoring. The baseline characterisation provides an understanding of the value of each environmental receptor or feature and its sensitivity to the potential impacts associated with construction and operation of the Proposed Development.

Full details of the topic-specific baseline and the data sources and survey and monitoring methods employed for the baseline studies are provided within the topic-specific chapters of EIAR Volume 2 and the associated Technical Appendices contained in Volume 3.

2.3.1 SCOPING AND CONSULTATION

The focus and scope of the EIAR and all supporting technical studies has been developed in full consultation with statutory and non-statutory stakeholders described in EIAR Chapter 4: Scoping and Consultation. The EIA Scoping Report outlined how each environmental topic would be assessed, it described the study area for each subject, it detailed the assessment methodology—including desk-based research, surveys and consultations, and summarised the current baseline conditions as well as potential impacts that might occur during construction and operation, along with their significance.

[1] Schedule 5 Part 1 8 (b): Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1,350 tonnes.

The scope for the EIAR was finalised via the issue of the EIA Scoping Report to the following topic relevant stakeholders in February 2023:

- Bord Iascaigh Mara
- Commissioners of Irish Lights
- Department of Transport Marine Survey Office
- Inland Fisheries Ireland
- Irish Coast Guard
- Marine Institute
- National Monuments Service Underwater Archaeological Unit
- National Parks and Wildlife Service
- Royal National Lifeboat Institution (RNLI) Wexford
- Sea Fisheries Protection Authority
- Wexford County Council.

In addition, scoping consultation meetings were held with key stakeholders including the Commissioners of Irish Lights, the Department of Transport Marine Survey Office, the National Monuments Services' Underwater Archaeological Unit, and the National Parks and Wildlife Service.

Following changes to the initial designs shared with stakeholders in December 2023, the Project Team engaged in further public consultation between Wednesday 22nd May 2024 and Sunday 23rd June 2024 with stakeholders including existing users of the facilities at Rosslare Europort, and with elected members and the local community who were invited to attend online and in-person events on the emerging preferred option for the ORE Hub. Engagement with the local community and stakeholders has continued up until submission of the application for development permission.

2.3.2 Mitigation and Monitoring

Mitigation is a central feature of the design and environmental assessment process. There are three types of mitigation considered in the EIAR.

- **Primary mitigation** relates to the location, design or timing of the project which are intended to avoid and reduce significant adverse effects on the environment. The primary mitigation measures are inherent in the proposals for the ORE Hub which are described in EIAR Chapter 5: Assessment of Alternatives and Project Design, and Chapter 6: Project Description.
- **Secondary mitigation** is further activity required to achieve the anticipated outcome where potentially significant adverse effects have not been avoided by project location, design or timing or require to be further reduced to within acceptable levels.
- **Tertiary mitigation** includes measures that are required regardless of an EIA assessment. It includes measures that are set out in legislation and/or are standard sectoral guidance and best

practices. These measures are standardised and are covered by law or other controls. As such, these measures are not presented in extensive detail in the EIAR.

The assessment reported in each environmental topic chapter of the EIAR includes consideration of primary mitigation (design) and tertiary mitigation (best practice) and recommends secondary mitigation measures where potentially significant adverse effects have not been eliminated by design.

In cases where residual effects (i.e., environmental effects which remain following the application of all mitigation) are uncertain or the effectiveness of proposed mitigation measures requires validation, commitments for monitoring are set out in the relevant environmental topic chapters of the EIAR.

A summary of the secondary mitigation measures and monitoring for each environmental topic is provided Chapter 26 of the EIAR.

2.4 STRUCTURE OF THE EIAR

The EIAR is presented in three volumes:

- Volume 1: Non-Technical Summary
- Volume 2: Introductory, Environmental Topic, and Concluding chapters
- Volume 3: Technical Appendices.

Each of the environmental topic chapters of the EIAR (Volume 2) describes the consultation relevant to that topic, a baseline characterisation, a description of impacts and assessment of significance of effects, and mitigation measures and monitoring requirements where relevant. The environmental topic chapters refer to Technical Appendices contained in Volume 3, as relevant. The outline of the EIAR is presented in Table 2.1.

Table 2.1: EIAR chapters

Section	Chapter
Introductory chapters	1 - Introduction and Methodology
	2 - Legislation and Policy Context
	3 - Need for the Project
	4 - Scoping and Consultation
	5 - Consideration of Alternatives and Project Design
	6 - Project Description
Environmental topic chapters	7 - Soils, Geology, Hydrogeology and Contamination
	8 - Coastal Processes
	9 - Water Quality and Flood Risk
	10 - Terrestrial Ecology

Section	Chapter
	11 - Benthic Ecology
	12 - Fish, Shellfish and Turtle Ecology
	13 - Marine Mammals
	14 - Ornithology
	15 - Commercial Fisheries and Aquaculture
	16 - Cultural Heritage
	17 - Traffic and Road Transport
	18 - Air Quality
	19 - Noise and Vibration
	20 – Shipping and Navigation
	21 – Population and Human Health
	22 - Material Assets
	23 – Seascape / Landscape and Visual Assessment
	24 - Climate
Concluding chapters	25 - Interactions
	26- Summary of Mitigation Measures and Monitoring

2.5 THE EIAR TEAM

Article 5(3)(a) of the amended EIA Directive states that *"the developer shall ensure that the environmental impact assessment report is prepared by competent experts".* The Environmental Protection Agency (EPA) *Guidelines on the Information to be contained in Environmental Impact Assessment Reports* published in 2022 (EPA EIAR Guidelines), highlight the need for competent experts to be involved in the EIA process and in the preparation of the EIAR. Accordingly, a team of specialist consultants, headed by highly qualified environmental consultants and EIA practitioners from GDG and NOD, has prepared the EIAR on behalf of IÉ and are identified in EIAR Chapter 1: Introduction and Methodology.

In each of the EIAR environmental topic chapters, contributing experts provide a statement of authority and explain the methods of data collection and assessments that were carried out with reference to applicable discipline or industry standards and government guidance.

3 THE PROPOSED DEVELOPMENT

3.1 NEED FOR THE PROJECT

The ORE Hub is part of IÉ's strategic plan for Rosslare Europort. The ORE Hub will enable efficient handling and storage, marshalling, staging and integration of ORE components for offshore wind farm projects. The ORE Hub aligns with policy frameworks across all governance levels and is critical to meeting Ireland's climate and energy security goals.

Offshore wind farms being progressed in Ireland are proposed in direct response to Ireland's Climate Action Plan 2025 target to have 5 Gigawatts (GW) of offshore wind operational by 2030, with further aims of 20GW of ORE generation by 2040 and 27GW by 2050 set out in the Government's 2024 '*Future Framework for Offshore Renewable Energy*' and in the 2024 '*Powering Prosperity Ireland's Offshore Wind Industrial Strategy*'. There are currently five applications for consent for offshore wind farms in the Irish Sea (Ireland's east coast) targeting for deployment by 2030. Further developments are planned for the Celtic Sea (Ireland's south coast) under the South Coast Designated Maritime Area Plan. The Proposed Development seeks to make an important contribution by facilitating ORE developments.

In 2021, the Minister for Transport undertook an assessment of the options for Irish State ports to facilitate the ORE sector, and published its *Policy Statement on the facilitation of Offshore Renewable Energy by Commercial ports in Ireland* wherein it is stated that a multiport approach will be required to address the needs of the ORE industry, to deliver on the ORE targets set out in national policy, and to take advantage of the economic opportunity created by the roll out of fixed and floating offshore wind in Irish waters.

By providing the facility to enable offshore wind development in the Irish Sea and Celtic Sea, the proposed Rosslare ORE Hub will support the achievement of the climate action objectives and will contribute to energy security. The proposed Rosslare ORE Hub is therefore considered urgent and in the public interest.

3.2 OVERVIEW

IÉ is applying for development permission for the Rosslare ORE Hub which includes capital dredging to achieve navigable depths for vessels delivering ORE components; land reclamation to create a storage area for these components; and construction of two new berths to facilitate loading and unloading of ORE components. The land reclamation works include infilling the existing small boat harbour, after the construction of a new small boat harbour. The Proposed Development also includes the installation of a new slipway and facility for local clubs, such as the Sea Scouts.

The purpose of the Proposed Development is to provide a facility for the efficient handling and storage, marshalling, staging and integration of ORE components to facilitate installation of offshore wind energy projects by ORE developers and operators. The Proposed Development is designed to provide facilities that accommodate a wide range of infrastructure uses, both for current requirements and anticipated future needs. For instance, the Proposed Development could be used for traditional port activities if required, including during periods of reduced ORE-related activity. Refer to EIAR Chapter 6: Project Description for further detail.

The PDB includes an area for capital dredging of 48.4ha and 27.7ha of reclamation from the sea providing operational areas for the storage, marshalling, staging and integration of ORE components, traditional Ro-Ro port activities and a new replacement 'Small Boat' harbour. The new Small Boat Harbour will be securely separated from the much larger vessels and operations in the main ORE facility.

Proposals for the new Small Boat Harbour include marine enabling works and installation of services for potential future developments which may include Operations and Maintenance (O&M) facilities

required by the ORE industry for major repairs and replacement of turbine components and a new RNLI base. Undertaking these advance works as part of the Proposed Development ensures construction and environmental efficiencies while marine plant is readily available. The buildings and facilities required for these potential future uses are not included in the Proposed Development.

The key elements of the Proposed Development are listed in Table 3.1 and shown in Figure 3.1

Table 3.1: Summary of the Proposed Development

Development / Activity	Description
Site preparation and mobilisation	• Site clearance involving removal of the existing small storage sheds, pontoons, gangways, timber mooring posts and timber structures at the small boat harbour; and establishment of a temporary site compound.
Capital dredging	• The navigation channel will be dredged to a depth of -10 metres Chart Datum (m CD). The berth pocket for ORE Berth 1 will be dredged to a depth of -12m CD. The total area to be dredged is 48.4 hectares (ha).
Land reclamation	• Land reclamation including infilling of the small boat harbour, using the marine dredged material and imported rockfill to create 27.7ha of land for the Proposed Development. • Installation of rock armour revetments around the perimeter of the reclamation area
ORE Storage Area	• Creation of an ORE Storage Area of 19.7ha, within the reclaimed lands, for the handling and storage, marshalling, staging and integration of ORE components.
ORE Berth 1	• Construction of ORE Berth 1, a heavy lift berth with a continuous open piled quay length of 330 metres (m).
ORE Berth 2	• Construction of ORE Berth 2, with a continuous open piled quay length of 240m.
ORE Compound	• A compound area of 0.2ha for installation of temporary modular buildings for site offices, welfare, logistics, and parking to service ORE developers.
New Small Boat Harbour	• Construction of a new Small Boat Harbour consisting of: ○ a 50m long fixed quayside berth and an 80m long floating pontoon ○ a 2.4m wide pontoon to provide 64 berths ○ a 127m long floating pontoon with 10 no. berths ○ 1 no. fixed berth for emergency service vessels ○ 10 single storey storage sheds ○ a slipway for launching and recovery activities ○ marine enabling works and installation of services to provide for potential future uses.
Sea Scouts Facility	• Construction of a slipway to the western flank of the newly reclaimed lands with a new storage shed and parking to accommodate local clubs, such as the Sea Scouts.

Development / Activity	Description
Ancillary works	• Site access to the Proposed Development and a new access road and footpath/cycle track to the proposed new Small Boat Harbour. • A medium voltage single storey electrical substation and switch room • Lighting • Fencing and security measures • Parking • Waste management facilities • Fire water network and storage • Landscaping • Foul water network and pumping infrastructure • Water mains network • Surfacing and drainage • Environmental enhancements

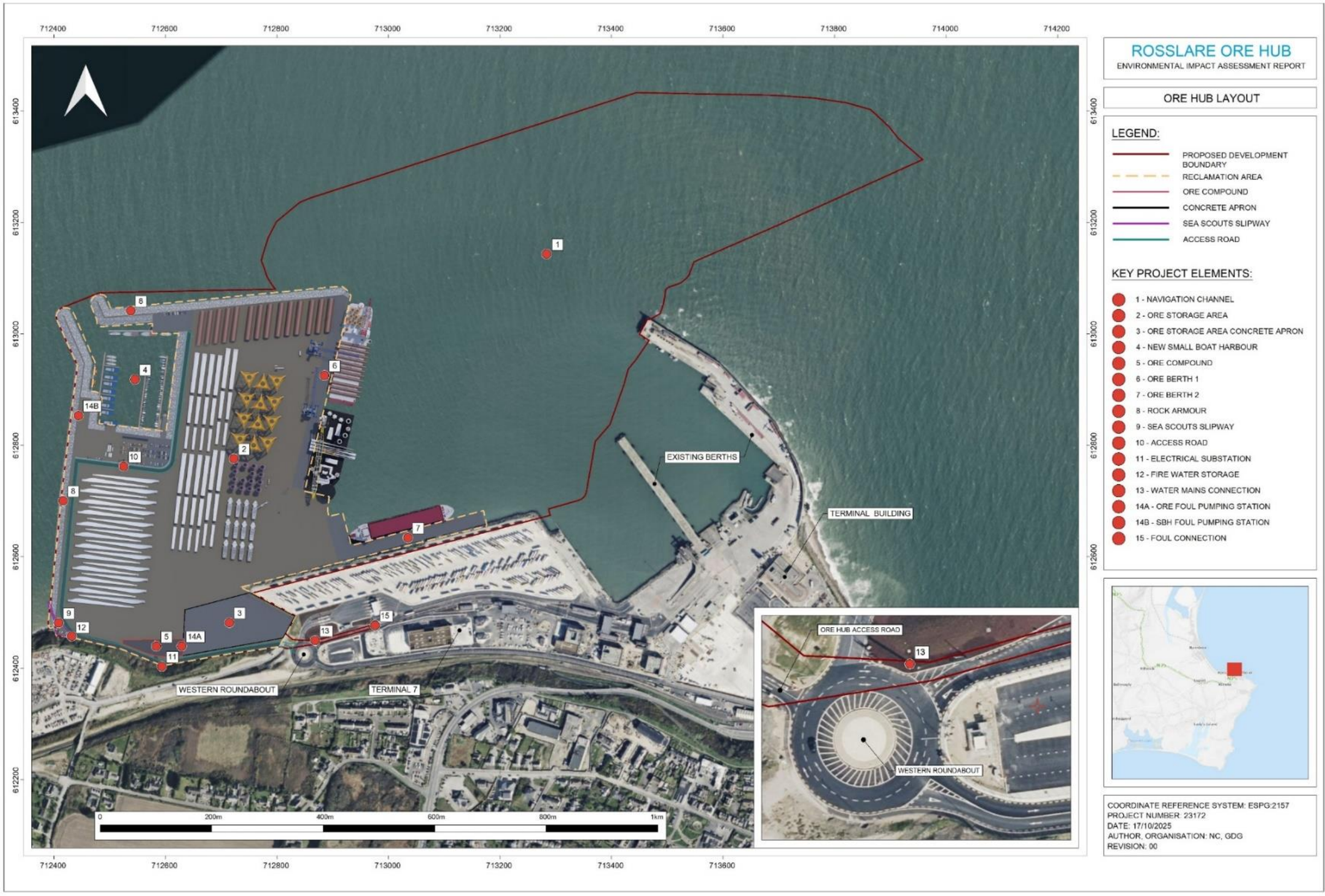

Figure 3.1: General layout of the Proposed Development

3.3 Alternatives Considered

In accordance with Article 5(1)(d) and Annex IV of the amended EIA Directive, when designing the Proposed Development, alternative options were identified and evaluated including alternative locations, alternative designs and alternative construction methods. The alternatives considered are described in detail in EIAR Chapter 5: Assessment of Alternatives and Project Design.

3.4 Construction Activities

The principal construction works include:

- Mobilisation and Establishing the Temporary Site Compound
- Dredging and Reclamation Works
- Piling Works
- Construction of Rock Armour Revetments
- Concrete Works
- Ancillary Works

Construction works (excluding dredging and reclamation) will be undertaken between 7am to 7pm Monday to Saturday. Work outside of these hours may be required on an infrequent basis to suit tides and vessel movements. If, in exceptional circumstances, works are required outside of these hours, the relevant statutory authorities will be notified in advance.

Dredging activities are expected to be ongoing for up to 24 hours per day, 7 days per week (24/7). The dredged material needs to be continually transported to the reclamation area to enable continuous dredging activities. For this reason, the reclamation activities will also need to be carried out on the same schedule.

It is expected that the construction phase will span 24 months from commencement to completion.

3.5 Operational Activities

Once operational, the Rosslare Europort ORE Hub will facilitate the handling, storage, marshalling, and integration of parts for ORE projects.

The heavy-lift quayside will support temporary assembly and staging of wind turbine towers and components before out-loading them onto installation vessels. These items will be temporarily stored at ORE Berth 1 during this process.

Both ORE Berth 1 and 2 will operate simultaneously, allowing component delivery and integration without disruptions. Heavy equipment will transfer parts within the storage area.

Project vessel traffic is expected to be low, peaking at one large vessel every two days during busy periods and dropping to one every two weeks off-peak. Installation vessels will call every four to eight days, carrying four to seven sets of components, with vessel sizes ranging from 160m to 250m. Vessels at Berth 2 will deliver by Lift-on, Lift-off (LoLo) and Roll-on, Roll-off (RoRo) methods. Traditional port activities may use ORE berths if space allows.

The new Small Boat Harbour includes pontoons for 64 boats, a fixed berth, and floating pontoon for local fishermen, facilitating docking and loading at various tides.

Staff numbers at the ORE Hub will fluctuate based on installation activity and weather, ranging from 40–60 regularly to peaks of around 150 during busy periods such as vessel visits and maintenance operations.

4 LIKELY SIGNIFICANT ENVIRONMENTAL EFFECTS

4.1 EIAR Chapter 7: Soils, Geology, Hydrogeology and Contamination

GDG were the lead consultants for EIAR Chapter 7: Soils, Geology, Hydrogeology and Contamination chapter. The environmental effects were assessed following a 'source-pathway-receptor' model which considers a connection between the source of contamination and a sensitive receptor via an environmental pathway (i.e., land, water, air).

4.1.1 Baseline Environment

A desktop review of a wide range of information sources within a defined study area was undertaken. It included onshore and offshore elements. In general, the geology, soils and hydrogeology receptors were found to be of low or negligible sensitivity. There was no evidence of contamination within the site.

4.1.2 Assessment of Effects

Construction activities which were assessed include site clearance, temporary site establishment, road construction, construction plant, equipment and storage of materials and hard landscaping and surfacing; marine works comprising reclamation, quayside wall and berth construction, piling, blasting, capital dredging, excavation and earthworks, construction of rock armour revetment and placement of breakwater armour units. Operational activities include storage of ORE components, machinery associated with landside ancillary work, maritime vessels, and storage of fuels and chemicals on-site.

The assessment of effects includes consideration of integrated measures that have been built into the project design (i.e., primary mitigation), and which are intended to prevent, reduce and where possible offset any significant adverse effects.

No significant adverse effects are predicted.

4.1.3 Mitigation and Residual Effects

No significant adverse effects were identified; therefore, no further (secondary) mitigation measures were necessary. However, additional measures are outlined to ensure any impacts on the receiving environment are minimised during construction.

It is considered that these measures will reduce the likely impact to lower magnitudes than predicted by the assessment of effects.

4.2 EIAR Chapter 8: Coastal Processes

GDG were the lead consultants on EIAR Chapter 8: Coastal Processes. Coastal processes encompass the natural physical processes that shape and influence the nearshore marine environment, including the cyclic nature of waves, tides, and tidal currents, sediment transport, suspended sediments, and the resulting sedimentary processes and morphology or shape of the coastline.

4.2.1 Baseline Environment

Data from various sources, including desktop reviews, public databases, site-specific surveys, and numerical modelling, were integrated to establish baseline conditions. Rosslare Europort and its immediate vicinity are heavily modified, with minimal natural coastline remaining. Despite this, the area is close to several important European conservation sites called Special Areas of Conservation (SAC) and Special Protection Areas (SPA), including the Seas off Wexford candidate SPA (cSPA) and Wexford Harbour and Slobs SPA, as well as SACs that support protected species like Harbour seal and Harbour porpoise.

The coastline in the study area is at high risk of erosion, a problem exacerbated by climate change-induced sea level rise and increased storminess. The coastal geomorphology includes sandy beaches, rocky outcrops, and artificial structures of Rosslare Europort. Long-term erosion rates have reached up to 2.5 m/year in some areas, notably at Rosetown. Interventions, such as the construction of groynes and land reclamation, have shaped sediment patterns and coastal morphology. Localised erosion persists, particularly in unprotected southern sections.

Bathymetric conditions range from shallow waters at the shore to depths of approximately -14 m near the port, with offshore sandbanks like Long Bank and Lucifer-Blackwater Bank playing a significant role in local wave and sediment dynamics. The seabed is primarily composed of sand and coarse sediment, with some rocky and muddy pockets.

Current speeds can reach up to 1.1 m/s, and the area is subject to storm surges, with extreme sea levels projected to rise further due to climate change. Wave conditions are largely influenced by south-southwest winds, with significant wave heights offshore reaching up to 9.6m and long wave periods up to 21.6 seconds. Closer to shore, mean wave heights are generally below 2m, with peak periods exceeding 14 seconds during storm events. Numerical modelling and site-specific measurements confirm these patterns, and wave propagation is primarily from the east to southeast.

Sediment transport is governed by both tidal currents and wave action, with high sediment mobility around Rosslare Europort (up to 60% of the time). The area generally exhibits low suspended sediment concentrations (0–1 mg/l), and sediment transport is predominantly northward along the coast. Local interventions and natural processes combine to create a highly dynamic and continually changing coastal environment.

4.2.2 Assessment of Effects

The construction of structures, such as quays and breakwaters, has the potential to alter the flow of water and the patterns and characteristics of waves and currents, leading to changes in seabed and coastline composition and morphology. The assessment identified that the Proposed Development

may result in effects of negligible, minor and moderate significance to Coastal Processes receptors, the area near to the Proposed Development related to increased suspended sediment concentrations during construction activities and to reduced tidal current speeds and reduced significant wave heights during the operational phase. No significant effects were identified from construction phase activities.

Effects on Rosslare Strand from long-term changes in tidal and wave regimes and sediment transport due to the Proposed Development were assessed as of minor significance and therefore not significant in EIA terms. Effects on the area near to the Proposed Development from these changes were assessed as of moderate significance and therefore significant in EIA terms.

4.2.3 Mitigation and Residual Effects

During construction, dredging and reclamation area infilling may increase suspended sediment in the water. Real-time turbidity monitoring will be carried out at Rosslare Europort. If suspended sediment concentrations rise above threshold levels, measures such as adjusting the weir box, reviewing construction methods, and temporarily halting dredging will be implemented to manage and prevent excessive sediment release.

During operation, monitoring of changes in bathymetry and coastal topography will inform management, which the applicant will undertake in close liaison with Wexford County Council and the Office of Public Works to ensure appropriate management measures are put in place as needed.

No significant residual effects are expected from the construction phase of the Proposed Development, owing to effective turbidity monitoring and management measures. While the operational phase may lead to changes in wave climate and tidal regime within 1km of the site, mitigation strategies for increased accretion and erosion will reduce these impacts to minor significance, resulting in no significant residual effects overall in EIA terms.

4.3 EIAR Chapter 9: Water Quality and Flood Risk

GDG were the lead consultants on EIAR Chapter 9: Water Quality and Flood Risk. The methods used for assessment of effects are informed by the EPA EIAR Guidelines, and the National Roads Authority 2008 guidelines titled 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes'. The environmental effects were assessed following a 'source-pathway-receptor' model which considers a connection between the source of contamination and a sensitive receptor via an environmental pathway (i.e., land, water, air).

4.3.1 Baseline Environment

Baseline water quality was established through a review of water quality status and risk classifications in the context of the EU Water Framework Directive (WFD) and supporting environmental standards. This comprises a large study area of onshore and offshore elements which spans river and transitional watercourses including the Milltown Rosslare stream, Rosslare Town and the South Slob Channel, to the offshore coastal waterbodies such as the Southwestern Irish Sea and Rosslare Harbour. Currently, these waterbodies display moderate to good status, although several are deemed to be at risk of environmental degradation in quality.

The wider baseline characterisation further considers marine water quality sampling and laboratory analysis, drinking water supplies, Uisce Éireann infrastructure, licensed activities, bathing waters, protected areas, designated habitats and an analysis of fluvial, pluvial, coastal and historical flooding datasets. A large proportion of the current Rosslare Europort and adjacent reclaimed land is located in Flood Zone A, with a section of the Proposed Development covered by this zone. Coastal flooding is inferred to be the primary source of any flooding which may occur in the study area.

4.3.2 Assessment of Effects

Activities that may cause potential effects on the water environment during construction of the Proposed Development include key general construction activities such as demolition, temporary site establishment, road construction, construction plant, equipment and storage of materials and hard landscaping and surfacing, marine works comprising reclamation, quayside wall and berth construction, piling, blasting, capital dredging, excavation and earthworks, construction of rock armour revetment and placement of breakwater armour units. During the operational phase, activities include storage of ORE components, machinery associated with landside works, LoLo and RoRo activities, maritime vessels, and storage of fuels and chemical on-site.

The following key risks to water quality were identified as potentially significant in the absence of secondary mitigation:

- Potential adverse effects on water quality through increased suspended sediment levels from sediment runoff and plumes generated during land reclamation and infill, piling, capital dredging, and material dispersal
- Potential adverse effects on water quality through release of highly alkaline contaminants from concrete and cement during quayside wall and berth construction
- Potential adverse effects on water quality due to accidental fuel or chemical compound leakages from construction plant, machinery associated with landside ancillary works, maritime vessels, equipment and storage of renewables materials polluting waterbodies
- Potential adverse effects on water quality due to accidental release or leakage of other liquids on-site such as wastewater associated with temporary site facilities

With regards to flood risk, the assessment of effects concluded that integrated measures that have been built into the design will sufficiently reduce or avoid the otherwise potentially significant effects associated with increases in impermeable surface run-off and risk of coastal flooding due to tidal inundation and predicted sea level changes.

4.3.3 Mitigation and Residual effects

Secondary mitigation procedures related to construction impacts affecting the water environment are set out within the Outline Construction Environmental Management Plan (oCEMP) which accompanies this application.

Key measures to reduce, avoid or offset the potential effects, include:

- A Water Quality Management Plan will be prepared and implemented by the Main Contractor ahead of construction to manage water quality throughout the construction and operation

phases. This includes sound design practices, temporary surface water management, and treatment systems for stormwater.

- During land reclamation, excavated dredged material will be placed in a controlled manner to prevent excess sediment dispersion into the water. Methods for sediment plume monitoring and erosion controls are outlined in the detailed CEMP prior to commencement of construction works.
- To minimise sediment disturbances during piling, mitigation measures will include a piling risk assessment, controlled Risk Assessment Method Statements, and erosion controls to limit sedimentation. These measures will be outlined in detail by the main contractor within the detailed CEMP prior to commencement of construction works.
- A Dredging Management Plan will be prepared and implemented by the Main Contractor ahead of construction and will govern dredging activities to prevent sedimentation in the water column. This includes measures such as using back-hoe dredgers or trailing suction hopper dredgers, minimising over-spilling, and monitoring sediment dispersal.
- To minimise contamination from concrete, careful control of wet concrete and cement will be implemented, including bunded washout areas, wheel washes, and ensuring mixing buffers from waterbodies. Special fast-setting mixes will be used where applicable. These measures are set out in the oCEMP.
- Spill risks from construction machinery and material storage will be controlled by adhering to strict site management practices, including bunded storage and emergency spill kits. Existing oil spill response plans will be followed, and MARPOL (the International Convention for the Prevention of Pollution from Ships) regulations will ensure vessels comply with international pollution prevention standards. These measures are set out in the oCEMP.
- Measures will be taken to prevent wastewater contamination, including the use of containerised waste facilities and emergency spill kits. Surface water drainage points will be mapped to prevent the flow of pollutants into water bodies. These measures are set out in the oCEMP.

When proposed mitigation measures are fully implemented during the construction and operational phases, all slight and significant adverse predicted effects on water quality will be imperceptible/not significant.

Overall effects on water quality arising from the Proposed Development are considered to be minimal and the development is considered to be compliant with the environmental objectives of the WFD and water quality objectives for sensitive waterbody receptors.

The primary mitigations built into project design and measures adopted during the construction and operational phases of the Proposed Development will provide a high level of flood protection and eliminate any potential adverse effects. The Proposed Development is considered to be aligned with the guidance outlined in the Planning System and Flood Risk Management: Guidelines for Planning Authorities (2009).

4.4 EIAR Chapter 10: Terrestrial Ecology

GDG were the lead consultants on EIAR Chapter 10: Terrestrial Ecology. This chapter evaluates the importance of the terrestrial ecological resources present and defines the degree of significance of potential impacts resulting from the Proposed Development. In the context of the Terrestrial Ecology EIAR chapter, terrestrial ecology specifically refers to the assessment of ecological receptors located above the high-water mark, including terrestrial habitats, flora, and fauna. The assessment addresses potential impacts from the construction and operational phases of the Proposed Development on terrestrial species, habitats, and designated conservation areas occurring within or influenced by activities above this mark. The report also identifies appropriate mitigation measures and residual impacts.

4.4.1 Baseline Environment

The Terrestrial Ecology study area includes the PDB and extends to adjacent habitats.

A review of available published data was carried out to identify features of ecological importance, along with field surveys which were focused on habitats, volant mammals (bats), non-volant terrestrial mammals (otter, badger, other small mammals), and herpetofauna receptors.

Survey data were collected in 2023 provided by INIS Environmental Consultants Ltd., who were commissioned to undertake ecological surveys within the terrestrial footprint of the Proposed Development to detail site usage, activity patterns of key species, and the distribution and extent of habitats at the site. Key factors determined from field surveys include habitat quality, species presence and sensitivity, and ecological connectivity. Habitats within the area were evaluated for ecological value.

Through an evaluation of potential terrestrial ecological receptors identified in the baseline, Key Ecological Receptors (KERs) were identified and assessed further to determine potential construction and operational impacts from the Proposed Development on Terrestrial Ecology. The following Terrestrial Ecology KERs have been identified:

- Bats
- Otter
- Common Lizard
- Marram Dunes (White Dunes)
- Embryonic Shifting Dunes

4.4.2 Assessment of Effects

Approximately 1.8 hectares of existing habitat will be removed, primarily consisting of artificial surfaces and scrub. The habitats removed include:

- 0.6 ha of Scrub (WS1)
- 0.09 ha of Dry Meadows and Grassy Verges (GS2)
- 0.2 ha of Mixed Sediment Shore (LS5)

- 0.6 ha of Sea Walls, Piers, and Jetties (CC1)
- 0.4 ha of Buildings and Artificial Surfaces (BL3)

All habitats designated for removal are valued at Local Importance (Lower Value). While they may exhibit some biodiversity value and are not characteristic of areas with extremely low species diversity (e.g., amenity grassland, improved agricultural grassland), they do not support rare or protected species or provide significant ecological functions at a scale beyond the local level. Their permanent loss is not expected to impact the conservation status of these habitats or any protected species. Given the limited extent of removal, no significant effect is anticipated at any geographic scale.

Other potential impacts on terrestrial ecology assessed include:

- Indirect disturbance of bats due to light spill
- Injury or mortality to otter due to underwater noise during dredging, piling and blasting.

Consultations with the Wexford County Council and NPWS also informed the assessment.

4.4.3 Mitigation and Residual effects

Mitigation measures including lighting design to reduce impacts on bats; Marine Mammal Observer pre-watches prior to underwater noise producing activities commencing (i.e., blasting and piling) for otters; and pre-construction surveys for habitats and species will be implemented to minimise impacts on terrestrial ecology receptors.

With the full implementation of the mitigation measures outlined in the Terrestrial Ecology chapter, the Proposed Development is not expected to result in significant residual effects during the construction or operational phases. However, it is acknowledged that certain impacts, such as residual light spill on bats, may result in minor residual effects. These effects are anticipated to be limited in scale and not significant at a population level.

With the proposed mitigation measures implemented, the overall significance of ecological impacts from the Proposed Development is anticipated to be slight or lower. Therefore, the construction and operation of the Proposed Development will not result in significant effects on any terrestrial ecological receptors.

4.5 EIAR Chapter 11: Benthic Ecology

The specialist marine ecological survey and consultancy firm, MERC Partners, were the lead consultants on EIAR Chapter 11: Benthic Ecology. A ZoI was determined to be the PDB and a surrounding buffer zone extending out to 3km to account for the potential impacts of sediment dispersion during the construction phase. Thereafter, a systematic analysis and assessment of the likely significant effects of the Proposed Development on the benthic ecology of the receiving environment within the ZoI was conducted. The analysis and assessment followed established best practice as set out in:

- Guidelines for the Information to be contained in Environmental Impact Assessment Reports (EPA, 2022).

- Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (Chartered Institute of Ecology and Environmental Management, 2018).
- Marine Evidence-based Sensitivity Assessment – Guidance Manual (Tyler-Walters *et al*, 2023a).

4.5.1 Baseline Environment

The predominant habitat within the study area is described as a mosaic of infralittoral (shallow subtidal zone) and circalittoral (deeper shallow subtidal zone) coarse sediment (EMODnet, 2021). As described in EIAR Chapter 11, grab sampling, drop down video surveys and walkover surveys were conducted in 2023 and 2024 to obtain detailed information on the benthic ecology of the area. These surveys provided the data required to fully characterise the study area. Technical Appendix 11: Benthic Ecology of EIAR Volume 3 includes the technical reports associated with these surveys.

4.5.2 Assessment of Effects

The identification of impacts and assessment of effects on the benthic ecology within the ZoI indicated the following potential impacts:

- Physical loss (to land or freshwater habitat).
- Habitat structure changes - removal of substratum (extraction).
- Changes in suspended solids (water clarity).
- Smothering and siltation rate changes (light and heavy).
- Introduction of invasive non-indigenous species (INIS)
- Introduction of shading and light.

Assessment of significance of these impacts on benthic receptors determined no significant effects in EIA terms.

4.5.3 Mitigation and Residual effects

The sediment dispersal modelling carried out indicated that Suspended Solids Concentration (SSC) and seabed thickness changes resulting from dredging and reclamation work will be below levels with the potential for significant effects during construction. However, with due regard to the precautionary principle, it is recommended that turbidity monitoring is carried out to ensure SSC levels (and thereby the potential for increased bed thickness changes) do not exceed the predicted values and that a system of appropriate action is implemented in the event that SSC rises above levels with the potential for significant effects are detected.

The dominant subtidal biotope (a sub-unit of a habitat) found within the study area is vulnerable to the potential introduction of INIS as a result of increased vessel traffic and the creation of new structures. It is therefore proposed that an INIS management plan is put in place to mitigate the potential for effects on this biotope.

A full account of the EIA process and an assessment of impacts and their potential effects on the benthic environment are fully documented in Chapter 11: Benthic Ecology Measures to avoid impacts on the benthic ecology of the PDB and its surrounding ZoI are embedded in the

development design. Additional mitigations have been recommended to avoid or reduce impacts on benthic ecology during construction and operation of the Proposed Development.

4.6 EIAR Chapter 12: Fish, Shellfish and Turtle Ecology

GDG were the lead consultants on EIAR Chapter 12: Fish, Shellfish and Turtle Ecology. Preparation of this chapter was informed by other chapters and technical appendices of the EIAR. The scope of the assessment is consideration of likely significant effects of the Proposed Development on fish including teleosts, elasmobranch, marine migratory fish, commercially important shellfish, and turtles arising from the construction and operation of the Proposed Development. This includes both resident and seasonally present species within the coastal waters adjacent to Rosslare Europort.

4.6.1 Baseline Environment

The following KERs were identified.

- Commercially Important Shellfish - including species such as brown crab, common whelk, Nephrops, and scallops
- Spawning and Nursery Grounds - covering the functional use of soft-sediment coastal habitats by early life stages of fish and shellfish species, including spatial overlap with identified regional spawning and nursery areas as mapped by the Marine Institute and the International Council for the Exploration of the Sea.

Species such as sea turtles and basking sharks were reviewed but not carried forward as KERs due to a lack of recent records, absence of viable impact pathways, and their limited association with the Proposed Development area.

4.6.2 Assessment of Effects

The assessment is based on a review of existing datasets, scientific literature, and technical appendices, including results from benthic surveys and water/sediment quality analyses, as well as information on regional fisheries activity and environmental sensitivities.

Indirect pathways such as elevated turbidity, accidental pollutant release, and underwater noise generation were considered where relevant. Several pressures were scoped out based on the application of integrated mitigation measures and the absence of a credible source-pathway-receptor link.

The potential impacts assessed include construction-related pressures such as underwater noise from piling, dredging and blasting, temporary habitat loss, and increased turbidity. Underwater noise modelling was used to assess the potential for auditory injury or disturbance to fish and shellfish, referencing international guidance.

Modelled results indicate that auditory injury thresholds will not be exceeded for any mobile fish groups from any activity, assuming typical swim speeds. However, injury thresholds for stationary life stages such as fish eggs and larvae may be exceeded within short distances—up to 150 m from piling (cumulative Sound Exposure Level), 105 m from blasting (Sound Pressure Level; range 30–170 m), and 10 m from dredging (cumulative Sound Exposure Level).

Impacts from sediment plumes and temporary habitat disturbance are expected to be spatially confined and short-term, with rapid recovery due to the dynamic nature of the existing port environment and the resilience of the receptor taxa.

Potential effects on spawning and nursery grounds were also assessed, with no critical spawning habitats or larval aggregations identified within the zones of predicted acoustic injury.

Available spatial datasets and site-specific survey results confirm the absence of sensitive life stages or functionally important reproductive habitats within the impacted footprint.

Integrated measures built into the project design (e.g., construction within rockfill bunds, use of rotary bored piling, separation of capital and maintenance dredging campaigns, and implementation of a Construction Environmental Management Plan) reduce the risk of ecological impacts. Consequently, many potential pressures were scoped out from detailed assessment.

Operational impacts, such as vessel activity or habitat modification, are also assessed and concluded to be not significant. No important spawning or nursery habitats for KERs occur within the Project Development Boundary, and no shellfish beds of ecological or commercial concern are present within the ZoI.

No sea turtles were recorded during surveys, and no evidence suggests their regular occurrence within the area; therefore, potential impacts on turtles are considered unlikely and have been scoped out.

4.6.3 Mitigation and Residual Effects

Following the application of mitigation and integrated design measures, no significant residual impacts on fish, shellfish, spawning and nursery grounds, or turtles are expected during the construction or operational phases, either alone or in combination with other projects.

4.7 EIAR Chapter 13: Marine Mammals

GDG were the lead consultants on EIAR Chapter 13: Marine Mammals. The following approach was taken in the assessment:

- Describing the Baseline to establish current conditions within the Regional Marine Mammal Study Area to serve as a comparison point for assessing potential changes
- Identifying Receptors (i.e., specific marine mammal species and important habitats) that could be affected by the Proposed Development
- Assessing Conservation Importance to evaluate the ecological value of the receptors within the Regional Marine Mammal Study Area that may be impacted
- Characterising Impacts and their Effects during construction and operations considering the nature of the works and activities
- Determining Significance utilising expert judgment to evaluate the significance of the identified effects
- Identifying potential Mitigation Measures to reduce significant adverse effects

- Assessing remaining impacts after applying mitigation measures; and identifying appropriate compensation measures to offset significant residual effects, and opportunities for ecological enhancement.

Each assessment evaluated the spatial extent of impacts relative to the relevant Management Unit (MU) (which represent biologically relevant geographic areas for assessment for cetaceans) and species' ecological characteristics. Consideration was given to the duration of impacts in the context of the species' lifespan and reproductive cycle, the frequency and reversibility of impacts, and the potential for long-term population-level effects. These factors were used to determine the magnitude of impacts and significance of effects.

4.7.1 Baseline Environment

Existing research and field surveys were used to identify important marine mammal species in the study area. Of the 26 species of whales and dolphins found in Irish waters, up to nine have been seen in the Irish Sea. Common dolphin, harbour porpoise, and bottlenose dolphin are seen year-round, while Risso's dolphin appears in summer and killer whale is rarely spotted near the coast. White-beaked dolphin was previously recorded, however, there are no recent records.

The Irish Sea is an important feeding area for baleen whales like fin whale and minke whale, with minke whale most often seen in the summer. Fin whale is more common from late summer through autumn. Humpback whale is seen less often, mostly from late summer to January. Some species, such as killer whale and fin whale, only occasionally pass through the area and do not use it as a main feeding ground.

Between 2022 and 2024, field surveys were done in the study area by the Irish Whale and Dolphin Group. These included visual surveys and acoustic monitoring to record marine mammal activity and underwater noise. The area surveyed included the Proposed Development site and nearby waters. Marine mammals observed included grey seal, harbour seal, bottlenose dolphin, and harbour porpoise.

4.7.2 Assessment of Effects

Indirect pressures that may result from the Proposed Development and may affect marine mammals include elevated turbidity, pollutant release and indirect effects on prey species. These indirect impacts have been assessed with reference to the following chapters of the EIAR:

- Chapter 8: Coastal Processes
    - Assessment of changes in sediment transport and deposition
- Chapter 9: Water Quality & Flood Risk
    - Assessment of turbidity and potential pollutant pathways.
- Chapter 11: Benthic Ecology
    - Assessment of impacts on benthic prey resources.
- Chapter 12: Fish, Shellfish and Turtle Ecology

- Assessment of impacts on pelagic and demersal fish species of ecological relevance (prey species) to marine mammals.

- Chapter 15: Commercial Fisheries and Aquaculture
  - Assessment of potential implications for commercially exploited prey species.

The marine mammal assessment considers direct and indirect impacts on species within the PDB and adjacent waters, extending into the Celtic and Irish Seas to capture broader ecological effects. Key factors assessed include species presence and abundance, habitat usage, sensitivity to underwater noise, and potential behavioural and physiological impacts from construction and operational activities.

The primary focus of the assessment undertaken is on evaluating the impact of underwater noise from activities associated with the Proposed Development on marine mammals.

The assessment incorporates consultation with regulatory bodies and stakeholders, alongside a review of conservation objectives and legal protections for marine mammals under Irish and EU legislation.

Through a detailed evaluation of marine mammal ecology and site-specific survey data, KERs were identified and assessed further in light of the potential construction and operational impacts. The KERs for marine mammals are focused on the species recorded or identified within the Regional Marine Mammal Study Area during field surveys, which demonstrated the use of the PDB and its surrounding areas by these species. The KERs include:

- Harbour porpoise
- Bottlenose dolphin
- Risso's dolphin
- Common dolphin
- Minke whale
- Harbour seal
- Grey seal

Where possible, measures designed to avoid any impact on the receiving environment have been incorporated into the project design. For example, piling will be conducted within a bunded area, the primary method used will be rotary piling, and it is anticipated a lower-energy hammer (120 kilojoules) will be used for impact piling along the quay wall and for the installation of pontoon foundations of the proposed new small boat harbour.

Marine Mammal Observers (MMOs) will ensure the area is clear before discharge from any disposal vessels during infilling and sediment disposal and therefore the risk of marine mammals being present beneath these vessels is extremely low. Vessel collision risk is minimal, as dredgers operate at low speeds (1–3 knots), and marine mammals are habituated to port traffic. Loss of foraging habitat is not expected to be significant, as marine mammals are generalist feeders, and affected prey species recover quickly.

The construction of the proposed ORE Hub may impact marine mammals through underwater noise, disturbance, and habitat changes, primarily from piling, rock blasting and dredging activities.

Piling and blasting generate impulsive noise that could cause injury at close range and temporary hearing loss over a wider area. Harbour porpoise and seals may temporarily avoid the area due to noise and increased vessel activity. Additionally, localised effects on benthic and fish populations could occur, however the generalist diets and wide foraging ranges of marine mammals reduce the significance of this impact.

To mitigate these effects, MMOs will monitor the area and enforce mitigation measures during underwater noise producing activities. Soft-start procedures will allow marine mammals to move away before piling and dredging reach full intensity. Exclusion zones will be monitored, with commencement of works delayed if marine mammals are detected within impact ranges.

Blasting events will be spaced 2–3 weeks apart and a bunded piling area will reduce noise propagation. An Acoustic Deterrent Device will be deployed during the pre-start monitoring in advance of blasting to encourage harbour porpoise to vacate the potential impact zone.

Real-time Static Acoustic Monitoring was used to monitor piling and dredging noise during the harbour seal breeding season to ensure underwater noise displacement thresholds are not exceeded beyond 1,000 m. If exceeded, the MMO will be alerted, dredging will stop, and adjustments will be made to these activities to reduce underwater noise impact below displacement threshold levels before resuming.

With these measures in place, the risk of injury, disturbance, and displacement is minimised, ensuring no significant impact on marine mammal populations.

During the operational phase of the Proposed Development, vessel traffic will increase, particularly during offshore construction and maintenance. However, the risk of collision with marine mammals is considered negligible, as vessel speeds will remain low, and marine mammals in the area are already habituated to port traffic. Underwater noise levels are also not expected to significantly increase or cause disturbance, as marine mammals are accustomed to existing port operations. Overall, operational vessel activity is not expected to have significant impacts on marine mammals.

Thus, in the absence of mitigation, significant environmental impacts are predicted on individual marine mammals, but not populations, due to piling, blasting, and dredging during construction. To minimise these impacts, integrated noise-reduction measures have been incorporated into the project design, and additional mitigation measures have been proposed in line with 2014 guidelines published by the National Parks and Wildlife Service.

4.7.3 Mitigation and Residual Effects

After applying the mitigation measures outlined above, the Proposed Development is not expected to result in any significant residual effects on marine mammals, during either the construction or operational phase. Residual effects are limited to the local scale and are considered to be of minor significance, i.e., there are no significant residual environmental impacts on marine mammals.

4.8 EIAR Chapter 14: Ornithology

Cork Ecology were the lead consultants on Ornithology for the EIAR. Site specific data were collected by APEM Ltd. The primary purpose of this chapter is to identify, describe and assess in an appropriate manner, the direct and indirect significant effects of the Proposed Development on key bird species, supporting habitats and designated conservation sites for birds within the ZoI of the Proposed Development.

4.8.1 Baseline Environment

Chapter 14 contains a description of the key bird species and designated sites (other than European sites) within and surrounding the site of the Proposed Development.

Baseline bird surveys were conducted between April 2022 and September 2024, and results from these surveys were used to characterise birdlife in and around the site of the Proposed Development. Key terrestrial species considered in the assessment were meadow pipit and yellowhammer, while key waterbird species included red-throated diver and common scoter.

4.8.2 Assessment of Effects

The Ornithology assessment considered impacts on the key terrestrial and waterbird species and populations in the vicinity of the Proposed Development.

The key potential impacts considered by the assessment were disturbance impacts to birds during construction, indirect impacts on prey species resulting from dredging activities, and the permanent loss of foraging habitat for waterbirds resulting from the construction of the Proposed Development. There were no significant impacts predicted from the Proposed Development on birds during construction.

The Proposed Development is coastal with no predicted significant effects on offshore ornithology from the operational phase.

4.8.3 Mitigation and Residual Effects

Mitigation measures for birds include conducting any construction activities that could result in habitat removal outside of the bird breeding season (March to August inclusive). In addition, following the completion of construction activities, appropriate planting of native shrub species around the edge of the site is recommended to provide additional opportunities for nesting birds and other wildlife.

As the impacts associated with the Proposed Development have been assessed as not significant in EIA terms, no further mitigation (in addition to that summarised above) is considered necessary. No ecologically significant adverse residual effects on birds have been predicted.

4.9 EIAR Chapter 15: Commercial Fisheries and Aquaculture

The Commercial Fisheries and Aquaculture of the EIAR has been written by Michael Keatinge of SMEC Ltd. This chapter provides stakeholders with sufficient information to determine the potential significant impacts of the Proposed Development on commercial fisheries and aquaculture receptors. Specifically, it:

- Presents the existing commercial fisheries and aquaculture baseline established from available fisheries data, desk studies, and consultations
- Identifies any assumptions and limitations encountered in compiling this information
- Identifies those receptors that could be affected by the construction and operation of the Proposed Development
- Presents the potential effects on commercial fisheries and aquaculture receptors arising from the Proposed Development, based on the information gathered, and the analysis and assessments undertaken
- Describes any necessary monitoring and/or mitigation measures which will be implemented to prevent, minimise, reduce or offset the possible effects of the Proposed Development on commercial fisheries and aquaculture receptors

This chapter specifically considers potential impacts of the Proposed Development on commercial fishing and aquaculture activity and the supply chain, with a focus on how the Proposed Development may affect fishing operations, access, effort, and economic viability. The assessment has been informed by input from fisheries stakeholders, including vessel operators and local fishing communities.

Ecological considerations relating to commercial fish and shellfish species – including their distribution, habitat use, and sensitivity to stressors such as underwater noise, sedimentation, or habitat loss – are addressed separately in Chapter 12: Fish, Shellfish and Turtle Ecology, where these species are assessed as Key Ecological Receptors, as are non-commercial fish species, including those of conservation concern (e.g., Annex II species under the Habitats Directive) and elasmobranchs.

Non-commercially exploited shellfish species are addressed in Chapter 11: Benthic Ecology.

4.9.1 Baseline Environment

Information on commercial fisheries activity presented in Chapter 15, provides a detailed understanding of the commercial fisheries and aquaculture baseline based on published information and extensive consultation with local fishers and regional fisheries representative organisations.

Based on the register of fishing vessels and the socio-economic assessment presented in Technical Appendix 15, and further to consultation with the owners of the local fishing fleet and processors, the commercial fishing fleet considered to have a high dependency on the port of Rosslare comprises up to 36 vessels of which 30 are under 12 metres in length.

In 2022, the SFPA recorded 1,267 tonnes of seafood, valued at €2.969 million, landed through Rosslare Europort. Whelk were the main species landed, accounting for 869 tonnes or 68% of the total by weight. These were valued at €1.364 million at first point of sale. Scallop were in second place with 212 tonnes (17%, €0.801 million) and razor clams in third place with 97 tonnes (8%, €0.603 million). The balance comprised 89 tonnes of various crustaceans (spider, brown, and velvet crab, and lobster) making up 7% of the total and valued at €0.199 million.

In 2022 seafood landed through the port of Rosslare generated benefit to the southeast region totalling €8.7 million in added value; employed or created employment through fishing, post-harvest

processing and other downstream activities for 107 persons (70 directly employed, 25 indirectly and 12 induced) and contributed an annual wage bill of €3.3 million to the region. The fleets responsible for this activity are the scallop, razor clam, whelk, and crustacean fleets which are considered to be of high socio-economic value.

4.9.2 Assessment of Effects

The assessment has considered direct and indirect impacts, including socio-economic impacts, from the construction and operational phases of the Proposed Development on local and adjacent commercial fishing fleets.

All receptors considered are sensitive to fleet displacement effects which could occur as a result of the Proposed Development, with effects of increased fishing on adjacent shellfish resources, increased steaming times, gear conflicts and displacement leading to economic impacts on local and adjacent operators considered.

On the basis of 'always afloat' provision of access to any port facilities for existing users, the overall significance of the effects of these impacts is considered slight and not significant in EIA terms.

4.9.3 Mitigation and Residual Effects

Mitigation, including that the Rosslare Harbour Fisheries Consultative Group will continue to meet periodically, both in advance of and during construction, to ensure good Fisheries Management and Mitigation planning and to provide ongoing liaison with fishers throughout all stages of the Proposed Development, will ensure effects on fish and fisheries receptors are avoided where possible and, where not, are sufficiently minimised.

4.10 EIAR Chapter 16: Cultural Heritage

Archaeological Diving Company Limited were the lead consultants on Cultural Heritage for the EIAR. This chapter provides a summary of topic-relevant guidance and outlines the data sources used to characterise the Cultural Heritage Study Area. Building on the general EIA methodology outlined in Chapter 1: Introduction and Methodology, the methodology followed in assessing the impacts of the Proposed Development on Cultural Heritage receptors is set out, as is the assessment of likely effects on the Cultural Heritage receptors arising from the construction and operation of the Proposed Development. Relevant mitigation measures, following the 'mitigation hierarchy' of avoidance, minimisation, restoration and offsets, and/or monitoring requirements, are proposed in respect of any significant effects and a summary of residual impacts is provided, as relevant.

4.10.1 Baseline Environment

The development of the shoreline at Rosslare is associated with the construction of a harbour at the end of the nineteenth century to facilitate steam ferry traffic between Ireland and the United Kingdom. The integral nature of a railway connection to the pier head reflects the original association with the Great Western Railway. More recent reclamation to the west of the original harbour has reclaimed much of the foreshore. The small harbour, Ballygeary Harbour, was constructed during this reclamation to provide a haven for local fishermen.

A single known cultural heritage site is located within the PDB.; namely, the Lighthouse at the pier head (NIAH15704829). The potential impacts of the Proposed Development on cultural heritage have been evaluated. The PDB is directly adjacent to the existing Rosslare Europort over a small area of existing reclaimed foreshore and an expanse of seabed that will be reclaimed as part of the Proposed Development.

Baseline description is based on a comprehensive series of surveys and studies and records the presence of a number of features within the ZoI of the Proposed Development on the landward side and within the wider Cultural Heritage Study Area on the seaward side. However, there are no features recorded within the footprint of the PDB itself.

4.10.2 Assessment of Effects

The cultural heritage assessment is conducted in line with the relevant legislative procedures and guidelines governing cultural heritage, including Archaeological (terrestrial and underwater), Industrial and Architectural heritage.

Two marine features (AT05 and AT06) identified within the Study Area to the west of the PDB were inspected in 2025 and assessed archaeologically. It should be noted that the seaward boundary of the ZoI corresponds to the seaward edge of the PDB and therefore AT05 and AT06 lie outside the ZoI of the Proposed Development.

4.10.3 Mitigation and Residual Effects

Mitigation through avoidance is the primary mitigation against effects to cultural heritage receptors for any undiscovered features. More generally, archaeological monitoring will be carried out, with the proviso to record any archaeological material observed in the course of such works. Archaeological monitoring is licensed by the Department of Housing, Local Government and Heritage through the National Monuments Service. With mitigation in place, no significant effects in EIA terms on Cultural Heritage receptors are considered likely as a result of the Proposed Development.

4.11 EIAR Chapter 17: Traffic and Road Transport

The lead consultants for Traffic and Road Transport were Pinnacle Consulting Engineers Limited. The Institute of Environmental Management and Assessment (IEMA) Guidelines on Environmental Assessment of Traffic and Movement (2023) were used to assess the likely traffic impacts from the construction and operation of the Proposed Development and the effects on receptors. The IEMA guidelines provide a systematic approach for evaluating the environmental effects of increased traffic and focus on impacts to people and the environment, rather than road network capacity. The assessment was also informed by Transport Infrastructure Ireland (TII) Traffic and Transport Assessment Guidelines (2014), and TII publications including PE-PAG-02039 Project Appraisal Guidelines for National Roads Unit 16.1 - Expansion Factors for Short Period Traffic Counts (May 2024).

The IEMA guidance considers pedestrian and driver severance, safety, and sensitive areas. The assessment process includes determining current and forecast traffic, selecting the assessment period and year, and defining geographical boundaries. The Guidelines recommend assessing

highway links where traffic or Heavy Goods Vehicle (HGV) flows increase by over 30% or by 10% in sensitive areas, with smaller increases considered negligible and therefore not significant in EIA terms. Only links meeting these criteria are included in the assessment, whilst others are excluded.

4.11.1 Baseline Environment

Two primary data sources provided baseline information in relation to traffic and road transport 1) traffic surveys undertaken commissioned by IÉ; and traffic count data published by TII. Additional data included public transport information, including train and bus timetables and bus stop locations was sourced from the National Transport Authority. The receptors identified for the assessment are pedestrians and cyclists, and road users on the local highway (road) network.

The main route into Rosslare Europort is the N25 national primary route, and this is the only route considered in the assessment. The proposed N25 Rosslare Europort Access Road (REAR) comprises the construction of approximately 1.45km of high-quality single carriageway road consisting of a combination of improved existing road and new road corridor to provide a new access route to Rosslare Europort in Co. Wexford. The N25 REAR Road is at detailed design stage at time of writing. If construction of the REAR road is completed prior to the commencement of the Proposed Development this would offer an alternative route for construction and operational traffic. However, this assessment considered a worst case or maximum scenario during construction stage, assuming that the REAR road is not completed. Once it is constructed, the N25 REAR Road will likely be the primary access road during the operational phase.

4.11.2 Assessment of Effects

This assessment has considered the potential impacts and effects of construction and operation of the Proposed Development on users of the surrounding road network. The receiving environment has been assessed in terms of pedestrian severance, pedestrian delay, pedestrian fear and intimidation, driver delay, accidents and safety, and the impact of hazardous loads.

To inform the assessments of construction traffic, assumptions have been made to estimate the number and type of vehicle movements as set out in EIAR Chapter 6: Project Description. These best estimate traffic generation rates and movements are representative of the maximum predicted traffic generation for the EIAR. Final details on the construction programme and traffic movements will be set out by the Contractor in a Construction Environmental Management Plan (CEMP) and Construction Traffic Management Plan (CTMP), which will be agreed with Wexford County Council prior to the construction phase and commencement of works.

During construction of the ORE Hub, the average number of vehicle movements has been calculated based on dredging /reclamation, staff arrivals, ongoing works, excavation and earth works, surfacing of port storage yard, construction of rock armour revetments, and concrete works. This calculation gives a total of 7,078 vehicles. Averaged out over the 24-month construction programme, this equates to 10 vehicles per day. In accordance with the IEMA Guidelines, the assessment would focus on the highway network where the increase in traffic would exceed 30% at any highway link.

Where a potential increase in traffic of c. 10% has been identified, with a total HGV increase of 5 associated with construction activities (well below 30%), the assessment concluded that the effects

to traffic and road transport during construction would be temporary, slight, adverse and not significant in EIA terms for Pedestrian Severance, Delay, Amenity, Fear and Intimidation and Accidents and Safety Driver Delay, and Accidents and Safety.

The Rosslare Europort ORE Hub, once operational, will facilitate a range of operations primarily related to ORE staging and marshalling. Operations will be administered, overseen and controlled by the Harbourmaster. There is an International Ship and Port Facility Security boundary within Rosslare Europort which will be extended for the management of ORE ship crews.

The primary purpose of the Proposed Development is to provide a main staging, installation and storage facility for offshore renewable energy projects for the east coast of Ireland and the Celtic Sea, as well as an operations and maintenance facility for the duration of the offshore renewable energy projects. The Proposed Development may also support traditional port operations (RoRo cargo). The operational and maintenance traffic includes traffic related to the new Small Boat Harbour. The potential traffic numbers include traditional port activities; and the future uses (for example Operations and Maintenance and the RNLI station) are also included to produce an integrated and conservative approach to traffic assessment. Two reference years are presented in the assessment of impacts on the highway network: 2028 and 2040.

At its opening year 2028, the effects on receptors from operation of the ORE Hub will be adverse, resulting in an increase in traffic levels by up to 16.35% at Rosslare Europort Access Roundabout. The average number of vehicular movements that will be generated by the Proposed Development is 751 trips per day. Of these trips 21.07% will be HGVs resulting in an average of 51 new HGV trips per day. During the operational phase, the effect of these additional traffic flows on the surrounding local highway network will be adverse and long term. In accordance with the IEMA Guidelines, the assessment would focus on the highway network where a potential increase in traffic of less than 30% has been identified with a total HGV increase of 51 associated with the operational activities. Therefore, the effects to transport and access during the operational phase would be permanent, slight, adverse and not significant in EIA terms for Pedestrian Severance, Delay, Amenity, Fear and Intimidation and Accidents and Safety.

From 2040, it is expected that the ORE Hub will operate in a similar manner to the 2028 opening year. There is potential for 45,000 RoRo trailer units to use the facilities from year 2040. Peak RoRo traffic will only likely be during periods of low ORE activity.

The average number of vehicular movements that will be generated from operational activities at the ORE Hub from 2040 has been calculated as an average of 834 trips per day. Of these trips 16.03% will be HGVs resulting in an average of 134 new HGV trips per day (below 30%). Based on these additional traffic flows, the Proposed Development is considered to result in imperceptible changes in the environmental effects of traffic, and the effects to transport and access during the operational phase from 2040 would be permanent, slight, adverse and not significant in EIA terms for Pedestrian Severance, Delay, Amenity, Fear and Intimidation and Accidents and Safety.

4.11.3 Mitigation and Residual Effects

The CEMP and the CTMP will expand on the information presented in the oCEMP, which accompanies the application, to set out procedures for how construction works will interact with the

public realm and footpaths along the proposed route for transport of construction materials. Once these mitigation measures are implemented and managed in accordance with the plan to be agreed with the Wexford County Roads Authority, it is considered that the effects of construction traffic will not be significant in EIA terms.

The results of the traffic assessment and analysis finds that the Proposed Development would give rise to increases in traffic that will be imperceptible to existing road users and will not result in significant environmental effects from traffic during construction stage. The assessment concludes that the effects on traffic and road transport during operational phase would be permanent, slight, adverse and not significant in EIA terms.

4.12 EIAR Chapter 18: Air Quality

The assessment of Air Quality for EIAR was prepared by AWN Consulting. The air quality assessment has focussed on:

- Potential construction dust emissions and impacts to nearby sensitive receptors such as residential properties etc.
- Potential vehicle emissions from traffic accessing the site for construction works and for operational phase maintenance activities.

4.12.1 Baseline Environment

Baseline data and data available from similar environments indicates that levels of nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}) and particulate matter less than 2.5 microns ($PM_{2.5}$) are generally well below the National and European Union (EU) ambient air quality standards.

The assessment of baseline air quality in the region of the Proposed Development has shown that current levels of key pollutants are significantly lower than their limit values.

4.12.2 Assessment of Effects

An assessment of the potential dust impacts as a result of the construction phase of the Proposed Development was carried out based on the UK Institute for Air Quality Management 2024 guidance document *'Guidance on the assessment of Dust from Demolition and Construction'* (2024). This established the sensitivity of the area to impacts from construction dust in terms of dust soiling of property, human health and ecological effects. The surrounding area was assessed as being of low sensitivity to dust soiling and of low sensitivity to dust-related human health effects.

The sensitivity of the area was combined with the dust emission magnitude for the site under four distinct categories: demolition, earthworks, construction and trackout (movement of vehicles) to determine the mitigation measures necessary to avoid significant dust impacts. It was determined that there is at most a low risk of dust related impacts associated with the Proposed Development. In the absence of mitigation there is the potential for direct, short-term, adverse, and slight impacts to air quality.

In addition, construction phase traffic emissions have the potential to impact air quality, particularly due to the increase in the number of HGVs accessing the site. Construction stage traffic did not meet the scoping criteria for traffic movements (or other scoping criteria) for a detailed modelling assessment outlined in Transport Infrastructure Ireland's 2022 guidance document *'Air Quality Assessment of Specified Infrastructure Projects – PE-ENV-01106'.* As a result, a detailed air assessment of construction stage traffic emissions has been scoped out from any further assessment and the construction stage traffic emissions will have a direct, short-term, adverse, and imperceptible impact on air quality.

Operational phase traffic has the potential to impact air quality due to vehicle exhaust emissions as a result of the increased number of vehicles accessing the site. The Proposed Development will not result in a significant change in traffic on the local road network. Therefore, the impact to air quality will be direct, long-term, localised, neutral and imperceptible which is overall not significant in EIA terms.

The Proposed Development may support traditional port operations (e.g., RoRo cargo operations and clean bulk cargos such as trade cars) in periods where there is a delay to ORE project demand for the development or where there is no ORE project demand, though the primary use of the facility is expected to be for ORE operations out to 2040. A review of traffic data associated with the traditional port operations indicates that this will not result in a significant change, in traffic on the local road network, based on Transport Infrastructure Ireland scoping criteria. Therefore, the impact to air quality will remain direct, long-term, localised, neutral and imperceptible which is overall not significant in EIA terms.

4.12.3 Mitigation and Residual Effects

Detailed dust mitigation measures are outlined within this chapter, and also included in the oCEMP to ensure that no significant nuisance as a result of construction dust emissions from demolition, earthworks, construction and trackout (movement of vehicles) occurs at nearby sensitive receptors. The implementation of best practice mitigation measures, derived from relevant dust management guidance including the Institute for Air Quality Management 2024 guidance '*Guidance on the Assessment of Dust from Demolition and C*onstruction' will ensure that impacts to air quality during the construction of the Proposed Development are considered direct, short-term, localised, adverse and not significant, posing no nuisance at nearby sensitive receptors (such as local residences).

No site-specific mitigation measures are proposed for the operational phase. However, should evidence of potential dust impacts occur during the operational phase as a result of unbound surface materials the mitigation measures set out for the mitigation of trackout during the construction phase will be implemented in order to mitigate emissions.

When the dust mitigation measures detailed in the mitigation section (Section 18.5) are implemented, the residual effect of fugitive emissions of dust and particulate matter from the site will be short-term, direct, localised, adverse, and not significant in nature and will pose no nuisance dust soiling, human health or ecological impacts at nearby receptors.

The impact to air quality during the operational phase of the Proposed Development has been assessed as having a long-term, direct, localised, neutral, and imperceptible but overall, not significant impact on air quality.

4.13 EIAR Chapter 19: Noise and Vibration

AWN Consulting prepared the chapter on Noise and Vibration. The assessment focused on the following elements:

- a survey of the existing noise and vibration environment in the vicinity of the proposed scheme
- specification of appropriate noise and vibration criteria with reference to national and international guidance
- prediction and assessment of the likely noise and vibration impacts during the construction and operational phases of the scheme
- specification of noise mitigation measures to achieve the criteria set for the scheme.

4.13.1 Baseline Environment

The baseline noise environment has been established through a series of unattended environmental noise surveys which were conducted at sensitive receptor locations surrounding the site to quantify the existing noise environment. The survey was undertaken by AONA Environmental and was conducted in accordance with ISO 1996-2:2017 *Acoustics - Description, Measurement and Assessment of Environmental Noise - Determination of Sound Pressure Levels*.

Noise sensitive receptors were identified in the local area; these are located south of the site and primarily comprised residential receptor locations which are located approximately 150m or more from the proposed works.

4.13.2 Assessment of Effects

There is no published statutory Irish guidance relating to the maximum permissible noise level that may be generated during the construction phase of a project. Local authorities typically control construction activities by imposing limits on the hours of operation and consider noise limits at their discretion.

Reference has been made to BS 5228 2009+A1 2014 *Code of practice for noise and vibration control on construction and open sites* to set appropriate construction noise thresholds for the development site.

A high-level construction programme has been provided as part of the Construction Environment Management Plan. Details from the programme have been used to predict typical construction noise levels using guidance set out in BS 5228-1:2009+A1:2014. Construction predictions indicate that the noise impact from works will be adverse, not significant to moderate and short-term, this includes the potential impact for night-time dredging works.

Given the distances between source and receptor locations, the impact of vibration from construction works is predicted to be adverse, not significant and temporary.

Calculations of noise increases at surrounding receptor locations from increased traffic flows on public roads indicate that impacts will be imperceptible.

Noise modelling has been undertaken for the operational stage of the development. The model accounts for a conservative scenario where all ships leave the site simultaneously during the night period, with additional support vehicles and plant in operation on the land. The results of the modelling indicate that the change in noise level will be imperceptible to not significant and the overall impact of the operational phase will be adverse, slight and long-term.

4.13.3 Mitigation and Residual Effects

A suite of mitigation measures has been proposed at the construction stage in line with the guidance contained within BS5228: 2009 + A1 2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites - Part 1 Noise. Various mitigation measures will be considered and applied during the construction of the Proposed Development to minimise the noise and vibration impacts where practicable.

4.14 EIAR Chapter 20: Shipping and Navigation

NASH Maritime Limited, specialists in shipping, navigation and maritime risk, were the lead consultants on Shipping and Navigation for the ORE Hub. A shipping and navigation study area focused on activity within a 1km radius from the PDB, composed of reclaimed land and the dredge area. Navigational features immediately outside of that radius such as the West Holdens Buoy and any relevant traffic activity up to 5km from the development area are also considered in the assessment.

The Navigation Risk Assessment forming the basis of this chapter was conducted in accordance with key national legislation guidance and followed the International Maritime Organisation Formal Safety Assessment methodology.

4.14.1 Baseline Environment

The Proposed Development is entirely within the port limits of Rosslare Europort. The shipping and navigation baseline within this study area was characterised from several data sources and studies, including Admiralty charts, analysis of historical vessel traffic, incident data from the Royal National Lifeboat Institution and Marine Casualty Investigation Branch, consultation with local users and stakeholders, and navigation simulations.

Vessel traffic primarily consists of commercial traffic, with Roll-on / Roll-off passenger ferries bound for Wales, England, Northern Ireland and other European destinations accounting for 70% of vessel movements. Cargo ships, tankers, fishing vessels, recreational craft and tug and service vessels were also identified from automatic identification system data. The port infrastructure includes three commercial berths, a small craft berth, and a fisherman's quay. The RNLI lifeboat station is currently situated between commercial berths 2 and 3.

4.14.2 Assessment of Effects

The construction and operation of the Proposed Development can have impacts on shipping and navigation receptors, including port operations, search and rescue, passenger ferries, small fishing boats and recreational craft.

The NRA was undertaken to identify and assess any navigational safety risks associated with the Proposed Development. Impacts were identified which might arise from the construction or operation of the Proposed Development. These included impacts to existing port and search and rescue operations, impacts on vessel safety such as risk of collision and grounding, and risks to small craft.

To manage port operations, a suite of embedded controls is currently implemented, and these are included in the Proposed Development design. These include Rosslare Europort's Local Port Services Plan, a clear channel policy, emergency plans, method statements, dredging and fendering. The significance of the identified impacts is expected to be slight adverse or lower, meaning they are not significant in EIA terms

4.14.3 Mitigation and Residual Effects

Existing embedded controls are sufficient to manage predicted effects on Shipping and Navigation. Therefore, no secondary mitigation is required.

In addition, all hazards identified as part of the NRA were assessed as Medium Risk and As Low As Reasonably Practicable, or Low Risk, with adopted mitigation. As a result, no additional mitigation is deemed necessary. However, recommendations are made to further enhance navigational safety.

Overall, it is concluded that there will be no significant effects arising from the construction and operation of the Proposed Development on shipping and navigation receptors.

4.15 EIAR Chapter 21: Population and Human Health

GDG were the lead consultants on the Population and Human Health chapter of the EIAR. The Population and Human Health chapter of the EIAR identifies, describes and assesses the direct and indirect effects of the ORE Hub on Population and Human Health receptors in the vicinity of the Proposed Development. An assessment has been made of the changes in environmental and social conditions from the construction and operation of the Proposed Development, and the associated impacts that would occur on population and human health receptors as a result.

Population in EIA is typically assessed through consideration of socioeconomics, such as economic impacts for employment and social effects such as impact of construction on quality of life and well-being issues such as settlement and land use, transport and amenity of the people living in the area.

The assessment of impacts on human health refers to the potential effects on human health from the bio-physical environment (air quality, noise and vibration, water quality, traffic and transport).

This chapter draws on information and assessments undertaken within EIAR Chapter 9: Water Quality and Flood Risk, Chapter 17: Traffic and Transport, Chapter 18: Air Quality, Chapter 19: Noise and Vibration, Chapter 22: Material Assets, Chapter 23: Seascape, Landscape and Visual Assessment, and Chapter 24: Climate.

4.15.1 Baseline Environment

The Study Area for population considered by the assessment in the Chapter is defined as the Electoral Division (ED) in which the Proposed Development lies and the two EDs immediately adjacent to this. The Study Area for human health is based upon the study areas described within the associated chapters.

Population baseline information included review of available data sets to give context for the population, demographic trends, employment and socio-economic indicators. Settlement patterns, land use, transport, services and local amenity including visual, recreational, and tourism were also outlined. Human health baseline information included an overview of public health, local air quality and noise, water quality and flood risk.

4.15.2 Assessment of Effects

Potential population effects for employment, transport and amenity and potential human health effects from changes in local air quality and noise during construction and operation of the Proposed Development were assessed.

There are employment opportunities during the construction of the Proposed Development with a positive effect at a local level however they are not significant in EIA terms. The construction of the Proposed Development is largely marine in nature however there is a predicted increase in traffic. These changes in transport nature and flow rates and effect on pedestrians and cyclist, driver delay and accident and safety are considered not significant in EIA terms.

Potential effects on visual amenity depends on the proximity to the Proposed Development. Effects on visual amenity in close proximity to the Proposed Development (i.e., within 250m) are considered significant. Beyond this limit, the effects are not considered significant.

Human health effects considered due to the construction of Proposed Development include changes in local air quality and noise from increased construction traffic and construction activities. These effects are considered not significant.

The operational phase effects on employment and transport nature and flows are considered not significant in EIA terms.

Similar to the construction phase, visual amenity effects depend on proximity to the Proposed Development. Effects are significant in close proximity (i.e., within 250 m) and not significant beyond this distance from the Proposed Development.

Operational phase human health effects from changes in local air quality and noise are considered not significant.

4.15.3 Mitigation and Residual Effects

Mitigation measures during the construction phase include the implementation of environmental management plans, along with strict security and safety protocols enforced throughout the Proposed Development and the use of a Community Liaison Officer as the primary point of contact for the local community. For the operational phase, noise reduction measures are proposed for operatives that arrive to site during the night period, screening in the form of areas of vegetation

beyond the proposed verge of native trees will be considered and the storage of renewable energy infrastructure within the ORE Hub will be undertaken in a neat and organised manner.

In summary, with integrated measures built into the project design, secondary mitigation measures and best practices measures, the overall significance of impacts to population and human health from the Proposed Development are not considered significant in EIA terms, with the exception of visual amenity effects in close proximity to the Proposed Development.

4.16 EIAR Chapter 22: Material Assets

An assessment of material assets was undertaken by GDG following desktop review and utility surveys to identify, locate, and document all existing utilities.

The assessment of material assets for the Proposed Development was conducted following the EPA EIAR Guidelines. The methodology focused on evaluating potential effects on built infrastructure (ports) and services, including electricity, telecommunications, water supply, foul drainage, traffic, and marine facilities. Both onshore and offshore elements were considered. The assessment incorporates stakeholder consultations and data collection from utility providers.

4.16.1 Baseline Environment

The Material Asset Study Area included the PDB for onshore material assets and a 25km area beyond the PDB for the offshore material asset assessment. Within the onshore study area electrical, telecommunications, gas, water and wastewater utilities were identified. Electrical, telecommunications, potable and wastewater utilities are present within the wider environment including Rosslare Europort. Within the offshore study area telecommunication cables were identified 16km to the south and a marine disposal site 6.5km to the east. No oil or gas infrastructure or military active areas were identified. Major infrastructure is the Rosslare Europort adjacent to the Proposed Development. The Proposed Development during construction and operation require connection to electrical, telecommunications, potable and wastewater infrastructure.

Key onshore material assets receptors include electrical infrastructure, water supply, and foul drain network. Key offshore material asset receptors include electrical and telecommunications infrastructure, marine disposal areas and ports and harbours. Potential effects on onshore and offshore material assets comprised potential damage to existing utility infrastructure, temporary disruptions to service operation, demand on utilities during construction and operation of the Proposed Development and disruption to infrastructure (ports and marine disposal site).

4.16.2 Assessment of Effects

The assessment concludes that there are no significant effects predicted on utilities and demand on utilities and no significant effects on port infrastructure as a result of construction and operation phases of the Proposed Development.

During construction connection to electrical, water and wastewater utilities are required. Potential for damage and disruption to these utilities was considered not significant and therefore not significant in EIAR terms. During construction of the Proposed Development demand for electrical

and water/ wastewater utilities was considered imperceptible and not significant in EIAR terms. Any disruption to infrastructure, marine disposal sites and Rosslare Europort was assessed as no effect and imperceptible and therefore not significant in EIA terms.

During operation of the Proposed Development demand for electrical and water/ wastewater utilities was considered slight and not significant in EIA terms. Any disruption to infrastructure, marine disposal sites and Rosslare Europort was assessed as no effect and imperceptible and therefore not significant in EIA terms.

4.16.3 Mitigation and Residual Effects

Best practice measures and strategies will be implemented during construction to prevent damage to utilities particularly as services are connected to the Proposed Development.

In summary, with integrated measures built into the project design and best practice measures, the overall significance of impacts to material assets from the Proposed Development are not considered significant in EIA terms. Therefore, the construction and operation of the Proposed Development will not result in significant effects on any material assets.

4.17 EIAR Chapter 23: Seascape, Landscape and Visual Assessment

This Seascape, Landscape and Visual Assessment was prepared by Macro Works Limited. Chapter 23 describes the landscape context of the Proposed Development and assesses the likely landscape and visual effects of the scheme on the receiving environment.

Seascape / Landscape Impact Assessment examines how the Proposed Development will change the character of the coastline and surrounding landscape. This involves analysing the individual features and sensitivities of the area to consider its ability to accommodate such change without significant adverse effects.

Visual Impact Assessment evaluates how the development will affect specific views and the overall visual experience, considering both the loss of existing elements and the introduction of new ones. Impacts include visual obstruction or intrusion.

The methodology for this assessment relates to the Proposed Development and ensures that it is appropriate and fit for purpose, guided by the Landscape Institute's Guidelines for Landscape and Visual Impact Assessment (3rd Edition).

4.17.1 Baseline Environment

The seascape and landscape baseline outlines the current context against which changes due to the Proposed Development at Rosslare Bay will be assessed. The landscape is characterised by a relatively flat coastal plain at Ireland's south-eastern edge, featuring low but steep escarpments, sea cliffs, and anthropogenic elements linked to the Rosslare Europort. Over time, the coastline has shifted from a naturalistic form to a more engineered one to support port activities.

Land use in the area is diverse, predominantly shaped by the port's operations, with freight storage, a boat harbour, and the national railway line separating the port from urban Rosslare. Beyond the

settlement, pastoral farmland with mixed hedgerows becomes the dominant land use, while coastal vegetation mainly comprises low scrub and sand dunes.

Rosslare Harbour is the largest nearby settlement, with Kilrane and Tagoat also within the study area. The closest residential areas are found along Cliff Road and Ballygerry, with no homes situated on the coastal side of the railway line in the immediate area.

Transport routes include the N25 National Primary Route, regional roads (R736, R740), a network of local roads, the national railway line, and ferry routes serving Rosslare Port. The area also features notable public amenities such as the Wexford cycle hub, cliff walking trails, golf clubs, and several public beaches including Rosslare Harbour Beach, St Helens Beach, and Rosslare Strand.

The visual baseline is illustrated in the computer-generated Zone of Theoretic Visibility (ZTV) map which shows where the Proposed Development could theoretically be seen, based on terrain alone and ignoring screening from vegetation or buildings. The ZTV is most useful for identifying areas within the 5km study area where the development will definitely not be visible due to landform screening. Key findings include that the reclamation area is largely screened by steep terrain to the south, although it may be visible from the port complex, Rosslare Harbour's coastline, Rosslare Strand, and some locations inland near Tagoat. However, actual visibility will be less than the map suggests, as real-world features like vegetation and buildings further limit views. The ZTV also does not account for future operational-phase structures, which may be visible from further inland.

Viewshed Reference Points (VRPs) are chosen locations used to assess the visual impacts of the Proposed Development, covering a range of receptor types, distances, and viewing angles. Twelve VRPs are selected, representing local amenities, communities, major routes, population centres, and scenic/heritage features across the area.

4.17.2 Assessment of Effects

During the construction phase of the Proposed Development, there will be a significant and short-term increase in activity and physical disruption at the site, including the creation of reclaimed land and various infrastructure works. These activities will cause substantial changes to the local seascape and coastal context, particularly within 250 metres of the site, where impacts are deemed Very High in magnitude and Significant in EIA terms. The effects, which include increased vehicle and vessel movements, temporary compounds, dredging, and construction of new harbour and port facilities, will result in cluttered views and reduced scenic amenity, although they are largely confined to the immediate vicinity of the port. The significance of these impacts diminishes rapidly with distance, becoming Moderate or Slight further inland and along more distant sections of coastline. Importantly, these construction effects are temporary, with activity expected to last 18–24 months and occur within an already busy industrial port setting.

Upon completion, the Proposed Development will significantly alter the coastal area around Rosslare Europort, extending approximately 500m northwards and nearly doubling the size of the existing port with a reclaimed area of about 21 hectares. This expansion will lead to increased physical and visual changes, intensifying both the scale and activity of development in the western sections of the port. Operational activities will include unloading, temporary storage, and loading of renewable energy components, berthing of various vessels, freight ferry movements, general cargo handling,

and ongoing maintenance dredging. While these activities are typical of a working port, the development will heighten the industrial character of the landscape and become a major coastal feature in the region. Although much of the new land will be screened from distant views, the operational phase will introduce substantial infrastructure that may increase the site's visual prominence from inland areas. The effects of the development are considered permanent, with the highest landscape impacts felt within 250 metres of the site, decreasing with distance due to screening and the project's reduced proportion of the overall coastline. The overall significance of landscape effects is assessed as Substantial-moderate locally, with residual effects elsewhere ranging from Moderate to Imperceptible. The quality of these effects is classified as negative/adverse and permanent. Visual impacts are evaluated using photomontages for selected viewpoints, providing accurate depictions of the development's appearance.

Visual effects were assessed at 12 viewpoints throughout the immediate and wider landscape/seascape context, representing various viewing distances, angles and receptor types. The residual significance of visual effects ranged between Substantial and Imperceptible, with those effects considered Significant in EIA terms (i.e., substantial and above) principally located in the immediate surrounds of the Proposed Development. Indeed, some of the most notable visual effects will be generated from the storage and assembly of the large-scale renewable energy infrastructure within the proposed ORE Hub.

Overall, the Proposed Development will result in a marked degree of physical change to the coastal environs in the immediate surrounds of the site and will substantially increase the intensity of development within the wider port complex. Whilst the location of the Proposed Development will not present as an inappropriate form of development in the context of the already well-established Rosslare Europort, it will intensify the overriding industrial/working character of the surrounding landscape/seascape, becoming one of the principal coastal developments along the southern portion of the Irish coastline. Thus, the overall significance of operational phase landscape effect was deemed Substantial-moderate. For the remainder of the 5 km study area, residual effects are likely to range from Moderate to Imperceptible. The quality of effects is classified as Negative/adverse, and their duration is deemed 'Permanent'.

4.17.3 Mitigation and Residual Effects

The main mitigation by avoidance measure employed in this instance is the siting of the Proposed Development within an existing busy port complex so it will not appear out of place or inappropriate along the coastline. Furthermore, the site is contained to the north of a steep escarpment along the coastline adjacent to Rosslare Harbour, resulting in partially screened and heavily screened views of the Proposed Development from the more inland sections of the study area.

Due to the scale and nature of the development, there are very few opportunities to provide additional screening in the form of additional areas of vegetation. Nonetheless, during the operational phase of the Proposed Development, the storage of renewable energy infrastructure within the ORE Hub will be undertaken in a neat and organised manner to reduce any further visual effects relating to visual clutter and confusion.

In terms of residual Landscape/Seascape effects, whilst the extensive area of land reclamation and areas of dredging are the cause of the greatest physical and landscape change, the visual presence of the large-scale operational features and incoming vessels will have the most notable effect on the character of the surrounding coastal environs. Whilst the Proposed Development is not considered an out of character development in the context of this busy port setting, it will result in marked intensification of wider port related development and will become one of the predominant land uses along this section of the coastline and will considerably increase the quantum of built development in the area. As a result, the residual magnitude of seascape/landscape effect at the site scale and in its immediate vicinity is deemed Substantial-moderate. The quality of effect is classified as Negative/adverse, and the duration of effect is deemed Permanent.

However, these operational phase activities within the site will fluctuate over time, and thus, the assessed visual effects represent the worst-case scenario in terms of residual effects. Overall, whilst the Proposed Development will generate some highly localised significant visual effects, its character and physical composition, along with its operational activities, will not appear incongruous within the context of the surrounding busy, working port setting to which it is adjacent. Indeed, whilst the Proposed Development represents a marked increase in the quantum of built development along these coastal environs, it presents as an extension to the already highly modified existing and well-established port facility.

4.18 EIAR Chapter 24: Climate

The climate assessment was undertaken by AWN Consulting, The assessment focussed on:

- The potential greenhouse gas emissions (GHG) during the construction and operational phases of the development
- The offsetting of GHG emissions through renewable electricity generation, which will contribute to reducing Ireland's reliance on fossil fuels
- The vulnerability of the Proposed Development to climate change, including considerations for increased rainfall and other projected climate impacts
- The design measures to enhance the Proposed Development's resilience to future climate risks, such as incorporating drainage systems for increased rainfall
- The long-term benefits of the development in helping Ireland achieve its Climate Action Plan targets and the National Climate Objective of Net Zero by 2050

4.18.1 Baseline Environment

The existing climate baseline can be determined by reference to data from the EPA on Ireland's total greenhouse gas (GHG) emissions and compliance with European Union's Effort Sharing Decision *"EU 2020 Strategy"* (Decision 406/2009/EC). The EPA estimates that 2023 total national GHG emissions, excluding Land Use, Land-use Change and Forestry, have decreased by 6.8% on 2022 levels to 55 Mt CO_2e, with a 2.2 Mt CO_2e (-21.6%) reduction in electricity industries alone. This was driven by a 40.7% share of energy from renewables in 2023 and by increasing our imported electricity. EPA projections indicate that Ireland has used 63.9% of the 295 Mt CO_2e Carbon Budget for the five-year

period 2021-2025. Further reduction measures are required in order to stay within the budget requirements.

4.18.2 Assessment of Effects

The impact to climate as a result of a Proposed Development must be assessed as a whole for all phases. The Proposed Development will result in some impacts to climate through the release of GHGs. TII state that the crux of assessing significance is:

"*Not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050*".

The potential impacts on climate have been assessed in two distinct ways; a GHG assessment and a climate change risk assessment. The GHG assessment quantifies the GHG emissions from a project over its lifetime and compares these emissions to relevant carbon budgets, targets and policy to contextualise magnitude. The climate change risk assessment considers a project's vulnerability to climate change and identifies adaptation measures to increase project resilience.

The impact of the construction and operation of the Proposed Development on Ireland's total national greenhouse gas emission is compared to Ireland's 2023 total greenhouse gas emissions, the relevant sectoral emissions ceilings and 2030 carbon budgets. Any adverse impacts are predicted to occur during the construction phase, with the dominant sources of GHG emissions as a result of the development due to the construction traffic and embodied energy associated with the Proposed Development's construction.

The generation of renewable electricity for export to the national grid during the operational phase will lead to a net saving for the Proposed Development in terms of GHG emissions. The production of wind power for export to the national grid means that the proposed impacts from the Proposed Development in terms of GHGs have a net positive annual impact and will contribute to Ireland achieving the Climate Action Plan commitments and the 2030 carbon budgets as well as the long-term National commitment of achieving Net Zero by 2050.

The Do Nothing assessment assumes that the Proposed Development is not built. In this scenario the climate emissions will remain as per the current baseline in the short-term.

In this scenario, the additional renewable energy capacity associated which the Proposed Development being constructed and operated is not generated. Such renewable energy is required to ensure targets set out in the Climate Action Plan are met. Such targets include up to 80% of the national grid being generated from renewable sources including 37GW of offshore wind by 2050. In addition, the Climate Action Plan aims to phase out and end the use of coal and peat in electricity generation by 2030. The Do Nothing Scenario is not in line with such plans. Reducing the use of coal and peat in energy generation and a reliance on renewable energy will also have a beneficial effect on air quality. Therefore, the Do Nothing Scenario is a lost opportunity for a beneficial effect on climate in the long term.

The GHG emissions associated with the construction of the Proposed Development were calculated using the online Transport Infrastructure Ireland Carbon Assessment Tool. GHG emissions associated

with the Proposed Development are predicted to be a small fraction of Ireland's Industry and Transport sector 2030 emissions ceilings of 4 Mt CO_2e and 6 Mt CO_2e, respectively. The Proposed Development will incorporate some mitigation measures which will aim to reduce climate impacts during construction and once the development is operational.

GHG emissions will occur during the operational phase due to increases in vessels as a result of construction and maintenance associated with the ORE Hub. The changes in road traffic volumes associated with the ORE Hub operational phase were not substantial enough to meet the assessment criteria requiring a detailed climate modelling assessment, as per Transport Infrastructure Ireland (TII) 2022 guidance "PE-ENV-01104: Climate Guidance for National Roads, Light Rail and Rural Cycleways (Offline & Greenways) – Overarching Technical Document". This remains the case should the Proposed Development support traditional port operations (e.g., RoRo cargo operations) in periods where there is no offshore renewable energy project demand for the development, though the primary use of the facility within the first 30 years will be for ORE operations.

The Proposed Development purpose is to assist with the development of offshore wind energy in Ireland. Offshore renewable energy is a key component of the National Climate goal of achieving net zero by 2050 detailed within the 2021 Climate Act. Ireland plans to have 37GW of offshore wind by 2050 in order to meet our carbon neutral by 2050 target. Should the Offshore Renewable Energy not be provided in any location, the construction of offshore windfarms and the clean renewable power which replaces power generated from fossil fuels would be delayed or prevented.

Impacts to climate are deemed direct, long-term, adverse and slight, which is considered not significant with regard to the construction and operational phases in terms of the TII significance criteria which set a high bar for the assessment of GHG emissions.

A climate change risk assessment was conducted to consider the vulnerability of the Proposed Development to climate change, as per the TII 2022 PE-ENV-01104 guidance. This involves an analysis of the sensitivity and exposure of the Proposed Development to future climate hazards which together provide a measure of vulnerability. The hazards assessed included flooding (coastal, pluvial, fluvial); extreme heat; extreme cold; drought; extreme wind; lightning, hail, fog, wildfire, landslides and coastal erosion. The Proposed Development is predicted to have at most low vulnerabilities to the various climate hazards, with the exception of flood risk which has a medium vulnerability. However, the design has taken this into account and applied significant design mitigation and will maintain management plans to mitigate this risk. The risk to the Proposed Development from future climate change will require periodical updates and active management to ensure the Proposed Development remains resilient to future climate impacts.

4.18.3 Mitigation and Residual Effects

A number of best practice mitigation measures are proposed for the construction phase of the Proposed Development to ensure that impacts to climate are minimised. These mitigation measures include a construction program, determine material reuse and waste recycling opportunities and identifying and implementing lower carbon material choices and quantities during detailed design.

The Proposed Development will align with requirements under the Local and National Climate Action Plans.

During the operational phase, emissions will be associated with vessel movements associated with the construction and maintenance of the offshore windfarms. The buildings associated with the ORE Hub will be designed as Nearly Zero-Energy Buildings and meet requirements under the revised Energy Performance of Buildings Directive (EU/2024/1275). To address future climate change risks, the design includes mitigation measures such as a quay height that exceeds the sea level rise with the high-end future scenario (RCP8.5) (2100).

In relation to climate change vulnerability, it has been assessed that there is a low risk as a result of the majority of future climate change hazards with the exception of flooding which has a medium risk. However, the sensitivity of the Proposed Development's assets has been mitigated by ensuring the quay height is significantly above the RCP8.5 projected sea level rise level by 2100. The risk to the Proposed Development from future climate change will require periodical updates and active management to ensure the Proposed Development remains resilient to future climate impacts.

4.19 INTERACTIONS

EIAR Chapter 25: Interactions of the EIAR draws from the information contained in each of the environmental topic chapters of the EIAR and is a summary of the additional impacts and effects, if any, on environmental receptors, and the requirement for additional mitigation, which may arise due to:

1) interactions between the various impacts and effects on receptors arising from construction and operation of the Proposed Development
2) interactions / cumulative effects between existing and / or approved projects in the same area as the Proposed Development
3) additionally, as required by the United Nations Economic Commission for Europe Convention on Environmental Impact Assessment in a Transboundary Context (referred to as the 'Espoo Convention') adopted in 1991, the potential interaction between significant effects arising from the Proposed Development and effects on environmental receptors outside the boundary of Irish waters.

Where potential interactions between environmental topics were identified, the mitigation measures described within the individual chapters were considered. It is concluded that the mitigation measures included for all environment topics of the EIAR will minimise the potential for significant effects for the interactions. No additional mitigation measures or monitoring are therefore considered necessary.

During construction, there is potential for cumulative effects between the Proposed Development and existing and proposed developments should maintenance dredging (licence S0016-02 for the period 2023 - 2027) and capital dredging occur simultaneously. To minimise cumulative impacts and effects on receptors arising from associated elevated levels of turbidity and underwater noise being introduced into the marine environment, IÉ will ensure these dredging activities do not occur simultaneously.

No further significant adverse cumulative effects during operation stage were identified, and no additional mitigation measures or monitoring are required.

With respect to the requirement for a cumulative assessment on climate, TII guidance titled 'Climate Guidance for National Roads, Light Rail, and Rural Cycleways (Offline & Greenways) - Overarching Technical DocumentPE-ENV-01104' states "as the identified receptor for GHG Assessment is the global climate and impacts on the receptor from a project are not geographically constrained, the normal approach for cumulative assessment in EIA is not considered applicable". However, by presenting the GHG impact of a project in the context of its alignment to Ireland's trajectory of net zero and any sectoral carbon budgets, the cumulative climate assessment demonstrates the potential for the ORE Hub to affect Ireland's ability to meet its national carbon reduction target. Therefore, the assessment approach is considered to be inherently cumulative. The Proposed Development is necessary to assist with the development of offshore renewable energy in Ireland. Offshore renewable energy (specifically wind energy) is recognised as a key component of the National Climate goal of achieving net zero by 2050 detailed within the 2021 Climate Act. Therefore, the Proposed Development is considered cumulatively beneficial.

The nature and location of the Proposed Development - within Rosslare Europort, a sheltered coastal environment, limit the potential for transboundary effects. While some mobile marine species may range across national waters (e.g., pelagic fish, marine mammals, seabirds), the physical and acoustic impacts of construction (e.g., noise, turbidity) are predicted to be localised and do not extend beyond Irish waters. Sediment dispersion and noise modelling confirm that the spatial extent of pressure propagation remains within the Irish Economic Zone and does not approach the European Economic Zone boundary. Where there is no pathway for transboundary effects on the environment of another country, there will be no transboundary effects on the environment of another country.

4.20 Summary of Secondary Mitigation Measures and Monitoring

As introduced in Section 2.3.2 of the NTS, there are three types of mitigation considered in the EIAR.

- Primary mitigation
- Secondary mitigation
- Tertiary mitigation

The primary mitigation measures which were applied to the design and development of the ORE Hub are described in EIAR Chapter 5: Assessment of Alternatives and Project Design, and Chapter 6: Project Description. The environmental topic chapters of the EIAR also identify in detail the primary, secondary and tertiary mitigation applicable to each.

The final chapter of the EIAR (Chapter 26) presents a summary of all secondary mitigation measures (i.e., the measures required in cases where significant adverse effects have not been avoided by project location, design or timing or require to be further reduced to within acceptable levels) for each environmental topic chapter during construction and operation.

The secondary mitigation measures are environmental commitments, which IÉ will ensure adherence to during the construction (through the CEMP prepared by the appointed Contractor) and

operation (by facility users and ORE developers and operators) through Rosslare Europort's bylaws and port operations policies and procedures.

In cases where residual effects (i.e., environmental effects which remain following the application of mitigation) are uncertain or where the effectiveness of proposed mitigation measures requires validation, monitoring programmes are set out in each environmental topic chapter of the EIAR, and also summarised in this chapter. The key monitoring programmes as set out in the EIAR environmental topic chapters and summarised in the final chapter of the EIAR are described below.

4.20.1 Construction Phase Monitoring

- During construction, real-time turbidity monitoring will be carried out using buoys placed up-current and down-current of the dredging area, enabling immediate detection and management if SSC exceed set limits. These buoys will relay instant alerts for elevated SSC, with monitoring positions adjusted according to tidal cycles.
- Monitoring for protected species in the terrestrial and marine areas by a licensed Ecologist and Marine Mammal Observers before and during construction and blasting, piling and dredging works, including static acoustic monitoring.
- Monitoring of dredging activities by a licensed Archaeologist.
- Monitoring of the dust mitigation measures will be required as set out in Section 18.7 and the oCEMP. The monitoring requirements will ensure that the dust mitigation measures are working satisfactorily.
- Noise monitoring to ensure adherence to guidance limits for protection of amenity of nearby receptors.

4.20.1.1 Operational Phase Monitoring

- In the operational phase, pre-construction surveys will establish baseline seabed and beach conditions, followed by regular post-construction bathymetric and topographic surveys within 1km of the development. An adaptive management approach will be used, with monitoring plans reviewed and updated as needed, and results will be shared with relevant authorities.
- Monitoring of constructed drainage to ensure its optimal performance.
- On completion of construction, programmes of monitoring of bird species (12 months, or 2 years in the case Kittiwake nest counts).

5 NEXT STEPS

The EIAR and application documents may be inspected free of charge or purchased on payment of a specified fee (which fee shall not exceed the reasonable cost of making such copy) during public opening hours at the following locations:

- The Offices of An Coimisiún Pleanála, 64 Marlborough Street, Dublin 1, D01 V902.
- The Offices of Wexford County Council, County Hall, Carricklawn, Wexford, Y35 WY93.

The application documents may also be viewed or downloaded on the following website: www.rosslareorehub.ie. This application is also registered on the Department of Housing, Local Government and Heritage EIA portal, accessible at: https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1

Any enquiries relating to the application process should be directed to the Marine Area Planning Section of An Coimisiún Pleanála (Tel: 01 8588100).

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