

Rosslare ORE Hub

EIAR Introductory Chapters

Chapter 1:

Introduction and Methodology

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List of Abbreviations

cSPA	Candidate Special Protection Area
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
GDG	Gavin and Doherty Geosolutions Limited
GW	Gigawatt(s)
IÉ	Iarnród Éireann – Irish Rail
MAC	Marine Area Consent
MAP Act	Maritime Area Planning Act 2021, as amended
MARA	Maritime Area Regulatory Authority
NIAH	National Inventory of Architectural Heritage
NOD	Nicholas O'Dwyer Limited
NPWS	National Parks and Wildlife Service
ORE	Offshore Renewable Energy
REAR	Rosslare Europort Access Road
RPS	Record of Protected Structures
RoRo	Roll-On, Roll-Off
ROPax	Roll-On, Roll-Off Passenger
SAC	Special Area of Conservation
SPA	Special Protection Area
S-P-R	Source-Pathway-Receptor
TII	Transport Infrastructure Ireland

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1 INTRODUCTION AND METHODOLOGY

1.1 BACKGROUND

This Environmental Impact Assessment Report (EIAR) has been prepared by Nicholas O'Dwyer Limited (NOD) and Gavin and Doherty Geosolutions Limited (GDG) on behalf of the applicant, 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 offshore renewable energy (ORE) projects.

Support for offshore renewable energy is clearly set out in Ireland's *Climate Action Plan 2025* (Department of Climate, Energy and the Environment, 2025) which has ambitious targets to increase the share of renewable electricity to 80% by 2030. This includes targets to deploy at least 5GW from offshore wind by 2030; increasing to 20 Gigawatts (GW) of ORE generation by 2040 and 37GW by 2050 as set out in the *Future Framework for Offshore Renewable Energy* (Department of Climate, Energy and the Environment, 2024). Previously, 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* (Department of Transport, 2021) 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.

This chapter presents the purpose of the EIAR and outlines the overarching assessment methodology employed to identify the likelihood of significant effects of the project on the environment during its construction and operation. A brief overview of the Proposed Development is provided. The overall structure of the report and an introduction to the Environmental Impact Assessment (EIA) project team are presented, as is information on the difficulties and uncertainties encountered in the preparation of this EIAR.

This EIAR considers a project design life for the quay structures and marine works of 50 years from completion of construction. All port facilities developed for the ORE Hub will be retained and required by Iarnród Éireann – Irish Rail for ORE, traditional port activities¹ and community use beyond this time period (with ongoing maintenance and repairs undertaken). Therefore, it is not considered necessary to plan for decommissioning and reinstatement works or for closure of the quays, storage areas, new Small Boat Harbour or parts of the ORE Hub once they are in-place.

¹ Traditional port activities as defined in the Rosslare Europort Masterplan (March 2020) are roll-on/roll-off (RoRo) and passenger ferry services (RoPax); storage and movement of trade cars and trailers; freight and passenger check-in operations; Customs and Immigration processing; marine services such as berthing, mooring and vessel turnaround; and some bulk cargo handling.

This complies with Section 96.(2)(d) of the Maritime Area Planning Act 2021, as amended (MAP Act) which allows for the re-use of infrastructure for the same or another purpose. It states:

“96.(2) Without prejudice to the generality of the obligation under subsection (1) on the holder of a MAC to rehabilitate a part of the maritime area, that obligation may be or include one or more than one of the following:

(d) the re-use of infrastructure for the same or another purpose;”

Therefore, decommissioning and reinstatement works for the ORE Hub are not considered in this EIAR.

1.2 PROPOSED DEVELOPMENT

The primary 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. Development of the Rosslare ORE Hub 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 and incorporating a new small boat harbour into the Rosslare ORE Hub at a new location in deeper water. The Proposed Development also includes the installation of a new slipway and facility for local clubs, such as the Sea Scouts.

There may be times when the facility is not fully utilised for ORE operations, for example, between ORE projects or due to ORE project delays. At such times, the ORE Hub may be used for traditional port activities. The potential occasional use for traditional port activities has been assessed as appropriate in the relevant chapters of the EIAR.

By providing facilities that support various uses of infrastructure both currently and in the future, the proposed Rosslare ORE Hub aligns with the *National Marine Planning Framework* (Department of Climate, Energy and the Environment, 2021) requirements for maritime economic development and with overarching marine planning policies on co-existence and sustainable infrastructure. Refer to EIAR Chapter 2: Legislation and Policy Context for further information.

The Proposed Development will consist of the following key elements:

- Site preparation and mobilisation
- Capital dredging
- Land reclamation
- ORE Storage Area
- ORE Berth 1
- ORE Berth 2
- ORE Compound
- New Small Boat Harbour

- Slipway and Sea Scouts facility
- Ancillary works

Refer to Chapter 5: Consideration of Alternatives and Project Design, and Chapter 6: Project Description for further detail.

1.3 THE APPLICANT

ÍÉ (“the Applicant”) is Ireland’s national rail operator and the entity responsible for the management, operation, and development of Rosslare Europort. As a wholly owned subsidiary of Córas Iompair Éireann, ÍÉ provides passenger and freight rail services across the country and oversees Rosslare Europort as part of its statutory remit. ÍÉ brings extensive experience in the delivery of major infrastructure projects, working in partnership with government, local authorities, and industry to deliver high quality transport and port solutions.

ÍÉ is committed to enabling a sustainable, connected future for Ireland through targeted infrastructure that supports national and regional growth, environmental responsibility, and value for stakeholders. The proposed ORE Hub at Rosslare Europort directly supports these aims by providing critical infrastructure for the ORE sector and facilitating the Government’s renewable energy targets.

Details of policies and legislation relevant to the Proposed Development are provided in Chapter 2: Legislation and Policy Context, and further information regarding the need for the project is presented in Chapter 3: Need for the Project.

1.4 CONSENTING ROUTE

The Proposed Development is development of a combination of classes in paragraphs 2, 8 and 21 of the Eighth Schedule of the Planning and Development Act 2000, as amended (as inserted by section 172 of the MAP Act 2021, as amended), reproduced below.

- Paragraph 1 of the Eighth Schedule states:

“1. Development referred to in the Seventh Schedule.”

- Paragraph 2 of the Seventh Schedule reads:

“Transport Infrastructure

2 - Development comprising or for the purposes of any of the following:

...

—A harbour or port installation ...—

(a) where the area or additional area of water enclosed would be 20 hectares or more, or

(b) which would involve the reclamation of 5 hectares or more of land, or

(c) which would involve the construction of one or more quays which or each of which would exceed 100 metres in length, or

(d) which would enable a vessel of over 1350 tonnes to enter within it.”

- Paragraph 2 of the Eighth Schedule states:

“2. Development consisting of a trading port or pier for loading and unloading goods that—

(a) is connected to land, and

(b) can accommodate vessels of over 1,350 tonnes”.

- Paragraph 8 of the Eighth Schedule states:

“10. Development consisting of the reclamation of not less than 10 hectares of land from the sea.”

- Paragraph 21 of the Eighth Schedule states:

“21. A harbour or port installation, including—

(a) loading or unloading areas

(b) vehicle queuing and parking areas,

(d) areas for berthing ... of ships, and

(e) areas for the weighing, handling or transport of goods..., and any associated offices or other similar facilities that would—

(i) result in the enclosed area of water in the harbour or port installation being not less than 20 hectares,

(ii) involve the reclamation of an area of land of not less than 5 hectares,

(iii) involve the construction of a quay greater than 100 metres in length, or

(iv) be capable of admitting a vessel of more than 1,350 tonnes.”

As the Proposed Development is development of the above classes of the Eighth Schedule, and is situated partly on land and partly in the nearshore area of a coastal planning authority, the application for development permission will be submitted to the statutory planning authority, in this case An Coimisiún Pleanála, per section 291 of the Planning and Development Act 2000, as amended, as inserted by Section 171 of the MAP Act 2021, as amended.

1.5 PRE-APPLICATION CONSULTATION

The Project Team had a pre-application consultation meeting with An Bord Pleanála (now An Coimisiún Pleanála) on 24th July 2024. An Bord Pleanála subsequently wrote to inform the Project Team that pre-application consultations were concluded and provided a list of prescribed bodies to

be notified following submission of the application for development permission. The letter from An Bord Pleanála to the Project Team dated 28th November 2024 is submitted with the application documentation.

1.6 MARITIME AREA CONSENT

Under the MAP Act 2021, as amended, IÉ is required to obtain a Maritime Area Consent (MAC) from the Maritime Area Regulatory Authority (MARA) prior to applying for development permission for the Proposed Development. IÉ were granted a MAC by MARA on 2nd July 2025 (ref: 20230005).

1.7 THE APPLICATION

The application for development permission is submitted along with the below listed documents:

- Application Documents
 - The forms, copies of statutory notices and letters of notification, and other documentation as required by section 291 of the Planning and Development Act 2000, as amended (as inserted by Section 171 of the MAP Act 2021, as amended), and the Planning and Development Regulations 2001, as amended.
 - Planning Report
- Supporting Documents
 - EIA Scoping Report (incorporating the EIA screening)
 - outline Construction Environmental Management Plan
 - Road Safety Audit
- Appropriate Assessment Screening Report
- Natura Impact Statement
- Water Framework Directive Compliance Assessment
- Environmental Impact Assessment Report
- Application Drawings

1.8 THE REQUIREMENT FOR ENVIRONMENTAL IMPACT ASSESSMENT

An EIA Screening for the Proposed Development was prepared in June 2022 in accordance with the following guidance:

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, from the Department of Housing, Local Government and Heritage (2018)
- Practice Note PN02 Environmental Impact Assessment Screening, Office of the Planning Regulator (2021)
- Environmental Impact Assessment of Projects, Guidance on Screening (Directive 2011/92/EU as amended by 2014/52/EU), from the European Commission (2017)

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 amended², it is subject to mandatory EIA and therefore requires an EIAR to be prepared and submitted with the application for development permission.

This EIAR contains the information required under Article 5(1) and Annex IV of the Amended EIA Directive as transposed under Schedule 6 of the Planning and development Regulations 2001, as amended. It has been prepared to assist the Competent Authority, in this case An Coimisiún Pleanála, to conduct an EIA in respect of the Proposed Development and to support the decision-making process on the application for development permission.

1.9 PURPOSE OF THE EIAR

The purpose of the EIAR is to present the findings of a systematic assessment of the likely significant environmental effects of development proposals. The main aim of the EIAR is to inform the public and the competent authority of the findings of the assessment of potential effects. The EIAR recommends measures for avoiding, and minimising identified environmental effects, and reassesses potential effects post mitigation to determine residual effects (i.e., what level of effect remains after every effort to avoid and minimise).

1.10 STRUCTURE OF THE EIAR

The EIAR comprises three volumes, as follows:

- 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 1.1.

Table 1.1: 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

² 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.

Section	Chapter
	6 - Project Description
	7 - Soils, Geology, Hydrogeology and Contamination
	8 - Coastal Processes
	9 - Water Quality and Flood Risk
	10 - Terrestrial Ecology
	11 - Benthic Ecology
	12 - Fish, Shellfish and Turtle Ecology
	13 - Marine Mammals
	14 - Ornithology
Environmental topic chapters	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

1.11 THE PROJECT 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* (2022) (hereafter referred to as the “EPA EIAR Guidelines”) highlight the need for competent experts to be involved in the EIA process and in the preparation of the EIAR.

A team of specialist consultants, headed by highly qualified environmental consultants and EIA practitioners from GDG and NOD, has prepared this EIAR on behalf of IÉ. The Project Team members responsible for authoring the introductory and concluding chapters, and for co-ordination and review of EIAR technical chapters were:

- Laurie McGee, an Associate within the Environment and Planning Team at NOD, specialising in town and environmental planning. Laurie's first degree is in Geography, awarded from the University of Connecticut, USA. She also holds a Master of Town and Country Planning from the University of West of England, and a Post Graduate Diploma in Community Development Practice from National University of Ireland, Galway. Laurie is a corporate member of the Irish Planning Institute and the Royal Town Planning Institute, and an affiliate member of the Institute of Environmental Management and Assessment. Laurie has over 30 years of experience working on projects in Ireland, Northern Ireland, Scotland, England, and in the USA. Her specialisms are onshore wind and renewable energy, EIA, and community and stakeholder engagement. Laurie has worked on a range of infrastructure projects in sectors such as ports and harbours, airports, water and wastewater, flood relief, and large-scale energy infrastructure.
- Krista Farrugia, an Associate within the Environment and Planning Team at NOD, specialising in EIA, Strategic Environmental Assessment and Environmental consultancy. Krista has over 20 years of experience in the field of EIA. She holds a Master of Science in Integrated Environmental Management from the University of Bath, a Post Graduate Diploma in Wildlife Biology and Conservation from Edinburgh Napier University, and a Bachelor of Science (Honours) in Chemistry and Biology from the University of Malta. She is a Practitioner with the Institute of Environmental Management and Assessment with extensive experience in EIA coordination, environmental auditing, Strategic Environmental Assessment, ecological studies, Appropriate Assessment, and landscape and visual assessment. Krista has worked on a range of infrastructure projects including ports, roads, airports, wastewater, flood relief, coastal development, onshore windfarms, and waste management infrastructure.
- Joey O'Connor, a Principal Marine Environmental Scientist in GDG, specialising in EIA, Appropriate Assessment and environmental consultancy. Joey holds a Master of Science in Engineering in the Coastal Environment from the University of Southampton and a Bachelor of Science (Honours) in Marine Science from the University of Galway. A Marine Scientist with coastal engineering expertise and extensive experience of delivering environmental assessments and consents for development activities and projects, Joey leads a team of environmental and consenting specialists within GDG's Marine Advisory Team and has 16 years' experience across the public and private sectors as a marine and coastal environmental professional and 10 years project and team management experience with a focus on managing delivery of scientifically robust marine environmental evidence and advice. Joey has worked on a range of infrastructure projects including ports and both offshore windfarms and onshore windfarms.
- Mark Armstrong, an Associate Director with NOD, has over 14 years of experience in the field of civil engineering, specialising in project management. Mark's experience includes the project management of teams preparing consent applications and environmental assessments. Mark holds a Bachelor of Engineering (Honours) in Civil Engineering from the University of Galway. Mark has worked on a range of infrastructure projects including ports, drainage, roads, airports. Mark also possesses a wealth of experience in preparing robust consideration of alternatives as part of the design development of infrastructure projects, including those in environmentally sensitive areas. Mark is the Project Manager for the Rosslare ORE Hub.

- Jeannine Dunne, Marine Advisory Director at GDG has rich experience in policy analysis and providing legislative advice across terrestrial and marine domains. In her career over 18 years, Jeannine has become expert in navigating complex legislative systems, ensuring compliance with International, EU, and National environmental and maritime laws. Notably, she played a key role in reforming the regulatory framework and spearheaded the design of technical criteria for Ireland's cutting-edge marine consenting regime. Jeannine's contributions have been vital in fostering marine development while maintaining a balance between industrial growth and environmental protection. She is a contributor to various Statutory and Industry Advisory Groups, actively shaping policies, and initiatives.
- Diarmuid O'Loan, Technical Director of the Ports and Harbours team in GDG, has 33 years' experience in maritime and port structures, including various types of quay construction, several dredging projects, reclamation and marinas in Ireland and the UK. His work includes projects acting as client engineer and in Design & Build projects led by contractors. He has assisted with many licensing applications and contributions to many EIAR reports on marine projects in environmentally sensitive areas. Diarmuid is the Design Technical Lead for the Rosslare ORE Hub.

In preparing their specific environmental topic chapters, the technical specialists have made use of the latest and most appropriate scientific methodology and assessment procedures to support the correct interpretation of data. In each environmental topic chapter in the EIAR, technical specialists provide an explanation of the methods of data collection and assessments of significance that were carried out with reference to applicable discipline or industry standards and government guidance and noting any limitations in relation to data collection or surveys. The technical environmental topic chapters and accompanying technical appendices were reviewed by independent competent experts.

Each Lead Author prepared a non-technical summary of their chapter. These were compiled into the Non-Technical Summary contained in Volume 1 of this EIAR.

The concluding chapters, Chapter 25: Interactions and Chapter 26: Summary of Mitigation Measures and Monitoring, were compiled based upon information contained in each of the environmental topic chapters of the EIAR.

Table 1.2 lists the qualifications and expertise of the Lead Authors for each specialist environmental topic. Each environmental topic chapter contains a statement of authority which details the roles and credentials of all the persons who prepared and contributed to those chapters.

Table 1.2: EIAR Project Team

Chapter	Lead Author	Company	Qualifications	Responsibility
7- Soils, Geology, Hydrogeology and Contamination	Roy Harrison	GDG	BSc (Hons) Geology, MSc Water Resources Engineering Management, Heriot Watt University, CGeol, EurGeol, MIEEnvSci	Roy Harrison is a Chartered Geologist and Member of the Institution of Environmental Sciences. He has over 20 years' experience in his field and has led the geoenvironmental EIA aspects of multiple large-scale developments, including wind farm projects (e.g., Middle Muir Wind Farm, Kype Muir Wind Farm, Kype Muir Extension Wind Farm), large-scale transportation projects (e.g., Clyde Waterfront, Renfrew Riverside and Glasgow Airport Investment Area Infrastructure Development Projects, Cross Tay Link Road, A96 Hardmuir to Fochabers) and urban redevelopments (e.g., Dublin Street north, Monaghan).
8- Coastal Processes	Diogo Neves	GDG	PhD (Civil Engineering) MSC (Geophysics - Physical Oceanography)	Diogo is the Metocean Team Leader for the Offshore Design service line at GDG, with over 15 years of experience in marine and offshore engineering. His specialism is marine and offshore engineering. With a strong academic foundation including a PhD in Civil Engineering and a Masters in Physical Oceanography, Diogo has contributed to various sectors through his roles in wave propagation studies, data processing, and marine technology development. He has led projects across Coastal and Offshore studies, including wave energy and sediment transport. Diogo has over 60 publications in scientific journals and conferences, demonstrating expertise in hydrodynamics, Computational Fluid Dynamics (CFD), and data analysis.
9- Water Quality and Flood Risk	Alasdair Pilmer	GDG	BSc (Hons), MSc Hydrogeology, PGeo, EurGeol	Alasdair Pilmer is Senior Hydrogeologist at GDG and a Chartered Hydrogeologist with the Institute of Geologists of Ireland. He has six years post-graduate experience working in the environmental, civil engineering and renewables sectors. Alasdair has worked on multiple onshore and offshore wind farm projects in the UK and Ireland.
10- Biodiversity: Terrestrial Ecology	Maggie Starr	GDG	BSc (Hons) (Marine Science) Qualifying member of CIEEM	Maggie is an Ecologist and Ornithologist with three years' experience in both onshore and offshore ecological consultancy and surveying. Her expertise spans a wide range of ecological assessments, including specialised freshwater, mammal, bird and habitat surveys and identification of seabird species during offshore digital aerial surveys.

Chapter	Lead Author	Company	Qualifications	Responsibility
				Maggie is a certified Marine Mammal Observer (Joint Nature Conservation Committee accredited), and holds additional certifications for conducting freshwater ecological surveys, including Freshwater Pearl Mussels, Freshwater White-clawed Crayfish and riverine Q-values.
11- Biodiversity: Benthic Ecology	Louise Scally	MERC Environmental	MSc (Botany), PhD (Botany)	Louise is a Principal Marine Ecologist with MERC. She has over 20 years of experience across marine survey, and monitoring. She was the lead marine ecologist for the national programme of surveillance monitoring of the conservation status of all marine Annex I habitats in Ireland for the period 2016 to 2020 as required under Article 11 of the EU Habitats Directive. She is currently fulfilling the same role for the 2021 to 2025 reporting period. Louise is the marine benthic ecology lead for the Rosslare ORE Hub.
12- Biodiversity: Fish and Turtle Ecology	Maggie Starr	GDG	As above	As above.
13- Biodiversity: Marine Mammals	Maggie Starr	GDG	As above	As above.
14- Biodiversity: Ornithology	Colin Barton	Cork Ecology	BSc (Hons) Biology (Ecology)	Cork Ecology is an independent environmental consultancy run by Colin Barton and based in Clonakilty in south-west Ireland. Colin has been working on offshore wind projects and terrestrial projects since 2001, specialising in all aspects of ornithology. He has over 23 years of experience in the field and has provided ornithological support for several offshore wind projects in Irish and in UK waters, with key inputs including baseline and impact assessment chapters as well as Habitats Regulations Assessment (HRA)/NIS documents on birds.

Chapter	Lead Author	Company	Qualifications	Responsibility
15- Commercial Fisheries and Aquaculture	Michael Keatinge	SMEC	Dip. Nautical Science, B.A. (Mod) (Natural Science), Grad Dip (Statistics), M.A. (Zoology), MSc Economics (Policy Studies)	Michael is the Principal Investigator for Seaview Marine Economic Consultancy (Seaview Marine). Michael has over 33 years of experience in the sector and provides advice in support of sustainable fisheries and aquaculture, marine planning, offshore renewable energy and marine protected areas. Michael was Interim Chief Executive of BIM from 2014-2017 and has worked for the Marine Institute and Trinity College, Dublin.
16- Cultural Heritage	Niall Brady	ADCO	BA MA PhD FSA	Dr Niall Brady holds a BA in Archaeology and Geography (UCD 1983); an MA in Archaeology (UCD 1986); an MA in Medieval Studies (Cornell University 1994), and a PhD in Medieval Studies (Cornell University 1996). He is a Fellow of the Society of Antiquaries of London since 2006 and is an associate of Trinity College Dublin's Centre for Environmental History since 2019. Dr Brady has directed the Medieval Rural Settlement Project for the Discovery Programme, Ireland's centre for advanced archaeological research (2002-10), sits on several national and international archaeological committees, and is co-founding director of ADCO (1999-present). Over his 30 years of experience in the field, Niall has carried out a wide range of archaeological assessments on land and underwater and been involved in the preparation of EIARs for port, offshore windfarm and marine pipeline projects.
17- Traffic and Transport	Ronan Kearns	Pinnacle	BA, BAI, MSc, MBA, CEng MIEI	<p>Ronan is a Chartered Engineer who has worked on roads, drainage and civil infrastructure design and project management for residential, retail, data centres, commercial and windfarm developments from feasibility through to construction over 20 years.</p> <p>Ronan has led numerous planning applications and infrastructure designs for a variety of developments. These developments have ranged from small scale residential projects to multimillion Euro retail, data centre and windfarm projects. Ronan specialises in transportation planning and site assessment, preliminary design and detailed design of development. Ronan has completed several Traffic and Transport EIAR chapters on sites throughout Ireland.</p>

Chapter	Lead Author	Company	Qualifications	Responsibility
18- Air Quality	Avril Challoner	AWN	BEng (Hons) Environmental Engineering, HDip Statistics, PhD Environmental Engineering (Air Quality), CEnv, CSci, MIAQM, MIEMA	Dr. Avril Challoner, a specialises in the fields of air quality, climate, EIA and air dispersion modelling. Over her career spanning 12 years, Avril has undertaken air quality and climate impact assessments for a wide array of development types including transportation schemes (active, public and private transport), renewable energy schemes and residential schemes, from constraints through to route selection, EIAR and oral hearing stage.
19- Noise and Vibration	Alistair Maclaurin	AWN	BSc Creative Music and Sound Technology, Dip Acoustics and Noise Control, MIOA	Alistair, a Senior Acoustic Consultant with AWN Consulting, has been the lead noise consultant across various sites on major infrastructure projects such as Crossrail and Thames Tideway Tunnel, specialising in construction noise assessment and control over his 13-year career. Additionally, he has undertaken various other environmental noise assessments for infrastructure developments and planning reports across the UK and Ireland.
20- Shipping and Navigation	Andrew Rawson	Nash Maritime	PhD BA (Hons)	Dr. Andrew Rawson is a maritime consultant and Associate Director at NASH Maritime, specialising in data analysis, modelling and Navigation Risk Assessments (NRA). Andrew has an extensive track record as project manager or technical lead specialising in authoring NRAs, EIA technical chapters, quantitative risk assessments (QRAs) and providing specialist technical advice to clients. Andrew is the project manager conducting the Shipping & Navigation Risk Assessment and EIA chapter for the Rosslare ORE Hub.
21- Population and Human Health	Charlotte Manwaring	GDG	BSc (Hons) (Geological Sciences) MSc (Geochemistry), BA (Archaeology)	Charlotte Manwaring is a Senior Environmental Scientist at GDG with 25 years' experience and an IEMA Practitioner. She has worked across environmental, compliance, planning and monitoring projects in the public and private sectors. She has experience in EIAR for port expansion, onshore windfarms and energy from waste projects and marine licencing.

Chapter	Lead Author	Company	Qualifications	Responsibility
22- Material Assets	Charlotte Manwaring	GDG	As above	Charlotte Manwaring is a Senior Environmental Scientist at GDG with 25 years' experience and an IEMA Practitioner. She has worked across environmental, compliance, planning and monitoring projects in the public and private sectors. She has experience in EIAR for port expansion, onshore windfarms and energy from waste projects and marine licencing.
23- Seascape / Landscape and Visual Assessment	Cian Doughan	Macro Works	BSLA, MILI	Cian is Associate Director at Macro Works Ltd, with 10 years' experience in his field. Macro Works is a consultancy firm specialising in Landscape and Visual Assessment and associated maps and graphics. Macro Works' relevant experience includes a broad range of infrastructural, renewable energy, industrial and commercial projects since 1999, including numerous urban, residential, and mixed-use development projects.
24- Climate	Avril Challoner	AWN	As above	As above.

1.12 SITE LOCATION AND CONTEXT

The site of the Proposed Development is defined by the red line Proposed Development Boundary (PDB) shown in Figure 1.1. The site is located immediately adjacent to the existing Rosslare Europort, situated on the southeastern coast of Ireland 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 (Figure 1.2).

1.12.1 SURROUNDING LAND USES

1.12.1.1 ROSSLARE EUROPORT

Rosslare Europort is one of Ireland's leading ports. The existing port facilities (refer to Figure 1.1) are managed by IÉ. Rosslare Europort is Ireland's second busiest Roll-on, Roll-off (RoRo) and passenger vehicles (ROPax) port, after Dublin, and is Ireland's closest port to mainland Europe. Rosslare Europort is a Tier 2 National Port as defined in Ireland's *National Ports Policy* (2013). It is designated as a Border Inspection Post and is classified as a Coastal Breakwater³ in the *World Port Index* (2019). The Port currently has three RoRo berths with total entrance, queuing, laydown and storage areas of approximately 22ha and maximum combined quay lengths of 940m. Small fishing boats are accommodated in the small boat harbour and at Fisherman's Quay.

Rosslare Europort was used in 2004 for marshalling and assembly of the Arklow Bank Phase 1 demonstration project, with a total capacity of 25.2MW, and is the only port in the State that has supported the build phase for an offshore wind farm.

1.12.1.2 SMALL BOAT HARBOUR

To the west of the existing port storage area lies a small boat harbour (refer to Figure 1.1) where locals have traditionally stored fishing and leisure craft. Local boat users and a limited number of local fishermen and the Sea Scouts use the small boat harbour.

³ The World Port Index classifies harbours by type. Types include Coastal Natural, Coastal Breakwater, Open Roadstead, River Tide Gate, River Natural, River Basin, Lake or Canal, Typhoon Harbour and None.



Figure 1.1: Location of proposed Rosslare ORE Hub

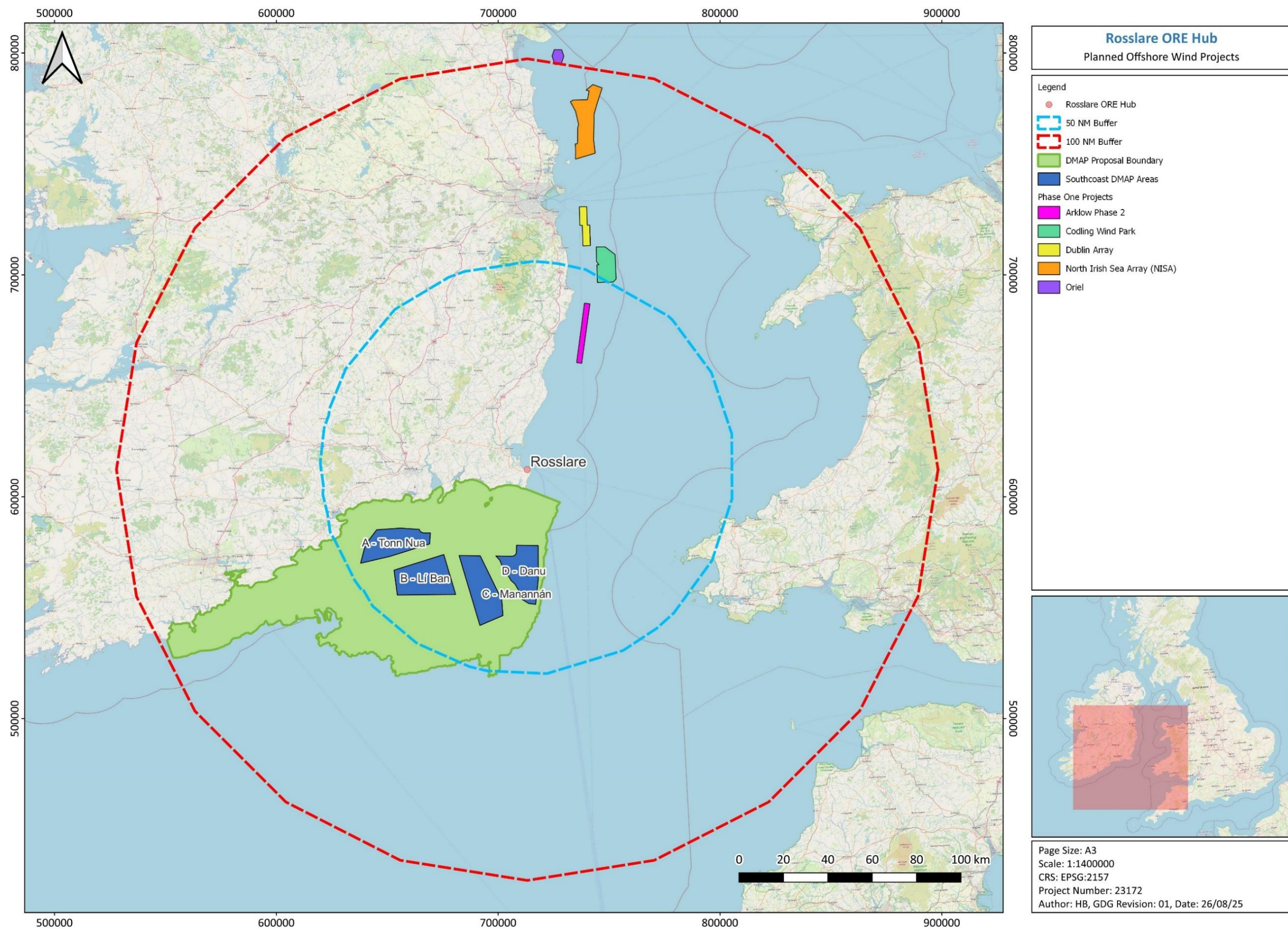


Figure 1.2: Planned offshore wind developments and Designated Maritime Area Plan for ORE in vicinity of proposed Rosslare ORE Hub

1.12.1.3 NEARBY SETTLEMENTS

Rosslare Europort sits immediately to the north of the settlement of Rosslare Harbour, which is distinct from the settlement of Rosslare Strand (which lies approximately 4km to the north along the coast, 8km by road). According to the 2022 Census data, Wexford has a population of 163,919. Rosslare Harbour sits in the St Helen's Electoral Division, which had a population of 2,719 in April 2022.

Rosslare Harbour encompasses the four main townlands of Ballygeary, Ballygillane Little, Ballygillane Big and Ballyknockan which run approximately southwards from the coast. The next adjacent village, Kilrane, lies on the N25 approximately 1.5km to the south-west in the townland of Churchtown. A further 2km along the N25 lies the village of Tagoat (refer to Figure 1.3).

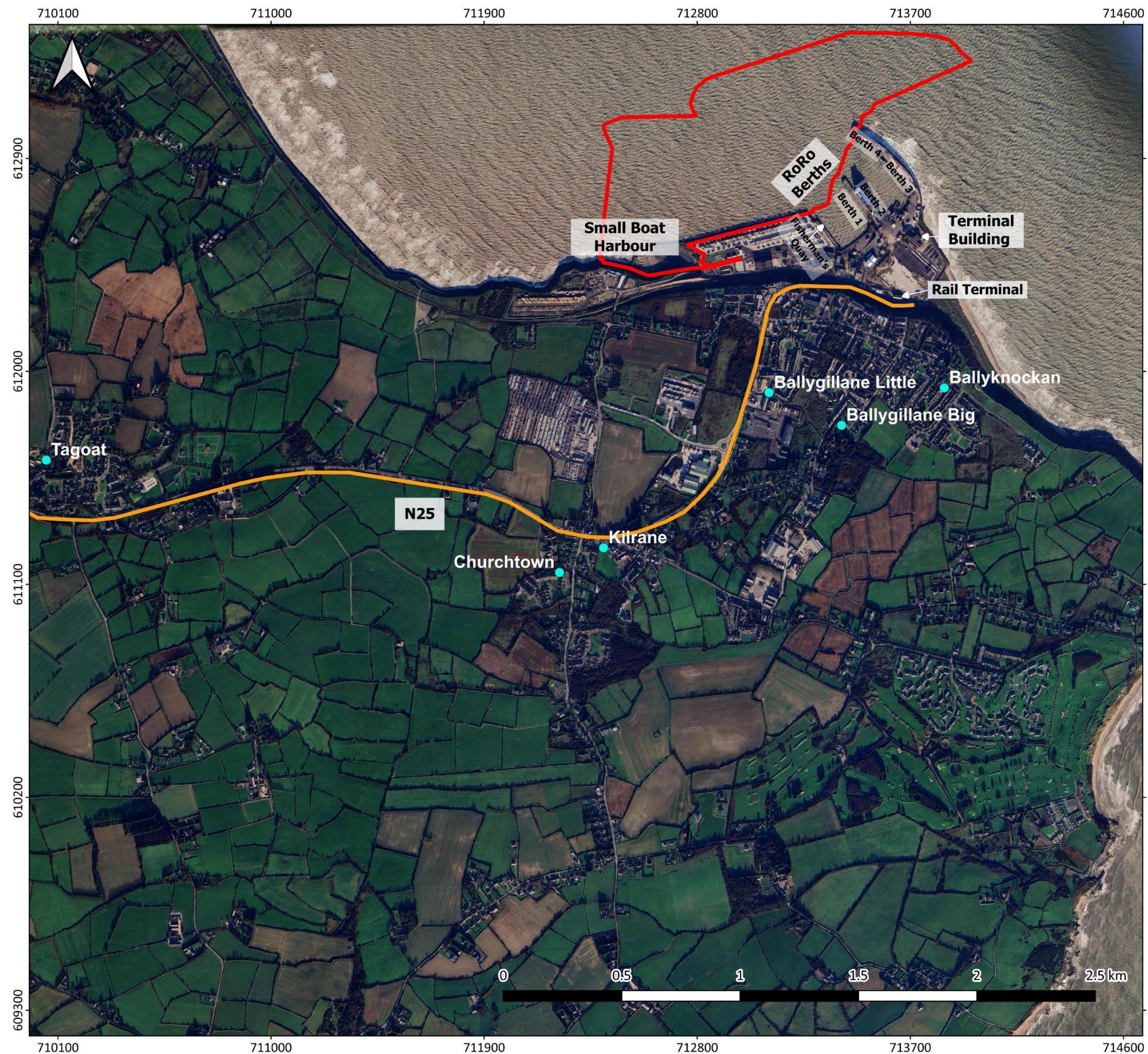
Rosslare Harbour village covers an area of approximately 55ha stretching along the northern and eastern coastlines, predominantly dedicated to residential housing with leisure, retail and hotel facilities. Beyond the village towards the south and stretching out to Kilrane are several adjacent commercial operations, mainly car storage, lorry parking, goods distribution and warehousing which in total cover approximately 25ha. Rosslare Harbour is home to the National Vehicle Distribution centre, and Perennial Freight and Roches Freight, which are transport and logistic companies.

Rosslare Harbour and Kilrane is designated as a Level 3(a) Service Settlement in the Core Strategy Settlement Hierarchy of the Wexford County Development Plan 2022 – 2028. Level 3(a) settlements are important service settlements for their local communities and their wider rural hinterlands and are important contributors to economic activity in the county.

1.12.2 SERVICES

Rosslare Harbour village and Rosslare Europort are served by the Uisce Éireann water supply network with local distribution around the Port by IÉ pipelines. The Electricity Supply Board facilitates the distribution of low voltage and medium voltage electricity within the Port and nearby settlements. The Port is equipped with standard street lighting and high mast lighting.

Refer to Chapter 22: Material Assets for more detail on these services and their capacity to service the Proposed Development.



Rosslare ORE Hub

Proposed Development with Townlands

Legend

Proposed Development Boundary

Wexford Town

Rosslare

Site location

Coordinate Reference System: EPSG:2157
 Project Number: 23172
 Date: 07/10/2025
 Author, Organisation: NC, GDG
 Revision: 00

Figure 1.3: Proposed Development Boundary and surrounding settlements

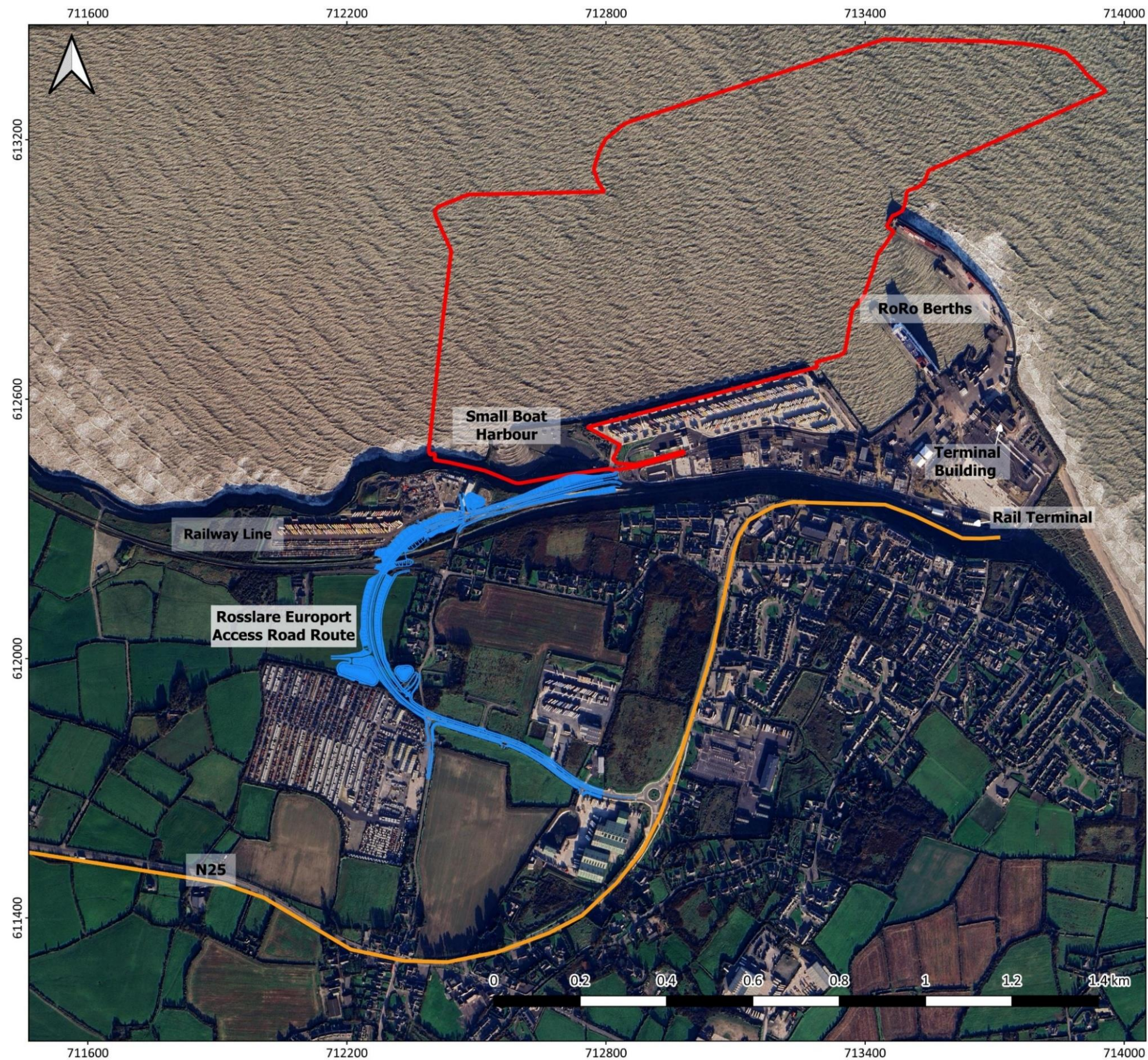
1.12.3 ROADS AND ACCESS

The existing road infrastructure around Rosslare Europort includes a network of local roads and the N25 national route running towards the Port as a main “spine” route connecting to the entrance at the east of the Port (refer to Figure 1.4). Rosslare Europort train station provides access to Dublin and the national rail network via Connolly Station.

The N25 Rosslare Europort Access Road (REAR) project, a joint development of Transport Infrastructure Ireland (TII) and Wexford County Council, involves the construction of a 1.45km single carriageway road, featuring a new access route and improvements to existing roads leading to the west of Rosslare Europort (Figure 1.4). The REAR project was granted planning permission by An Bord Pleanála in October 2023 (ref: 314015) and is currently progressing through Phase 5 “Enabling and Procurement” of TII’s Project Management Guidelines.⁴ On completion of Phase 5, and subject to receiving the necessary approvals and the availability of funding, the project will progress to Phase 6 (Construction and Implementation).

This EIAR takes the most conservative approach and assumes that the N25 REAR project will not be delivered by 2050 and therefore the worst-case scenario (i.e., based on existing road network) has been assessed for the construction and operation stages of the Rosslare Europort ORE Hub.

⁴ Rosslare Europort Access Road Project Website, <http://rosslareeuroportaccessroad.ie/latest-news/>, news posted 19th June 2024. (accessed 7th October 2025).

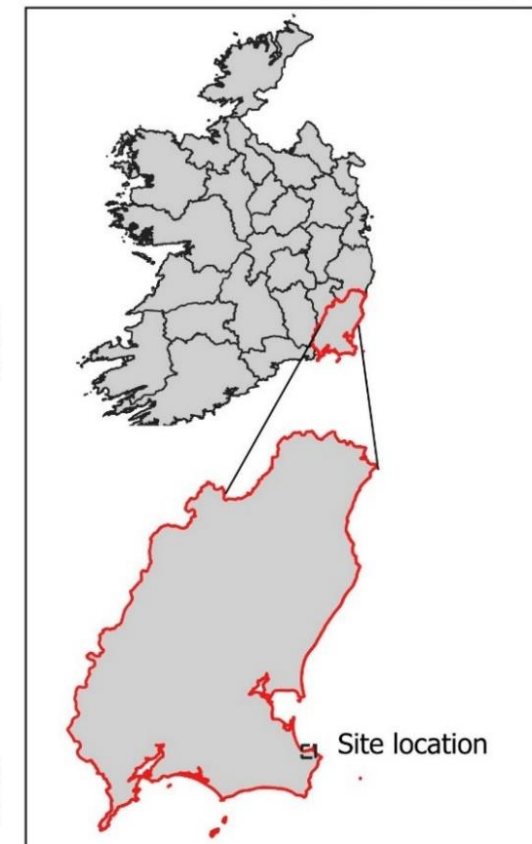
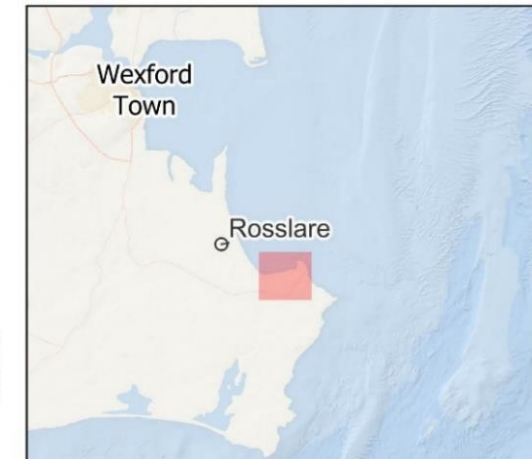


Rosslare ORE Hub

Proposed Development with Rosslare
Europort Access Road Route

Legend

Proposed Development Boundary



Coordinate Reference System: EPSG:2157
Project Number: 23172
Date: 25/08/2025
Author, Organisation: NC, GDG
Revision: 00

Figure 1.4: Rosslare Europort Access Road Route

1.12.4 EUROPEAN PROTECTED SITES

EU countries must designate Natura 2000 sites to protect certain species and habitats of EU importance (European Commission, 2025). Special Areas of Conservation (SAC) are prime wildlife conservation areas in the country, considered to be important on a European as well as an Irish level (National Parks and Wildlife Service, 2025). The legal basis on which SACs are selected and designated is the EU Habitats Directive, transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended. Ireland is also required, under the terms of the EU Birds Directive (2009/147/EC), to designate Special Protection Areas (SPA) for the protection of listed rare and vulnerable bird species, regularly occurring migratory species and wetlands, especially those of international importance for migratory birds.

Figure 1.5 shows the SACs and SPAs in relation to the Proposed Development Boundary. The Proposed Development Boundary overlaps with the proposed boundary of the Seas off Wexford candidate SPA (cSPA).

Interactions between the Proposed Development and Natura 2000 sites, including the Seas off Wexford cSPA, have been considered and assessed in this EIAR⁵ in the following chapters of this EIAR, following the approach outlined in Section 1.13 and the chapters themselves:

- Chapter 10: Terrestrial Ecology
- Chapter 11: Benthic Ecology
- Chapter 12: Fish, Shellfish and Turtle Ecology
- Chapter 13: Marine Mammals
- Chapter 14: Ornithology

⁵ Note interactions between the Proposed Development and Natura 2000 sites, including the Seas off Wexford cSPA, have also been considered and assessed in the Appropriate Assessment (AA) Screening Report and, where relevant, the Natura Impact Statement (NIS), which accompany the planning application. The AA Screening Report and NIS have been produced to support the AA process as required under the Habitats Directive (92/43/EEC), which is transposed in Ireland under Part XAB of the Planning and Development Act 2000, as amended ('the Planning Acts'), to assist the competent authority, An Coimisiún Pleanála, to undertake the Appropriate Assessment of the Proposed Development.

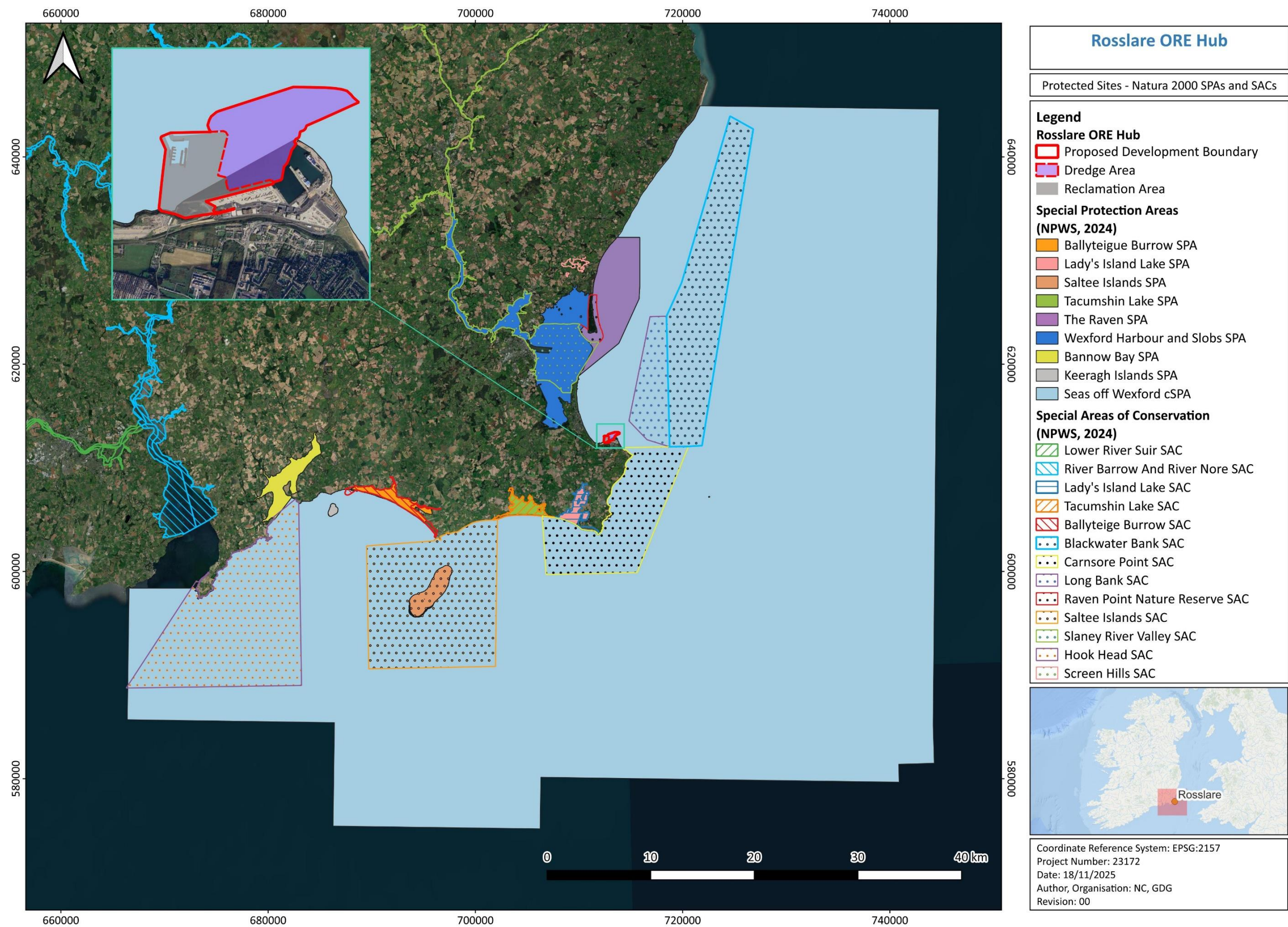


Figure 1.5: European designated protected sites in relation to Proposed Development Boundary

1.12.5 CULTURAL HERITAGE

Monuments of cultural interest, including shipwrecks, are protected and designated under the National Monuments Acts 1930 to 1987. Buildings and structures that are listed in the National Inventory of Architectural Heritage (NIAH) are afforded protection by the Planning and Development Act 2000 through each county's Record of Protected Structures (RPS).

Figure 1.6 shows the location of cultural heritage features within the Proposed Development Boundary and the wider study area (500m radius from the Boundary). The only recorded cultural heritage site that is located within the Proposed Development Boundary is the lighthouse on the pier head. This building is on the NIAH but is not on the Wexford County RPS (Wexford County Development Plan 2022-2028). Two of the nine NIAH buildings in wider study area are on the Wexford County RPS.

There are two historic shipwreck sites within the wider study area. These are W17556 (trawler *Success* lost in 1982) 570m northeast of the study area, and W10425 (unknown origin) which is 220m southeast of the study area.

A windmill (WX048-018) is located 110m south of the Proposed Development Boundary, and a 17th - century house (WX048-017) lies 450m south of the Proposed Development Boundary.

A series of small pit features revealed by excavation (WX048-155) at a location 400m southwest of the Proposed Development Boundary indicates the potential for archaeological remains to survive inshore.

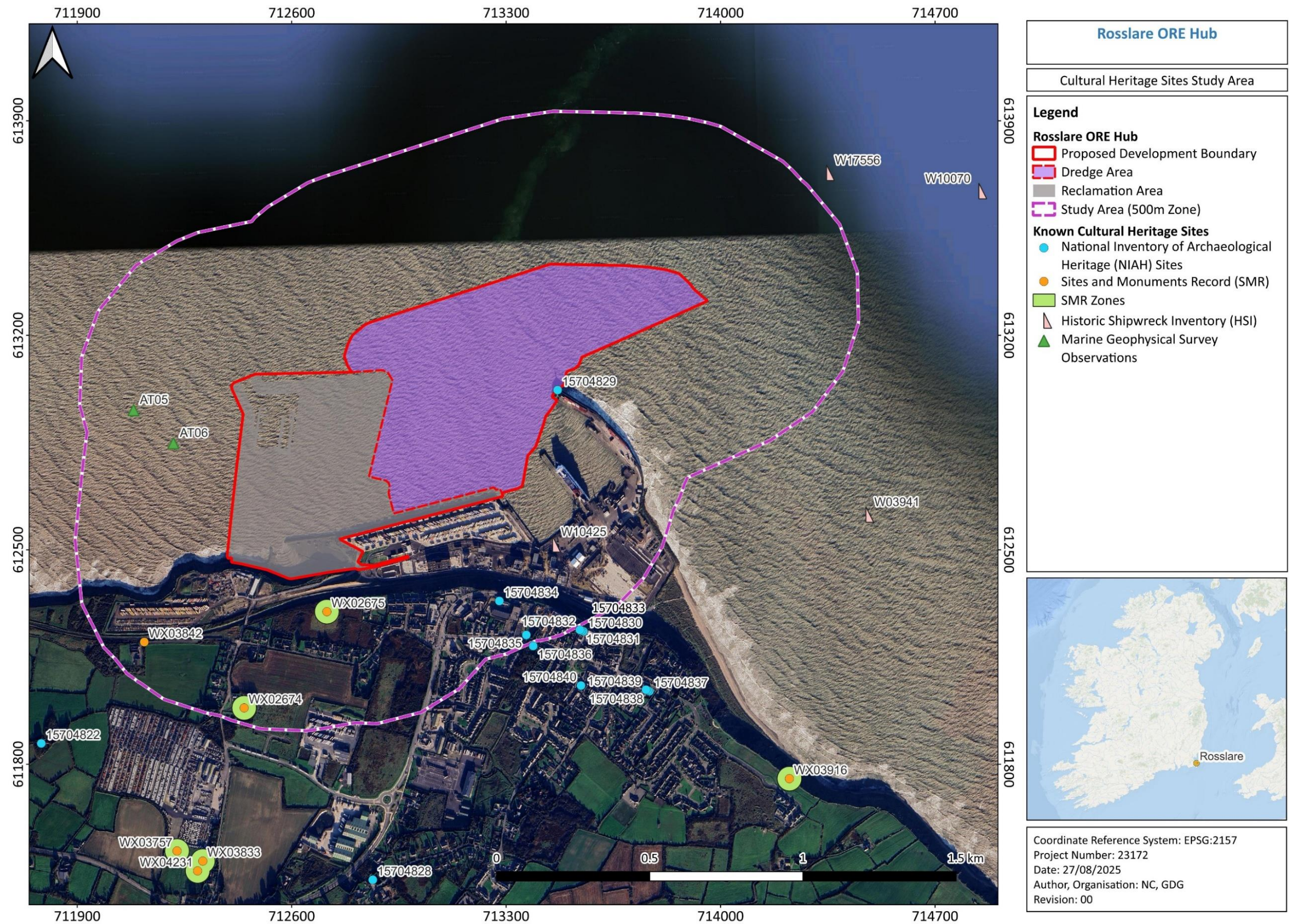


Figure 1.6: Rosslare ORE Hub and cultural heritage features

1.13 APPROACH TO THE EIAR

This EIAR reports on the likely significant (positive and/or negative, adverse and/or beneficial) effects of the Proposed Development on the existing (or baseline) environment, alone and cumulatively with other projects, and proposes appropriate mitigation and monitoring measures where required.

1.13.1 SCOPING AND CONSULTATION

Effective consultation is central to the EIA process. In line with the EPA's EIAR Guidelines (2022), and legal obligations under the Aarhus Convention, preparation of this EIAR has included:

- Engagement with stakeholders at key project stages
- Public participation to ensure transparency
- Integration of feedback into project design and assessment.

Refer to Chapter 4: Scoping and Consultation for a report on the EIA scoping, community engagement, and pre-application consultation with key stakeholders.

1.13.2 BASELINE ENVIRONMENT

The baseline describes the existing environmental conditions against which impacts of a project, and effects on sensitive receptors or features are assessed. The baseline of the receiving environment for the Proposed Development was established through:

- Desk based studies making use of publicly available reports and scientific data
- Stakeholder engagement and consultation, to identify additional data sources and information (see Chapter 4: Scoping and Consultation for full details of scoping and consultation undertaken and how this has informed the EIAR), and
- Site surveys and monitoring.

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 environmental topic chapters of EIAR Volume 2 and the associated Technical Appendices provided in Volume 3.

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. The baseline also informs consideration of the evolution of the environment without the project (the “do-nothing” scenario), recognising that some environmental conditions may change over time even without the Proposed Development.

1.13.3 IMPACT ASSESSMENT DEFINITIONS

The definitions of terms relevant to the impact assessment contained in each chapter are now described.

- **Impact:** A change to the baseline environment caused by the project
- **Effect:** The consequence of that impact on a receptor (e.g., people, habitats)
- **Receptor:** Any environmental feature that may be affected.

There are different types of effects, as described in the EPA's EIAR Guidelines (2022) including:

- **Indirect effects** – Effects on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway
- **Cumulative effects** – The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects
- **'Do-nothing' effects** – The environment as it would be in the future should the subject project not be carried out
- **'Worst-case' effects** – The effects arising from a project in the case where mitigation measures substantially fail
- **Indeterminable effects** – When the full consequences of a change in the environment cannot be described
- **Irreversible effects** – When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost
- **Residual effects** – The degree of environmental change that will occur after the proposed mitigation measures have taken effect
- **Synergistic effects** – Where the resultant effect is of greater significance than the sum of its constituents (e.g., combination of SO_x and NO_x to produce smog).

1.13.4 SOURCE-PATHWAY-RECEPTOR MODEL

This model (abbreviated as S-P-R model) identifies potential effects by linking:

- **Source:** The activity (e.g., construction, causing the impact, noise)
- **Pathway:** The route/medium through which the impact travels (e.g., air, water)
- **Receptor:** The feature affected (e.g., marine mammals).

If no pathway exists, an effect is ruled out.

1.13.5 RECEPTOR SENSITIVITY

The sensitivity of a receptor is characterised by the receptor's capacity to tolerate, adapt to and recover from changes in the environment. Consideration is also given to the importance of the receptor, for example, if a designated protected status applies.

The sensitivity value categories assigned to receptors (or receptor attributes) / resources used in this EIAR, and their definitions are:

- **Negligible:** The receptor/resource is tolerant of change without detriment to its character or does not make a significant contribution to local character or distinctiveness and is not designated
- **Low:** The receptor/resource is tolerant of change without detriment to its character, is of low or local importance
- **Medium:** The receptor/resource has moderate capacity to absorb change without significantly altering its present character, or is of high importance
- **High:** The receptor/resource has little ability to absorb change without fundamentally altering its present character or is of international or national importance
- **Very High:** The receptor/resource has no ability to absorb change without fundamentally altering its present character or is of international or national importance.

1.13.6 IMPACT MAGNITUDE

The magnitude of an impact reflects the scale of environmental change. The following magnitude value categories that have been used in this EIAR, and their definitions are:

- **Negligible:** Very little change from baseline conditions. Change barely distinguishable, approximating to a 'no change' situation
- **Low:** A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but not material. The underlying character/composition/attributes of the baseline condition will be similar to the pre-development circumstances/situation
- **Medium:** Loss or alteration to one or more key elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed
- **High:** Total loss or major/substantial alteration to key elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.

1.13.7 DETERMINING SIGNIFICANCE OF EFFECTS

Significance is determined by combining receptor sensitivity and impact magnitude. In this EIAR, effects are categorised as follows (per the EPA's EIAR Guidelines, 2022, Table 3.4, section 3, p. 50):

- **Imperceptible:** an effect capable of measurement but without significant consequences
- **Not Significant:** An effect which causes noticeable changes in the character of the environment but without significant consequences
- **Slight:** An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
- **Moderate:** An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends
- **Significant:** An effect which, by its character, magnitude, duration or intensity, alters a sensitive aspect of the environment

- **Very Significant:** An effect which, by its character, magnitude, duration or intensity, significantly alters most of a sensitive aspect of the environment
- **Profound:** An effect which obliterates sensitive characteristics.

1.13.7.1 EXTENT AND CONTEXT OF EFFECTS

- **Extent** includes the size of the area, the number of sites and the proportion of a population affected by an impact
- **Context** can affect the perception of significance. It is important to establish if the effect is unique or, perhaps, commonly or increasingly experienced.

1.13.7.2 DURATION AND FREQUENCY OF EFFECTS

Impacts may be short term, temporary or longer term over the lifetime of the Proposed Development.

- **Duration** has been categorised as follows for this EIAR, as described in the EPA's EIAR Guidelines (2022):
 - **Momentary effects** – Effects lasting from seconds to minutes
 - **Brief effects** – Effects lasting less than a day
 - **Temporary effects** – Effects lasting less than a year
 - **Short-term effects** – Effects lasting one to seven years
 - **Medium-term effects** – Effects lasting seven to fifteen years
 - **Long-term effects** – Effects lasting fifteen to sixty years
 - **Permanent effects** – Effects lasting over sixty years
 - **Reversible effects** – Effects that can be undone, for example through remediation or restoration.
- **Frequency** has been categorised as follows for this EIAR (note hourly, daily, weekly, monthly and annually are also used, where relevant):
 - Once
 - Rarely
 - Occasionally
 - Frequently
 - Constantly.

In the chapters, each potential effect has been assessed in terms of its magnitude and in the context of the receptor's sensitivity or value, resulting in a prediction of the level of significance of the resulting effect. In this way, a determination of whether significant effects will result is made. Effects determined as moderate or lower will be considered to have no likely significant effect, unless they are determined to have likely significant effects when combined with other effects (interactions and cumulative effects).

As illustrated in Table 1.3 and Figure 1.7, this EIAR characterises the magnitude of the impacts identified in the context of the sensitivity of the receptors to then determine the level of significance of the effects.

Table 1.3: Rosslare ORE Hub EIAR Effect Significance Matrix

Sensitivity		Magnitude			
		High	Medium	Low	Negligible
	Very High	Profound	Very Significant	Significant	Moderate
	High	Very Significant	Significant	Moderate	Slight
	Medium	Significant	Moderate	Slight	Not Significant
	Low	Moderate	Slight	Slight	Imperceptible
	Negligible	Slight	Not Significant	Imperceptible	Imperceptible

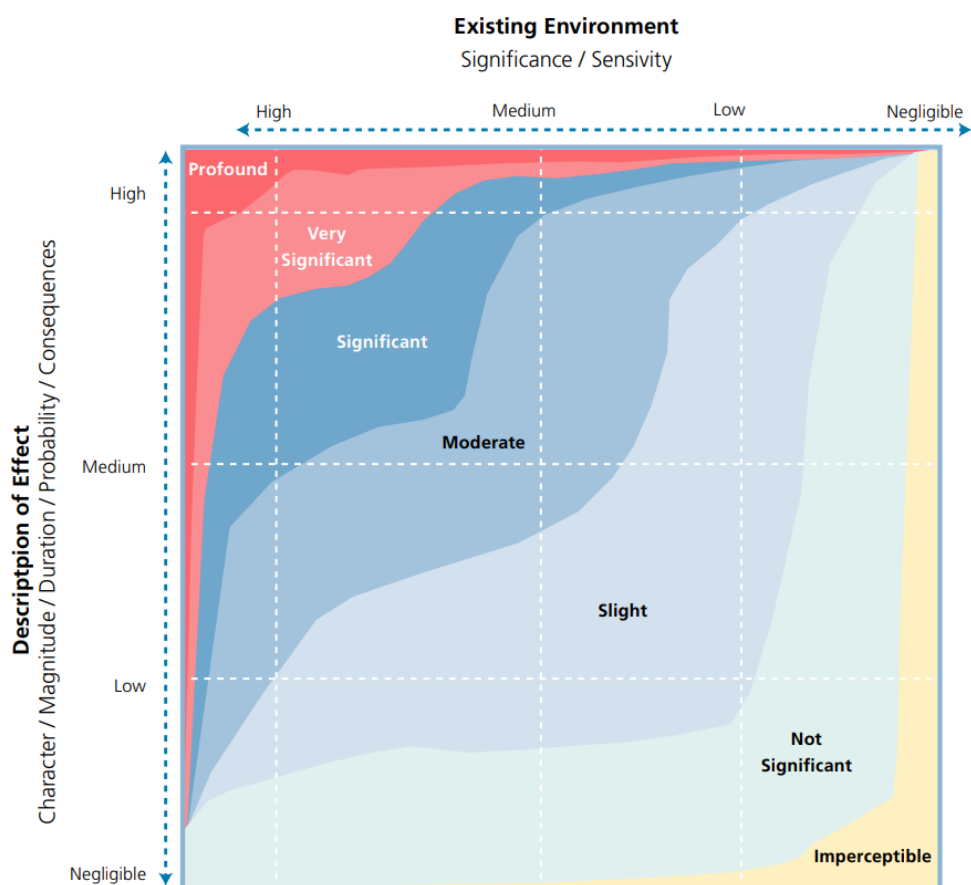


Figure 1.7: Typical classifications of the significance of effects⁶

⁶ This figure “shows how comparing the character of the predicted effect to the sensitivity of the receiving environment can determine the significance of the effect.”, reproduced from EPA EIAR Guidelines, Figure 3.4, page 53, May 2022.

1.13.8 IMPACT INTERACTIONS

The environmental topic chapters of this EIAR consider the project life cycle from construction and operation and identifies potential linkages between activities and receptors to ensure that a robust and holistic impact assessment for all receptors has been identified. Interactions describe the potential interaction of multiple project impacts upon one receptor and have a spatial and temporal component. Impact interactions are summarised in Chapter 25: Interactions.

1.13.9 CUMULATIVE EFFECTS

Cumulative effects are “the addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects” (EPA, 2022). Cumulative effects can occur at different temporal and spatial scales.

Cumulative effects have been considered for each resource and receptor assessed in each environmental topic chapter following the approach set out in the UK Planning Inspectorate Advice Note *Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment* (September 2024) and with due consideration of Irish and European cumulative effects specific guidance as outlined in Chapter 25: Interactions including *Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions*. European Commission (1999).

The outcomes of the cumulative effects assessments are summarised in Chapter 25: Interactions.

1.13.10 TRANSBOUNDARY EFFECTS

Transboundary effects relate to the likelihood of significant effects on receptors which are outside of the project’s national boundaries. The need to consider transboundary effects is embodied in the United Nations Economic Commission for Europe *Convention on Environmental Impact Assessment in a Transboundary Context* (the ‘Espoo Convention’) adopted in 1991.

Transboundary effects have been considered in the relevant environmental topic chapters of this EIAR where the potential for such effects exists due to the nature of receptors (i.e., Chapter 11: Benthic Ecology, Chapter 12: Fish, Shellfish and Turtle Ecology). Based on the spatial extent of impacts arising from the construction and operational phases, and following a detailed assessment of environmental receptors and regional dynamics, it is concluded that the Proposed Development will not result in transboundary environmental effects.

1.13.11 MITIGATION

Three types of mitigation measures are considered in this EIAR, following IEMA (2024).

- **Primary mitigation** is an inherent part of the project design. Primary mitigation relates to the location, design or timing of the project, and these measures are intended to avoid and reduce significant adverse effects on the environment.
- **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** is the 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 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 described in each chapter includes consideration of integrated measures that are built into the project design (i.e., primary mitigation) and tertiary mitigation, which are intended to prevent, reduce and where possible offset any significant adverse effects on the environment. Where potentially significant adverse effects have not been eliminated by project design, additional mitigation measures (i.e., secondary mitigation) are proposed.

1.13.11.1 RESIDUAL EFFECTS

Following the application of primary mitigation and secondary mitigation measures prescribed for each environmental topic, there may be residual effects. These effects represent the final level of environmental impact that is reported in the environmental topic chapters of the EIAR, and are identified as significant or not significant, positive or negative, temporary or permanent. It is the residual effects that require to be considered by the competent authority before a decision is made to grant or refuse consent.

1.13.11.2 MONITORING

In cases where residual effects are uncertain or the effectiveness of proposed mitigation measures requires validation, commitments for monitoring are set out in the environmental topic chapters of this EIAR. Monitoring programmes are commonly required as a condition of consent and can cover the periods during and after construction, but can also be utilised prior to and during operation, depending on the nature of the impact or mitigation measure under inspection. Where appropriate, monitoring has been proposed in the environmental topic chapters of this EIAR.

1.13.12 DIFFICULTIES AND UNCERTAINTIES

Given that EIA is a predictive tool, the determination of the significance of effects incorporates and describes any uncertainty inherent within the assessment. This may arise from the data used within the assessment, the identification of activities and impacts, the confidence in determining impact magnitude and receptor sensitivity, and ultimately in assigning significance levels of predicted resulting effects.

No significant difficulties were encountered during the preparation of this EIAR. Any technical limitations associated with assessment of environmental factors are detailed in the relevant chapter.

Survey work has been undertaken to complement consultation and data from official sources to provide reliable and up-to date baseline information on which to base the environmental assessments.

This EIAR has been prepared based on the best available information and in accordance with current best practice and relevant guidelines.

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