Dun Laoghaire Maritime Usage Licence Application for Site Investigation Works Assessment of Impacts on Maritime Usage

Client	Dun Laoghaire Rathdown County Council
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List of Abbreviations

AA	Appropriate Assessment
AIMU	Assessment of Impacts on Maritime Usage
AIS	Automatic Identification System
BH	Borehole
CBS	Chief Boundary Surveyor
DHLGH	Department of Housing, Local Government and Heritage
DTTAS	Department of Transport, Tourism and Sport
EC	European Commission
EIA	Environmental Impact Assessment
EMODnet	The European Marine Observation and Data Network
EPA	Environmental Protection Agency
EU	European Union
EUNIS	European Nature Information System
GES	Good Environmental Status
GSI	Geological Survey Ireland
ITM	Irish Transverse Mercator
JNCC	Joint Nature Conservation Committee
MAP	Maritime Area Planning Act 2021
MARA	Maritime Area Regulatory Authority
MARPOL	The International Convention for the Prevention of Pollution from Ships
MI	Marine Institute
MMO	Marine Mammal Observer
MSFD	Marine Strategy Framework Directive
MSP	Marine Spatial Planning
MUL	Maritime Usage Licence
NIS	Natura Impact Statement
NM	Nautical Mile
NMPF	National Marine Planning Framework
NMS	National Monuments Service
NPF	National Planning Framework
NPWS	National Parks and Wildlife Service
OPR	Office of the Planning Regulator
ORE	Offshore Renewable Energy
OWF	Offshore Wind Farm
pNHA	Proposed Natural Heritage Area
PoM	Programme of Measures
PTS	Permanent Threshold Shift
QI	Qualifying Interest
RAAIVS	Risk Assessment for Annex IV Species
RBMP	River Basin Management Plan
SAC	Special Areas of Conservation
SCA	Seascape Character Area
SCI	Special Conservation Interest

SI	Site Investigation
SISAA	Supporting Information for Screening for Appropriate Assessment
SPA	Special Protection Areas
SPL	Sound Pressure Level
SSS	Side Scan Sonar
TTS	Temporary Threshold Shift
UK	United Kingdom
UKHO	United Kingdom Hydrographic Office
VC	Vibrocore
WFD	Water Framework Directive
WGS	World Geodetic System

1 INTRODUCTION

1.1 OVERVIEW

Dún Laoghaire Rathdown County Council proposes to undertake Site Investigations (SI) to support maintenance dredging design and consenting at Dún Laoghaire Harbour. The dredging aims to remove approximately 56,400 m^3 of material from Dún Laoghaire Harbour to achieve a target depth of -6.1 m.

Dún Laoghaire Harbour has prepared this report in support of an application for a Maritime Usage Licence (MUL) under the Maritime Area Planning Act (2021) to undertake SI activities to support dredging design. This submission does not constitute an application for dredging; a separate application for dredging activities will be submitted at a later stage.

The Maritime Usage Licence Application Area (hereafter referred to as MUL area) is shown in Figure 1-1. The total MUL Application Area is 25.85 ha.

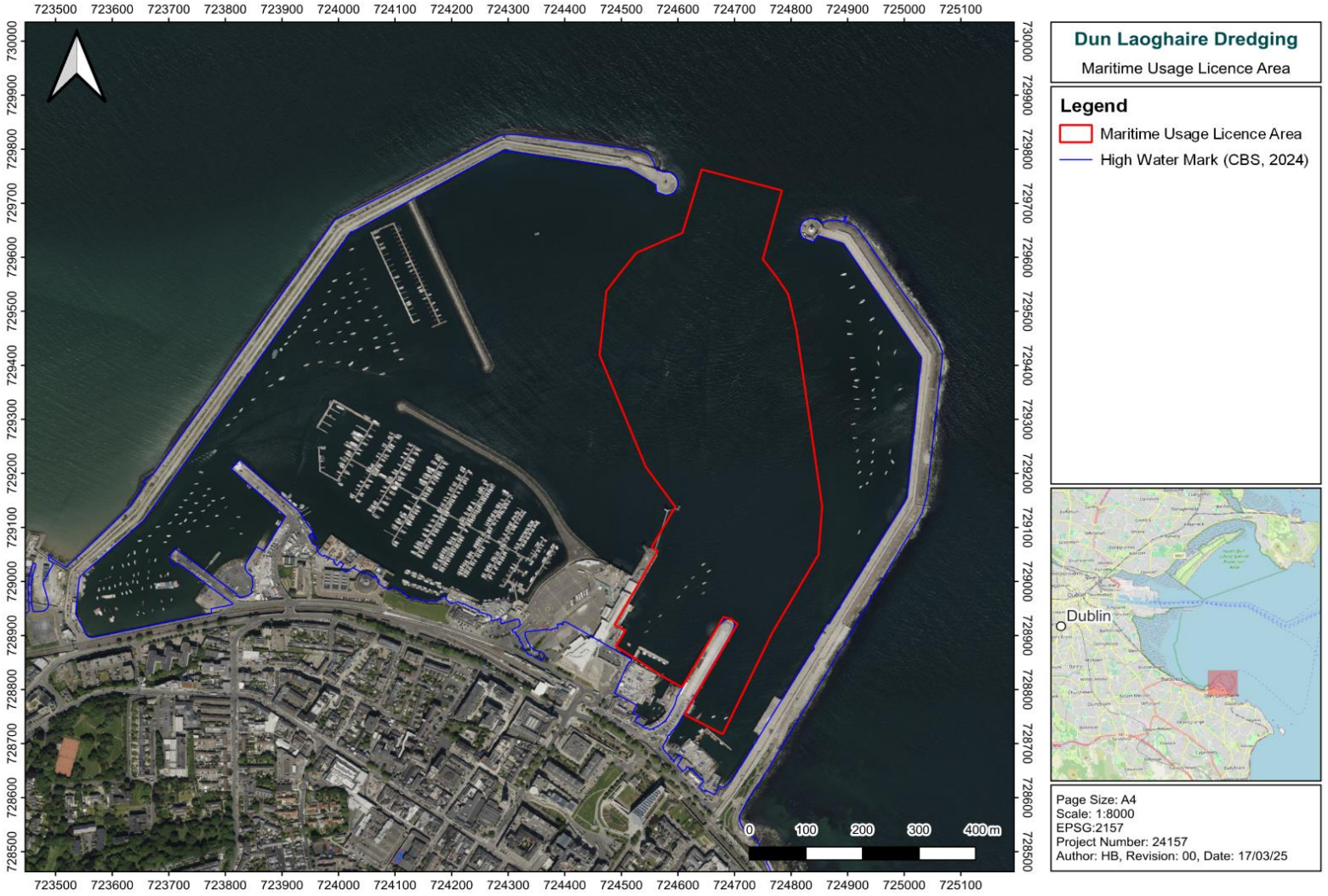

Figure 1-1 Maritime Usage Licence Area

1.2 AIM OF THIS REPORT

This Assessment of Impacts of the Maritime Usage (AIMU) report for SI at Dun Laoghaire Harbour has been prepared by Venterra. This AIMU report is part of the Maritime Usage Licence (MUL) application to the Maritime Area Regulatory Authority (MARA) and aims to provide information documenting the current state of the environment in the vicinity of the proposed SI activities and consideration of the potential effects from the proposed SI activities on the receiving environment.

This report also aims to determine whether any of the proposed SI activities fall within a class of projects listed in Part 2 of Schedule 5 of the Planning Regulations, as amended.

1.3 METHODOLOGY

This AIMU report follows the MARA Applicant Technical Guidance Note (MARA, 2024) and includes an analysis of the likely effects of the proposed SI.

The following sections are included:

- Description of the Proposed Activities – this includes a description of the licenced area and proposed SI activities.
- Description of the Need and Alternatives – short description included to reflect the scale of the SI activities.
- Description of Planning and Development – this section includes a statement of consistency with the National Marine Planning Framework.
- Description of Environmental Assessment of Impacts – this section includes an overview of the individual environmental topics as outlined in Table 1-1.

Table 1-1: Environmental topics included in the AIMU

Environmental Topic	Assessment
Land & Soils	For each topic the environmental setting is described followed by a review of the potential effects and proposed mitigation, if appropriate An assessment of potential effects is provided as a conclusion.
Water	
Biodiversity	
Fishing & Aquaculture	
Air Quality	
Noise & Vibration	
Landscape & Seascape	
Traffic, Transport and Navigation	
Cultural Heritage	
Population & Human Health	
Major Accident & Disaster	
Climate	
Waste	
Material Assets	
Interactions (Cumulative effects)	

- Mitigation measures that are either part of the project design or proposed as additional mitigation measures are described.
- Conclusions with a summary in relation to:
  - Environmental Impact Assessment (EIA) Directive
  - Water Framework Directive (WFD)
  - Marine Strategy Framework Directive (MSFD)

The scale of and detail of information provided in this AIMU reflects the scale of the proposed SI activities. The environmental topics included in the above chapter list, as described in the MARA Guidance Note, in some cases are not relevant to this MUL application. When this is the case, a short paragraph is included describing the relevance and summarising the reason for no likely effects.

1.4 STATEMENT OF COMPETENCE

This report has been prepared by [redacted] BSc. Hons Geological Science, MSc. Geochemistry) [redacted] is a Senior Environmental Scientist at GDG with 25 years' experience and an IEMA Practitioner. She has worked across the environmental, compliance, planning and monitoring industries for both the public and private sector. She has experience in environmental impact assessment of port expansion, onshore windfarm and energy from waste projects and of marine licencing.

This report has been checked by [redacted] [redacted] is a Senior Marine Environmental Scientist with a background in marine regulation and extensive experience in environmental assessment and consenting. She has worked across the public and private sectors, delivering high-quality environmental reports, regulatory submissions, and stakeholder engagement for a wide range of marine and coastal projects in Ireland, the UK, and internationally.

This report has been reviewed and approved by [redacted] is a Marine Ecologist with coastal engineering expertise and extensive experience of offshore benthic survey and Marine Protected Area monitoring who has undertaken multiple environmental assessments under the Habitats and EIA Directives within consulting engineering and as a statutory adviser to the UK government and its devolved administrations with the Joint Nature Conservation Committee.

2 DESCRIPTION OF THE PROPOSED ACTIVITIES

2.1 PROJECT DESCRIPTION

Dún Laoghaire Rathdown County Council proposes to undertake SI activities to inform the future design of a concept dredging scheme for Dún Laoghaire Harbour. While dredging is not proposed at this stage, the future works are expected to involve the removal of approximately 56,400 m^3 of material from Dún Laoghaire Harbour to achieve a target depth of -6.1 m.

The current proposal relates solely to the SI activities, which are intended to gather baseline information to support dredging design and associated environmental assessment. These activities consist of the collection of sediment samples for:

- sediment characterisation
- chemical analysis
- characterisation of the benthic environment

Geophysical techniques including Side Scan Sonar (SSS) and magnetometry may also be employed to identify potential underwater hazards, including shipwrecks or features of archaeological interest.

2.2 LICENCE APPLICATION AREA

The MUL Application Area, which is wholly within the marine environment, is located entirely within Dún Laoghaire Harbour, located approximately 12 km southeast of Dublin. The MUL Application Area encompasses an area of 25.85 ha, Figure 2-1)

The harbour has a 200 year plus history and has two outer harbour walls: East Pier (1,300 m long) and West Pier (960 m long). The harbour entrance is 232 m across. The harbour comprises four main inner harbours: Old Harbour, Coal Harbour, Marina Harbour and the Main Harbour. The MUL Application Area includes a rectangular area between the harbour entrance moving south to include a turning circle and another rectangular area adjacent to St Michaels Pier across southeast to Carlisle Pier.

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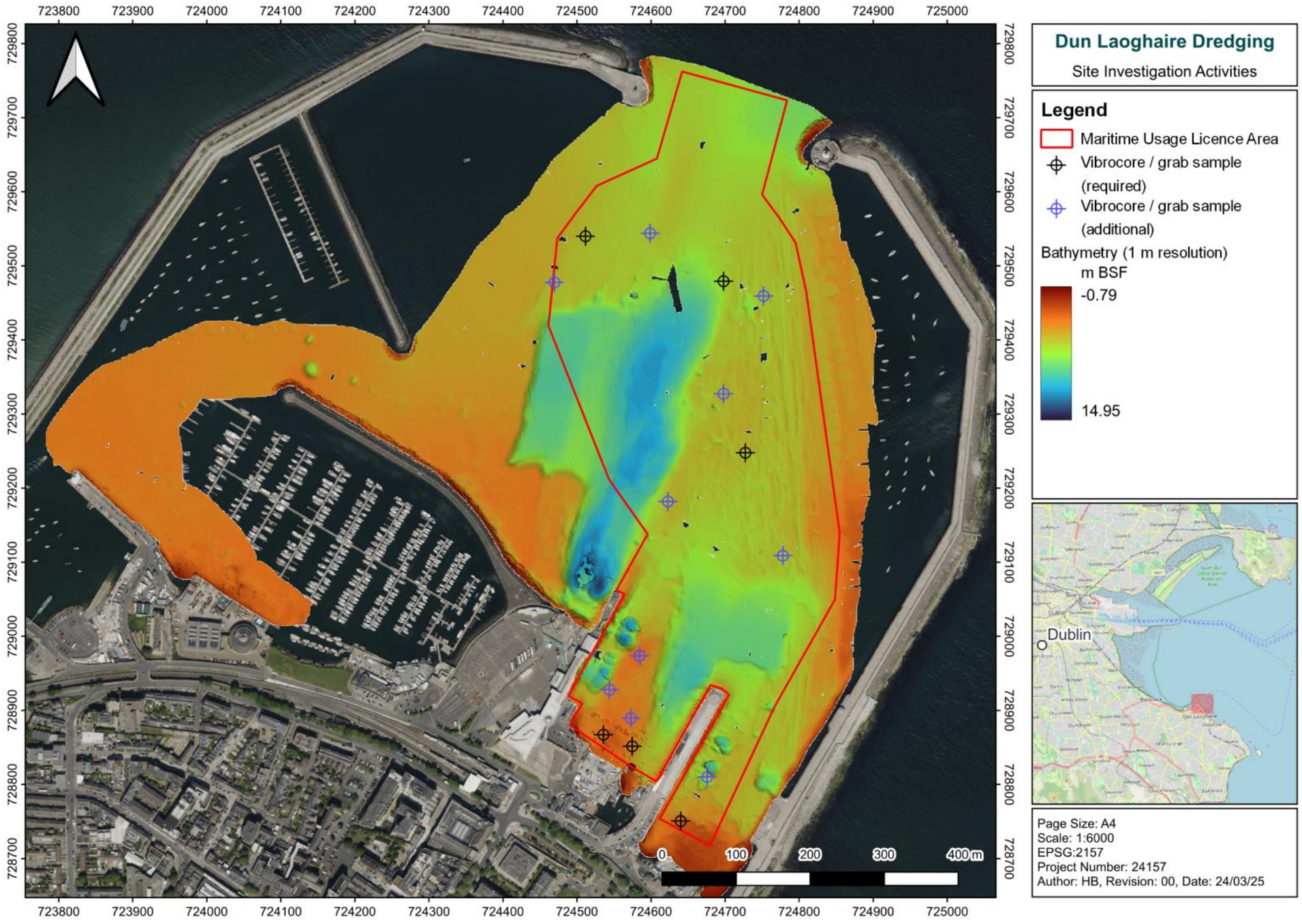

Figure 2-1 Maritime Usage Licence Area Activities

2.3 SITE INVESTIGATION ACTIVITIES

The objectives of the SI activities are to:

- characterise sediment and subsurface geology
- collect sediment samples for chemical analysis
- characterise benthic communities through grab sampling and seabed imagery
- identify any hazards and underwater archaeology features such as shipwrecks through geophysical surveys (SSS and Magnetometry)

The proposed programme of SI activities to be undertaken within the MUL Application Area is summarised in Table 2-1 and outlined in Figure 2-2. The exact technical specifications of the equipment to be used will not be known until the survey contracts have been awarded. However, a description of typical equipment and expected survey parameters is provided in Appendix A.

Table 2-1: Proposed SI Activities

Activity	Description	Sampling Effort
Vibrocore	Vibrocoring, a technique for collecting core samples of the seabed sub-strata sediments, consists of a vibrating mechanism attached to a metallic core which is driven into the sediment by the force of gravity, enhanced by vibration energy. Typical estimated time required for activity – 30 min to 2 hours per location. Typically, an area of 1 m^2 of seabed is sampled.	Up to 16 samples to be collected: 6 primary samples for chemical testing and geotechnical analysis, with up to 10 additional identified as contingency sampling locations.
Dropframe camera system & Grab Samples	Seabed imagery will be collected by use of a dropframe camera system from up to 30 locations to characterise epibenthic communities and assess suitability of locations for grab sampling. Typical estimated time required for activity – 20 mins per location. A grab sample is a single sediment sample collected at a specific location and time, providing a snapshot of the conditions at that moment. It is a simple and quick method used to assess localised sediment characteristics without accounting for temporal or spatial variations. Grab samples are commonly analysed for grain size, contamination levels, organic content, and chemical composition. Up to 4 no. replicates will be collected from up to 30 locations. Typical estimated time required for activity – 20 mins to 1 hour per location. Typically, an area of 1 m^2 of seabed is sampled.	Up to 30 locations for dropframe camera and grab sampling effort

Activity	Description	Sampling Effort
Side Scan Sonar (SSS)	SSS surveys are used to determine sediment characteristics and seabed features. The EdgeTech 4125 may be taken as an indicate example of an SSS device and for these surveys will have a potential operating frequency range of approximately 600/1600kHz in nearshore areas such as the MUL Area. Total estimated time - 5 – 10 days	SSS may be undertaken across the MUL Area to a suitable percentage coverage
Magnetometer	A magnetometer is used to identify magnetic anomalies and hazard mapping for metal obstructions, shipwrecks and unexploded ordnance on the surface and in the shallow sub-surface. The Geometrics G-882 can be taken as an indicative equipment example, it is a passive device (i.e. it does not emit any sound waves into the marine environment). Total estimated time - 5 – 10 days	Magnetometer survey may be undertaken across the MUL Area to a suitable percentage coverage.

2.4 SI SCHEDULE

The intention is to begin SI activities as soon as feasible following MUL award.

Timing of the SI activities is dependent on many factors including weather, tidal flows, availability of vessels and the grant of the MUL. The granting of the MUL will have a direct effect on the timing of SI activities.

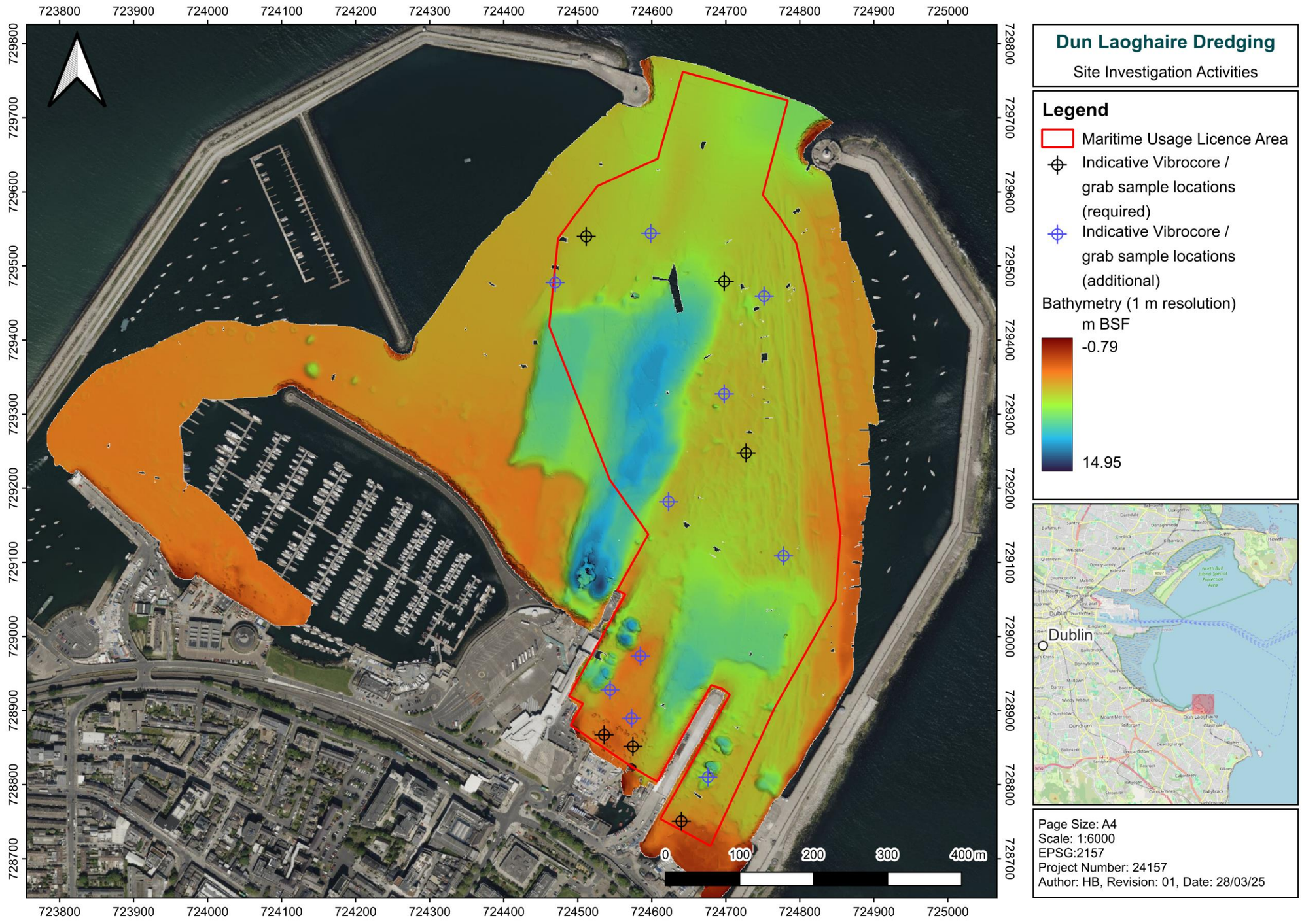

Figure 2-2: SI Activity Proposed Locations

2.5 SUMMARY OF ACTIVITIES & POTENTIAL ENVIRONMENTAL IMPACTS

Table 2-2 summarises the potential environmental impacts. The discussion reviews the magnitude and nature of the potential impact

Table 2-2: Summary of Potential Environmental Effects from Proposed SI activities

Activities & Potential Sources of Ecological Impacts Descriptions	Potential Effects Summary	Discussion
Activity: Vibrocore sampling and grab sampling Associated Impacts: Physical sampling of seabed sediments has the potential for direct sediment disturbance of the seabed. Potential for water pollution from oil / fuel spills and polluted surface water run-off	Habitat loss Increased suspended sediment concentration Reduction in water quality	The MUL area is within the harbour walls. The harbour walls act as a physical barrier to the movement of suspended sediment and pollution event. Habitat loss will be limited to the immediate area of the sample. Increase suspended sediment concentrations and reduction in water quality is likely to be immediately adjacent to the sample location and will not be outside the MUL area.
Activity: Side Scan Sonar (SSS) Survey Associated Impacts: Operation of SSS equipment has the potential for underwater noise impact and associated ecological disturbance	Displacement and/or disturbance from underwater noise	The MUL area is within the harbour walls. The harbour walls (with the exception of the harbour entrance) act as a barrier to the propagation of underwater noise. Underwater noise may propagate beyond the harbour only through the harbour entrance.
Activity: Magnetometry Associated Impacts None anticipated since this survey has no contact with the seabed and no underwater noise effects	None	None

Activities & Potential Sources of Ecological Impacts Descriptions	Potential Effects Summary	Discussion
Activity: Vessel used for SI activities Associated Impacts: Underwater noise from engines to create disturbance Collision risk to ecological receptors Potential for water pollution from oil / fuel spills and polluted surface water run-off Airbourne noise and disturbance Reduction in air quality from vessel exhaust emissions	Displacement and/or disturbance from underwater noise Mortality or injury from vessel collision Reduction in water quality Displacement and/or disturbance from airborne noise Vessel collision with other vessels	The MUL area is within the harbour, already a busy environment. The harbour walls (with the exception of the harbour entrance) act as a physical barrier to the propagation of underwater noise. The SI vessel is operating within a busy port environment, additional vessel engine noise (underwater and airborne) and vessel collision risk from one additional vessel is not considered significant. Similar to the previous point exhaust emissions are not considered to be significant within the busy harbour environment.

3 NEED AND ALTERNATIVES

The need for the proposed SI activities, as described in Section 2, is to determine environmental conditions, as well as the seafloor and subsurface geological characteristics, within the MUL Application Area. The future project design of a concept dredging scheme for Dún Laoghaire Harbour, along with the required environmental assessments, cannot be progressed without this data.

The alternative to collecting site and project specific data is to use existing, available data for project design and to inform environment assessments. Although existing data have been reviewed and are being used to inform the project, the available dataset is over 10 years old and may not adequately reflect the current site conditions.

4 PLANNING & DEVELOPMENT

This section has been prepared to demonstrate that the proposed SI activities are consistent with Ireland's National Marine Planning Framework (NMPF), the European Commission's guidance on port development, and other relevant supporting policies and guidance. This section also outlines how the proposed SI activities align with MARA's Application Prioritisation Scoring System.

4.1 STATEMENT OF CONSISTENCY WITH NATIONAL MARINE PLANNING FRAMEWORK

The NMPF "is a national plan for Ireland's seas, setting out, over a 20-year horizon, how Ireland will use, protect, and enjoy its seas. The NMPF sits at the top of the hierarchy of plans and sectoral policies for the marine area."

The NMPF establishes a vision for the future development of the marine planning system towards 2040. It will play an important role in supporting both the short-term recovery and the longer-term planning for Ireland's maritime area, to have a lasting effect on Ireland's most significant natural resource.

The NMPF is Ireland's first comprehensive marine spatial planning framework, as required under Directive 2014/89/EU of the European Parliament and of the Council of July 23rd, 2014, establishing a framework for maritime spatial planning, known as the Maritime Spatial Planning (MSP) Directive. Member States establishing and implementing MSP must consider economic, social and environmental aspects to support the sustainable development and growth of the maritime sector.

The NMPF is also a parallel document to the National Planning Framework (NPF), which guides strategic terrestrial planning and development, and it is important that each is consistent with the other, as well as regional and local plans.

Some of the high-level objectives laid out in the NMPF in relation to Port Development and Offshore Renewable Energy (ORE) include:

- Safeguard the operation of ports as key actors in the economic wellbeing of the State through the provision of safe and sustainable maritime transport.
- Sustainable development of the ports sector and full realisation of the National Ports Policy with a view to providing adequate capacity to meet present and future demand, and to adapt to the consequences of climate change.

- Ensure that the strategic development requirements of Tier 1 and Tier 2 Ports, ports of regional significance, and smaller harbours are appropriately addressed in regional and local marine planning policy to support the development of ORE in Ireland.
- To make Ireland a leader in climate action through reaching ORE targets.
- To increase the sustainable ORE use of our extensive marine resource.
- To support Ireland's decarbonisation journey through increased use of ORE.
- To provide enhanced security of supply.

The NMPF includes a number of policies. Chapter 18 of the NMPF applies to Ports, Harbours and Shipping and includes a number of policies in relation to port development and operation.

We believe that the above, together with Table B1 included in Appendix B, demonstrates that this MUL is consistent with both the high-level objectives of the NMPF, and those Port Development and ORE Policies that are considered relevant to the proposed activities under this licence application.

4.2 MARA'S APPLICATION PRIORITISATION SCORING SYSTEM

Dún Laoghaire Harbour is proposed to play a strategic role in supporting the delivery of Ireland's ORE ambitions. The SI activities proposed under this MUL application are intended to inform the concept design for maintenance dredging that would improve navigational access and enable the harbour to safely accommodate a greater number of offshore wind farm (OWF) survey vessels. The harbour has already served as a base of operations for OWF survey campaigns, demonstrating its suitability and readiness to support offshore infrastructure deployment. The proposed dredging will therefore directly enhance the port's capacity to contribute to ORE development, in line with national and European priorities for energy security. This aligns with the 'Security of energy supply (e.g. Offshore Renewable Energy)' criterion of the MARA's Application Prioritisation Scoring System, which emphasises the need to prioritise projects that enable the rollout of renewable energy in support of climate and energy objectives.

Under the National Ports Policy (DTTAS, 2013), Dún Laoghaire is defined as a Port of Regional Significance (Tier 3), serving local and specialised markets such as tourism, marine leisure, and smaller-scale commercial activities. However, the policy allows that ports of regional significance pursue development opportunities where these support national strategic objectives, such as the growth of ORE and the diversification of port functions. In this context, maintenance dredging not only supports Ireland's ORE deployment pipeline but also enhances the harbour's cruise and tourism potential. By facilitating increased cruise ship traffic and improving berthing conditions, maintenance dredging would stimulate the regional tourism and leisure economy in line with the 'Policy and Regulatory – The National Ports Policy' criterion of MARA's scoring system.

Taken together, these outcomes demonstrate clear alignment with multiple prioritisation criteria – Policy and Regulatory, Security of Energy Supply, and Assessment Status – supporting the case for this MUL application to receive the highest prioritisation under MARA's framework.

5 ENVIRONMENTAL ASSESSMENT OF IMPACTS

5.1 INTRODUCTION

The following documents, also submitted in support of this MUL application, describe the receiving environment, identify the potential environmental impacts of the proposed SI activities, and assess the possible effects of these impacts on the receiving environment in the context of Natura 2000 sites and Annex IV species:

- Supporting Information for Screening of Appropriate Assessment (SISAA)
- Risk Assessment for Annex IV Species (RAAIVS)

A desk study of publicly available information has been undertaken to inform the environmental setting.

A review of the following report has also been undertaken with relevant information included in this section to describe the environmental setting.

- Proposed Cruise Berth Facility, Dun Laoghaire Harbour Environmental Impact Statement (EIS) (Stephen Little and Associates, 2015). It is noted that this EIS is ten years old. While survey data are likely to be outdated for environmental receptors these are provided for context.

Note the scale and complexity of this AIMU reflects the scale and complexity of the SI activities being proposed. Due to the limited scale and nature of the SI activities, the environmental setting descriptions included below are focused on the MUL Application Area.

5.2 ENVIRONMENTAL DATA

The following publicly available information has been reviewed to inform the environmental setting for this MUL application.

- EPA Online mapping (https://gis.epa.ie/EPAMaps/)
- Bathing Water Areas (https://www.beaches.ie/)
- Marine Institute – Data Centre and Publications (www.marine.ie)
- Biodiversity – EUNIS Habitat maps and Information (https://eunis.eea.europa.eu/index.jsp)
- Biodiversity – Cetacean survey Phase I & II ObSERVE project (https://www.gov.ie/en/publication/12374-observe-programme/?referrer=https://www.gov.ie/observe/)
- Ireland's Marine Atlas (www.atlas.marine.ie)
- Air Quality (https://airquality.ie/)
- Noise – EPA online mapping (https://gis.epa.ie/EPAMaps/)
- Seascape Character Areas (SCA) – Ireland's Seascapes (https://storymaps.arcgis.com/stories/04cb5843648e4854b94429e0a5851a77)
- European Marine Observation and Data Network (EMODnet) (https://emodnet.ec.europa.eu/en)

5.3 ENVIRONMENTAL SETTING

This section gives an overview of the environmental setting; note the level of detail presented is proportional to the scale and nature of the proposed SI activities.

5.3.1 DESIGNATED SITES

The following sites, in the immediate vicinity of the MUL area, are designated as Special Areas of Conservation (SACs) and Special Protected Areas (SPAs). These sites and their marine Qualifying Interests (QIs) and Special Conservation Interest (SCIs) are listed in Table 5-1 and Table 5-2, and can be seen in Figure 5-1and Figure 5-2

Proposed Natural Heritage Areas (pNHAs) occur in the vicinity of the MUL area. Most of these are covered by a SAC or SPA designation.

Table 5-1: SACs and their QIs

SAC & Distance (km)	Qualifying Interest (QIs)	
	Annex I habitats	Mobile QIs
South Dublin Bay SAC (000210)	Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]	n/a
Rockabill to Dalkey Island SAC (003000)	Reefs [1170]	*Phocoena phocoena* (Harbour Porpoise) [1351]
North Dublin Bay SAC (000206)	Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (*Juncetalia maritimi*) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with *Ammophila arenaria* (white dune) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Petalophyllum ralfsii (Petalwort) [1395]	n/a
Baldoyle Bay SAC (000199)	Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310]	n/a

SAC & Distance (km)	Qualifying Interest (QIs)	
	Annex I habitats	Mobile QIs
	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (*Juncetalia maritimi*) [1410]	
Lambay Island SAC (000204)	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	*Phocoena phocoena* (Harbour Porpoise) [1351]* Halichoerus grypus (Grey Seal) [1364] *Phoca vitulina* (Harbour Seal) [1365]

*QI added 2024

Table 5-2: SPAs and their SCIs

SPA & Distance (km)	Special Conservation Interests (SCIs)
South Dublin Bay and River Tolka Estuary (004024)	Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Oystercatcher (*Haematopus ostralegus*) [A130] Ringed Plover (*Charadrius hiaticula*) [A137] Grey Plover (*Pluvialis squatarola*) [A141] Knot (*Calidris canutus*) [A143] Sanderling (*Calidris alba*) [A144] Dunlin (*Calidris alpina*) [A149] Bar-tailed Godwit (*Limosa lapponica*) [A157] Redshank (*Tringa totanus*) [A162] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Roseate Tern (*Sterna dougallii*) [A192] Common Tern (*Sterna hirundo*) [A193] Arctic Tern (*Sterna paradisaea*) [A194] Wetland and Waterbirds [A999]
Dalkey Islands (004172)	Roseate Tern (*Sterna dougallii*) [A192] Common Tern (*Sterna hirundo*) [A193] Arctic Tern (*Sterna paradisaea*) [A194]
North Bull Island (004006)	Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Shelduck (*Tadorna tadorna*) [A048] Teal (*Anas crecca*) [A052] Pintail (*Anas acuta*) [A054] Shoveler (*Anas clypeata*) [A056] Oystercatcher (*Haematopus ostralegus*) [A130] Golden Plover (*Pluvialis apricaria*) [A140] Grey Plover (*Pluvialis squatarola*) [A141]

SPA & Distance (km)	Special Conservation Interests (SCIs)
	Knot (*Calidris canutus*) [A143] Sanderling (*Calidris alba*) [A144] Dunlin (*Calidris alpina*) [A149] Black-tailed Godwit (*Limosa limosa*) [A156] Bar-tailed Godwit (*Limosa lapponica*) [A157] Curlew (*Numenius arquata*) [A160] Redshank (*Tringa totanus*) [A162] Turnstone (*Arenaria interpres*) [A169] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Wetland and Waterbirds [A999]
South Dublin Bay and River Tolka Estuary (004024)	Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Oystercatcher (*Haematopus ostralegus*) [A130] Ringed Plover (*Charadrius hiaticula*) [A137] Grey Plover (*Pluvialis squatarola*) [A141] Knot (*Calidris canutus*) [A143] Sanderling (*Calidris alba*) [A144] Dunlin (*Calidris alpina*) [A149] Bar-tailed Godwit (*Limosa lapponica*) [A157] Redshank (*Tringa totanus*) [A162] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Roseate Tern (*Sterna dougallii*) [A192] Common Tern (*Sterna hirundo*) [A193] Arctic Tern (*Sterna paradisaea*) [A194] Wetland and Waterbirds [A999]
Howth Head Coast (004113)	Kittiwake *(Rissa tridactyla*) [A188]
North-west Irish Sea (004236)	Red-throated Diver (*Gavia stellata*) [A001] Great Northern Diver (*Gavia immer*) [A003] Fulmar (*Fulmarus glacialis*) [A009] Manx Shearwater (*Puffinus puffinus*) [A013] Cormorant (*Phalacrocorax carbo*) [A017] Shag (*Phalacrocorax aristotelis*) [A018] Common Scoter (*Melanitta nigra*) [A065] Little Gull (*Larus minutus*) [A177] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Common Gull (*Larus canus*) [A182] Lesser Black-backed Gull (*Larus fuscus*) [A183] Herring Gull (*Larus argentatus*) [A184] Great Black-backed Gull (*Larus marinus*) [A187] Kittiwake (*Rissa tridactyla*) [A188] Roseate Tern (*Sterna dougallii*) [A192] Common Tern (*Sterna hirundo*) [A193]

SPA & Distance (km)	Special Conservation Interests (SCIs)
	Arctic Tern (*Sterna paradisaea*) [A194] Little Tern (*Sterna albifrons*) [A195] Guillemot (*Uria aalge*) [A199] Razorbill (*Alca torda*) [A200] Puffin (*Fratercula arctica*) [A204

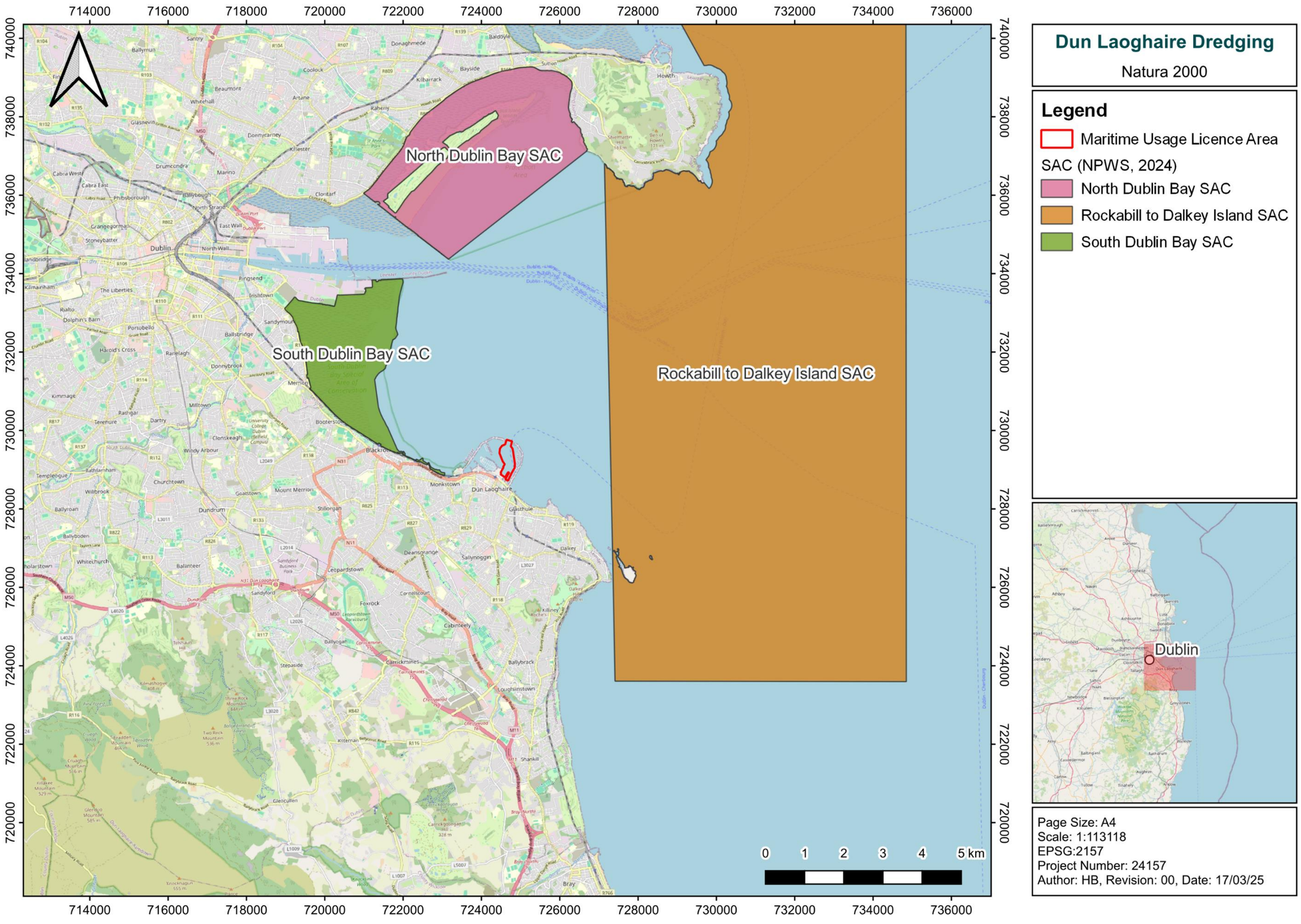

Figure 5-1: SACs in the vicinity

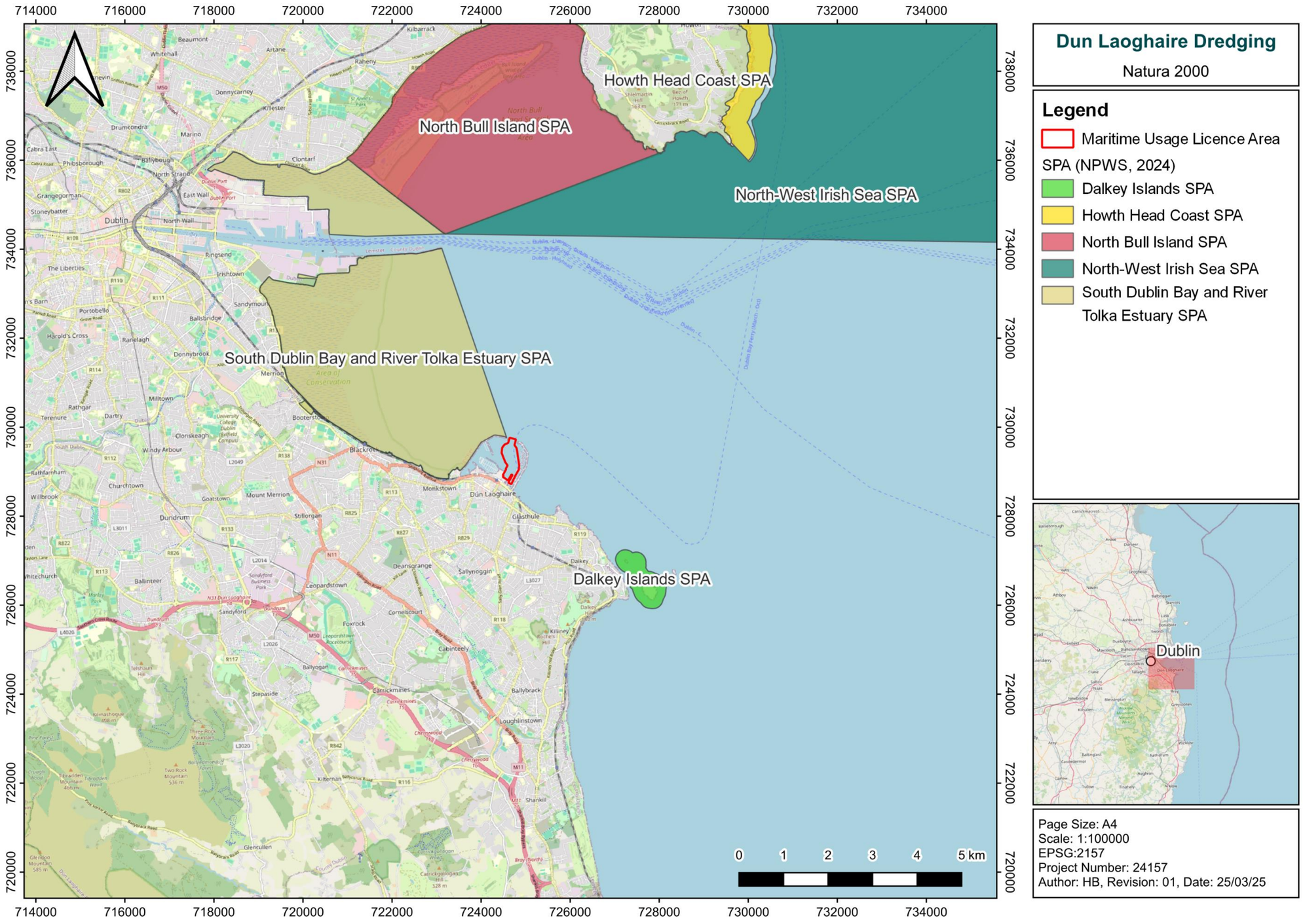

Figure 5-2: SPAs in the vicinity

5.3.2 BIODIVERSITY

5.3.2.1 BENTHIC ECOLOGY

Annex I benthic habitats designated within SACs in the vicinity of the MUL Application Area are shown in Table 5-1.

Benthic habitat types, according to the European Nature Information System (EUNIS, 2023) classification, within the MUL area are shown on Figure 5-3 and described in Table 5-3.

Table 5-3: Benthic Habitat

EUNIS Habitat type	Description
A5.33 Infralittoral sandy mud	Infralittoral, cohesive sandy mud, typically with over 20% silt/clay, in depths of less than 15-20 m. This habitat is generally found in sheltered bays or marine inlets and along sheltered areas of open coast. Typical species include a rich variety of polychaetes including *Melinna palmate*, tube building amphipods (*Ampelisca* spp.) and deposit feeding bivalves such as *Macoma balthica* and *Mysella bidentata*. Sea pens such as *Virgularia mirabilis* and brittlestars such as *Amphiura* spp. may be present but not in the same abundances as found in deeper circalittoral waters
A5.35 Circalittoral sandy mud	Circalittoral, cohesive sandy mud, typically with over 20% silt/clay, generally in water depths of over 10 m, with weak or very weak tidal streams. This habitat is generally found in deeper areas of bays and marine inlets or offshore from less wave exposed coasts. Sea pens such as *Virgularia mirabilis* and brittlestars such as *Amphiura* spp. are particularly characteristic of this habitat whilst infaunal species include the tube building polychaetes *Lagis koreni* and *Owenia fusiformis*, and deposit feeding bivalves such as *Mysella bidentata* and *Abra* spp

Chapter 5 of Proposed Cruise Berth Facility, Dun Laoghaire Harbour Environmental Impact Statement 2015 describes the benthic ecology within the port and an area outside the harbour. The surveys are over 10 years old; however, it is noted that stations within the harbour were the least species rich of those surveyed. This is reflective of pressures from the busy harbour environment, previous maintenance dredging, and potential seabed scour from larger vessels.

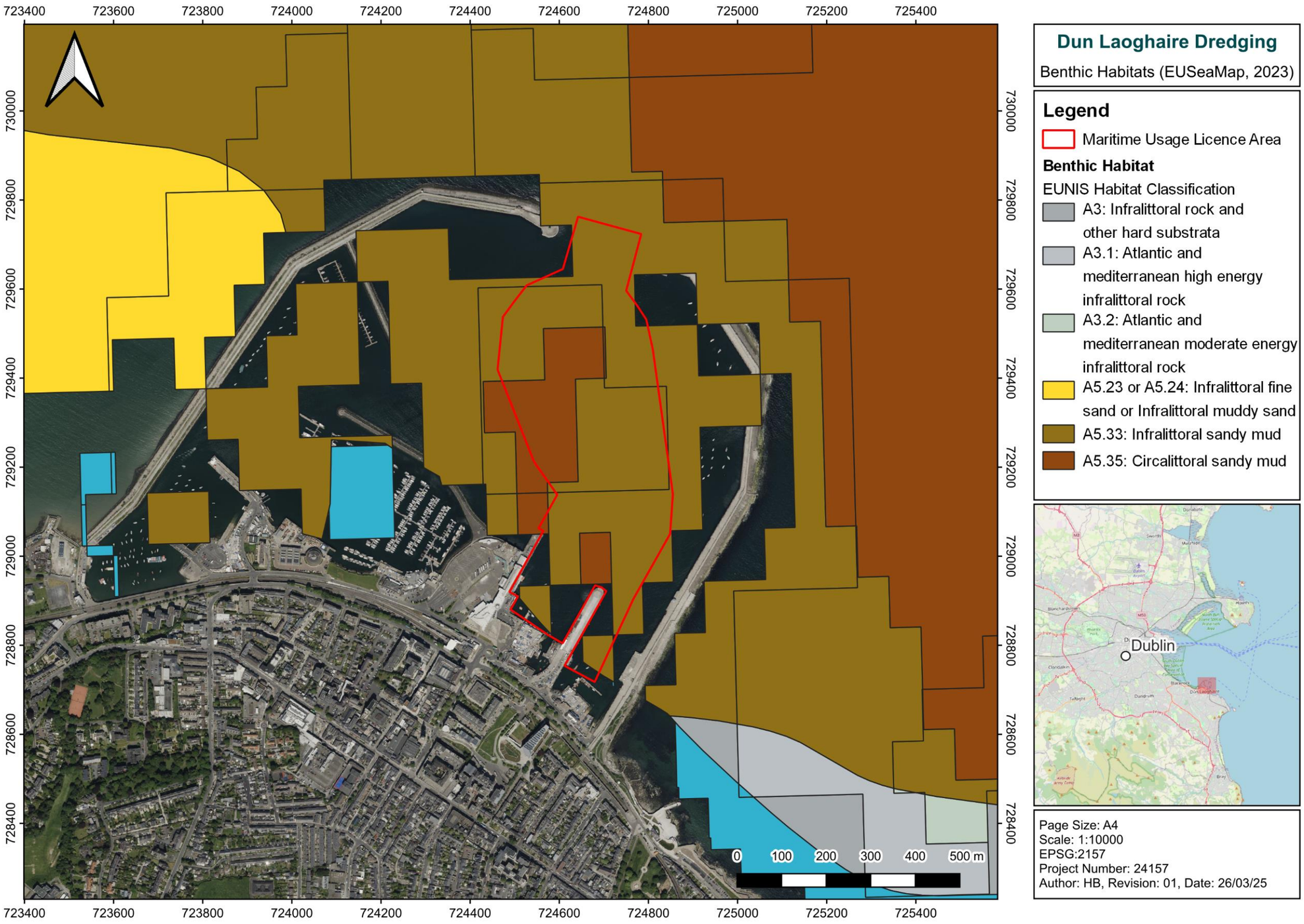

Figure 5-3: Benthic Habitats (EUSeaMap, 2023)

5.3.2.2 ORNITHOLOGY

Seabirds and wetland birds as SCIs within designated SPA are outlined in the previous section 5.3.1.

Bird Watch Ireland (https://www.birdwatchingireland.com/bird-watching-dunlaoghaire-harbour) describes the harbour as a good place to observe a variety of guls, terns (in summer) and waders. In winter it is a good place to see divers including Red Throated Divers, Black Throated Divers and Great Crested Grebes.

Chapter 5 of Proposed Cruise Berth Facility, Dun Laoghaire Harbour Environmental Impact Statement 2015 describes the ornithology ecology within the port and an area outside the harbour. The surveys are over 10 years old; however, the following is noted:

- The breeding bird survey concentrated on confirming the nesting locations of the population of Black Guillemot *Cepphus grille* known to breed within the harbour and a total of nine breeding pairs were confirmed in May and June 2014, 5 no. pairs on Carlisle Pier and 4 no. pairs in front of the Commissioners of Irish Lights building.
- In total, 58 species were recorded within the study area during the survey period. This included 8 Annex I species, 18 SCI species for nearby SPAs, 7 Red listed and 30 Amber listed species. The majority of the bird species were recorded on or near to the East and West Pier in relatively small numbers. These surveys were undertaken in February 2014, March 2014 and September 2015 – February 2015.
- 18 SCIs for SPAs within 15 km of the proposed development were recorded in the study area. Regularly occurring species included Black-headed Gull, Dunlin, Cormorant, Guillemot, Herring Gull, Oystercatcher, Redshank, Ringed Plover and Turnstone. All were generally recorded in small numbers not exceeding the 1% National Threshold, with the exception of Dunlin and Sanderling.
- Breeding birds – tern species do not breed within the harbour. Common terns were recorded with a peak count of 125 feeding of the end of the East Pier.

Birds are regularly found within the harbour, as would be expected, and the results from the EIA surveys in 2014 and 2015 illustrate this.

5.3.2.3 MARINE MAMMALS, MARINE REPTILES, OTTER AND BATS

Marine mammals as QIs within designated SAC are outlined in the previous section 5.3.1 (Harbour Porpoise (*Phocoena phocoena*) is a QI for Rockabill to Dalkey Island SAC).

Harbour Porpoise was also recently added as a QI for Carnsore Point SAC, Blackwater Bank SAC (located in the south east coast), Codling Fault Zone SAC within the Irish Sea east of the MUL area and Lambay Island SAC located to the north of the MUL area.

Publicly available data sources and surveys for cetaceans for the geographical area of the Irish Sea reviewed show key species present in the area include harbour porpoise, bottlenose dolphins, Risso's dolphins, minke whales, grey seals and harbour seals.

CETACEANS (WHALES, DOLPHINS AND PORPOISES)

The Risk Assessment for Annex IV Species (RAAIVS) submitted with this MUL application provides an overview of cetacean species relevant to Dún Laoghaire Harbour and its surrounding waters. Sightings data from the Irish Whale and Dolphin Group (IWDG) and the ObSERVE Programme were reviewed as part of the assessment. Harbour porpoise is the most frequently recorded species in the area, with occasional sightings of bottlenose dolphins (*Tursiops truncatus*) and unidentified small

cetaceans. No cetacean breeding or critical foraging habitats are located within the harbour itself, and the enclosed, high-traffic nature of the port limits its suitability for regular cetacean use.

PINNIPEDS

Both grey seals (*Halichoerus grypus*) and harbour (common) seals (*Phoca vitulina*) are widely distributed around the Irish coastline. Grey and Harbour Seal are distributed around the entire Irish coast with Grey Seal being generally more abundant along the western seaboard and off the southwest coast (Cronin *et al*., 2004; O'Cadhla *et al*., 2007; O'Cadhla & Strong, 2007). The conservation status of Grey and Harbour Seal in Ireland has been assessed as favourable (NPWS, 2019), although excessive disturbance at key breeding and haul-out sites can have a significant negative impact.

While no targeted seal surveys have been undertaken within Dún Laoghaire Harbour specifically, both species are known to occur in Dublin Bay and have been recorded occasionally within the harbour itself, typically in low numbers.

During Phase II of the ObSERVE Aerial Surveys programme (Giralt Paradell *et al*., 2024), harbour and grey seal could not be differentiated from the aircraft and were grouped together. Pinnipeds were seen in all seasons. Sightings occurred primarily in the coastal strata, with a smaller number recorded further offshore and one individual in the deep water of the Rockall trough. Density was high in the Irish sea, with highest concentration of sightings off the northwest coast (Figure 5-4). Generally, Harbour Seal have a more restricted nearshore coastal distribution, while Grey Seal have been tracked foraging out as far as the continental shelf edge, so the majority of these sightings are likely to be of Grey Seal. No abundance estimate was generated for pinniped species based on sightings.

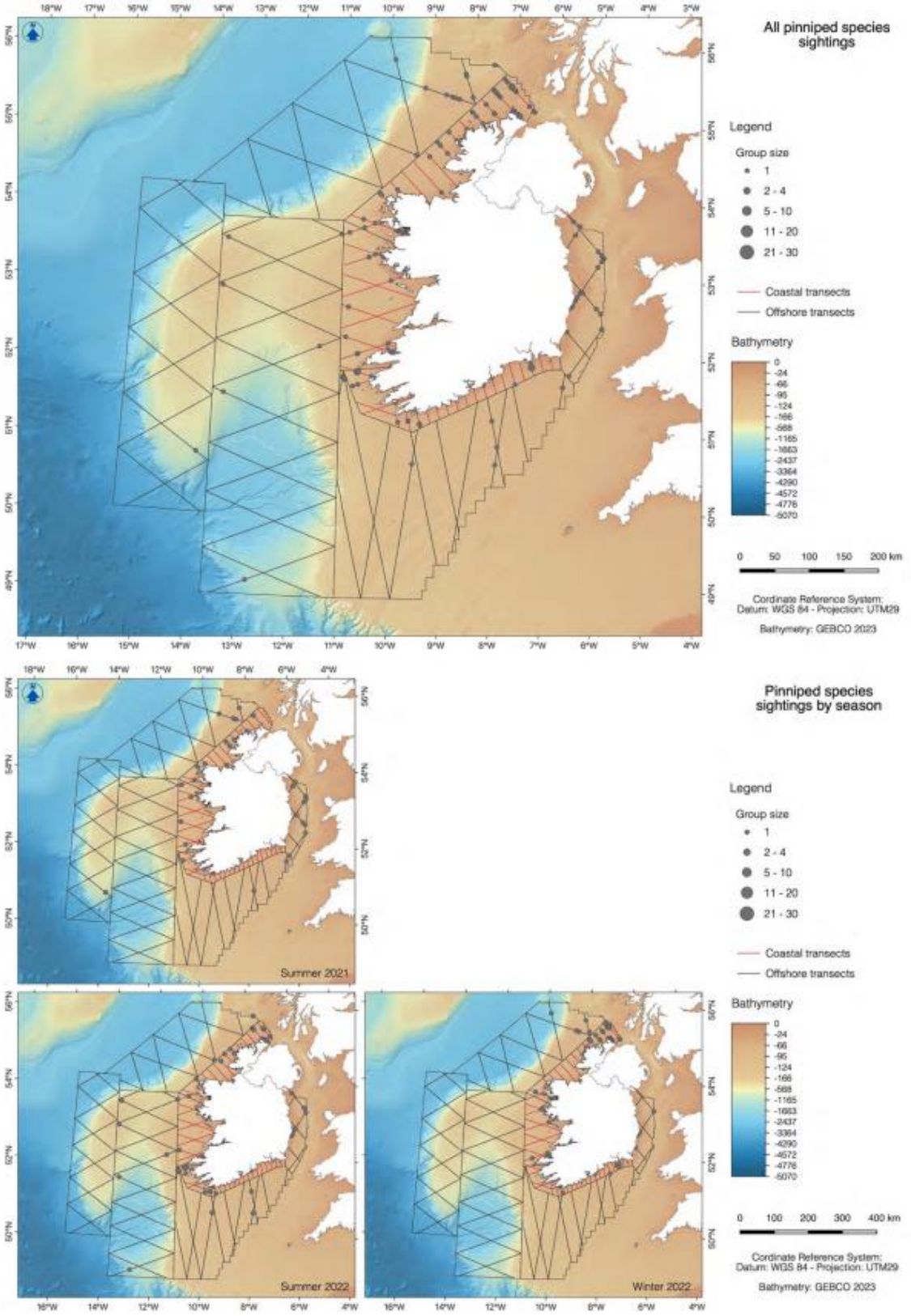

Figure 5-4: Sightings of pinniped species across all surveys (top) and in each survey period (bottom). Note that no surveys were carried out in winter 2021. Grey lines indicate the survey tracklines in the offshore strata and red indicate the tracklines in the coastal strata. Circles are proportional to the number of pinnipeds in each sighting (from Giralt Paradell et al., 2024)

Grey seals are regularly observed in the wider Dublin Bay area and were the most frequently recorded marine mammal during ongoing monitoring of dredging activities at Dublin Port between August and March over multiple years (Russell *et al*., 2018; 2019; 2020; 2021), accounting for 57–70% of sightings, often as solitary individuals.

Although Dún Laoghaire Harbour does not support breeding sites for grey seals (O'Cadhla *et al*., 2007; Morris & Duck, 2019), individual animals have been reported using the harbour for foraging and occasional haul-out (Welsh, 2022). Given their known wide-ranging foraging behaviour (Cronin *et al*., 2016), it is possible that grey seals observed in the area are part of the breeding population associated with the Lambay Island SAC.

In Figure 5-5, the NBDC records of grey seals within and surrounding the Dún Laoghaire Harbour are presented (NBDC, 2025).

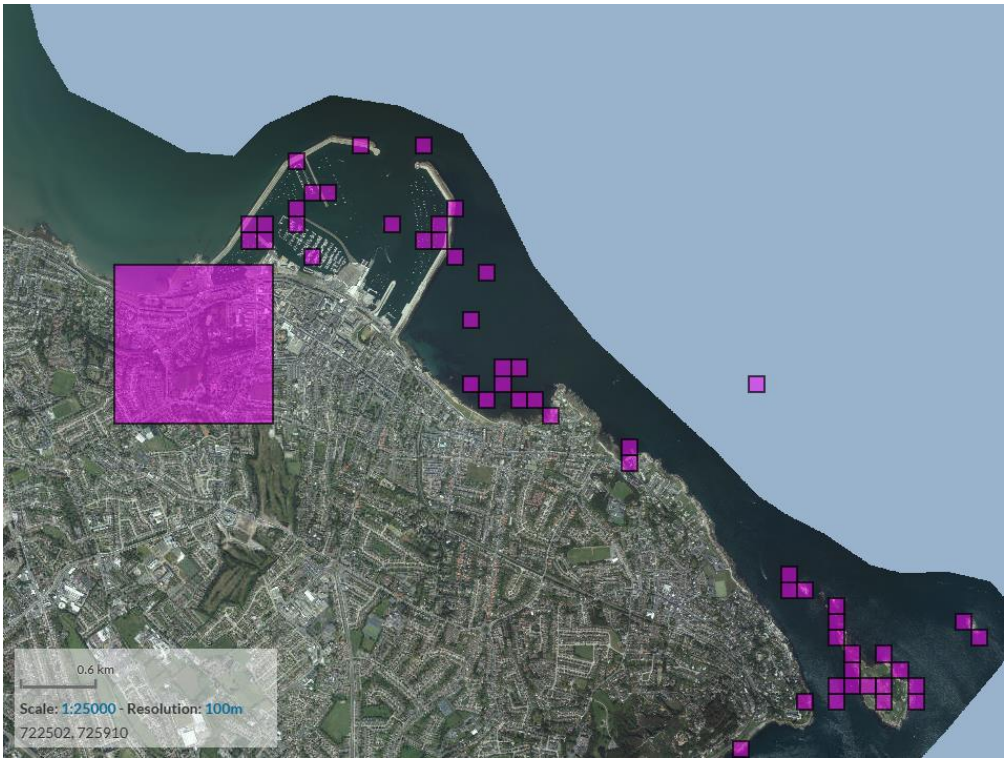

Figure 5-5: NBDC records of grey seal within and surrounding Dún Laoghaire Harbour (NBDC, 2025).

Harbour seals are recorded far less frequently within Dún Laoghaire Harbour, and no haul-out or breeding sites have been documented there during NPWS surveys (Cronin *et al*., 2004; Morris & Duck, 2019).

This species typically gives birth during the summer months (June–July), with the moulting period occurring shortly afterwards and extending from June to November, peaking in mid-September (Cronin *et al*., 2016).

In Figure 5-6, the NBDC records of harbour seals within and surrounding the Dún Laoghaire Harbour are presented (NBDC, 2025).

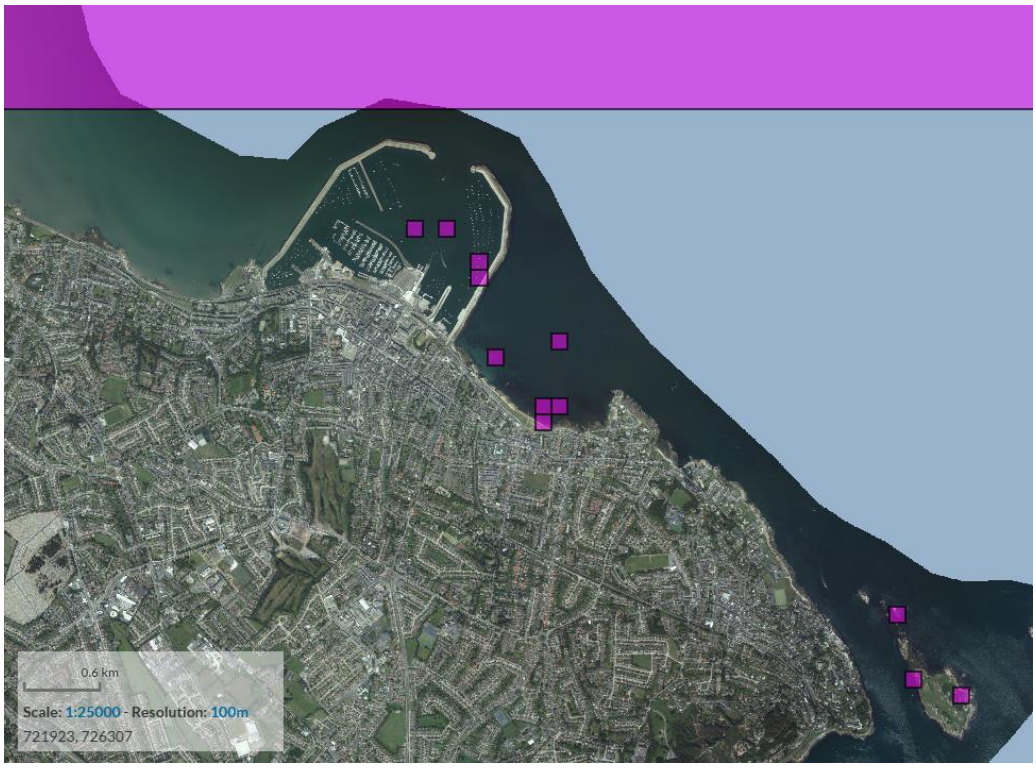

Figure 5-6: NBDC records of harbour seal within and surrounding Dún Laoghaire Harbour (NBDC, 2025)

MARINE REPTILES (TURTLES)

Marine turtles were reviewed through a desk study as part of the RAAIVS. These species are extremely rare in the vicinity of Dún Laoghaire Harbour, with only historical or isolated records. Given their infrequent occurrence and the short-term, low-impact nature of the SI activities, no significant effects are anticipated, and turtles were scoped out from further assessment.

OTTER AND BATS

Both otters (*Lutra lutra*) and bats were reviewed through a desk study as part of the RAAIVS.

Otters are protected under the Wildlife Act 1976 - 2012 (as amended) and are listed on Annex II and Annex IV of the Habitats Directive. All bats and their roosting sites are legally protected under the Habitats Directive as transposed by the Habitats Regulations, as well as under the Wildlife Act.

Chapter 5 of Proposed Cruise Berth Facility, Dun Laoghaire Harbour Environmental Impact Statement 2015 describes the ornithology ecology within the port and an area outside the harbour. The surveys are over 10 years old, however the following is noted:

- Otter activity was confirmed at a number of locations within the harbour and environs by detection of spraints.
- Possible resting area on the disused ferry pontoon located south-east of the (now former) StenaLine berth.
- Leisler's bats were recorded in the vicinity of the (now former) StenaLine Ferry berth (sunset surveys April 2014).
- No roosts were confirmed in the study area.

Additionally, a targeted otter survey conducted in 2022 within 300 m of Carlisle Pier (RPS, 2022) found no evidence of holts, resting places or field signs within Dún Laoghaire Harbour. While otters may occasionally forage or transit through the wider harbour area, the site does not provide suitable habitat for regular use. The enclosed and busy nature of the port environment further reduces its suitability for otter activity.

The desk study identified only Leisler's bat (*Nyctalus leisleri*) and common pipistrelle (*Pipistrellus pipistrellus*) as recorded in the vicinity of Dún Laoghaire Harbour, based on data from the National Biodiversity Data Centre (NBDC, 2025[1]).

Due to the short duration and low-impact nature of the SI activities within an already busy and well-lit harbour, no direct or indirect effects on bats, their habitats, or roost sites are anticipated. Bats were therefore scoped out from further assessment, as there is no source–pathway–receptor linkage with the marine-based geophysical or geotechnical SI activities.

5.3.2.4 FISH

There are no designated sites with fish as QIs in the vicinity of the MUL area. The closest are River Boyne and River Blackwater SAC (located to the north at Drogheda) and Slaney River Valley (located to the south at Wexford).

Commercially important fish species, including their spawning and nursery grounds, and migratory fish are considered here.

The MUL area overlaps with the spawning and/or nursery grounds of several commercially important species of fish, as identified in Ireland's Marine Atlas (2021), as listed Table 5-4. However, the proposed SI activities will only take place within Dún Laoghaire harbour's walls. While the identification of Dún Laoghaire Harbour as overlapping with the spawning and nursery areas for various fish species suggests that these species utilize the broader coastal waters in this region for critical life stages, the likelihood of these species actively spawning or establishing nurseries within the confined and busy environment of Dún Laoghaire Harbour itself is relatively low. Busy harbours, characterised by constant vessel traffic, pollution, and anthropogenic noise, generally do not provide the tranquil and stable environments conducive to these activities. Therefore, while the coastal waters around Dún Laoghaire Harbour serve as important spawning and nursery grounds for various fish species, it is unlikely that these activities occur within the harbour's inner, high-traffic areas, as the environmental conditions within a busy harbour are typically unsuitable for the spawning and early development stages of these fish.

Table 5-4: MUL area overlap with commercial fish species

Species	Nursery Area	Spawning Area
Cod	✓	✓
Haddock	✓	
Whiting		✓
Mackerel	✓	
Horse Mackerel	✓	

[1] https://maps.biodiversityireland.ie/Species

BASKING SHARK (CETORHINUS MAXIMUS)

Basking sharks (*Cetorhinus maximus*) are now legally protected since October 2022 under the Wildlife Acts, as amended, and are not frequently observed off the east coast of Ireland, with most sightings occurring along the west and southwest coasts, where oceanographic conditions favour high plankton availability. While basking sharks are seasonally abundant in Irish waters, particularly during spring and summer, their distribution is strongly associated with plankton-rich areas along the Atlantic seaboard. Sightings in the Irish Sea and along the east coast, including near Dún Laoghaire Harbour, are considered infrequent and sporadic. Although the species may occur on the continental shelf year-round, the east coast is not considered a key area for regular basking shark presence or foraging activity.

IWDG collaborate with the Irish Basking Shark Group and collate and validate basking shark sighting records from Irish waters. Basking shark sightings are rare in Dublin Bay with only one recent validated sighting in 2020. In Figure 5-7, NBDC (2024) records of basking sharks, along with year of the sighting (considered historical records), are presented.

Given their infrequent occurrence and the short, low-impact nature of the SI activities, no significant effects are anticipated.

Figure 5-7: NBDC records of basking sharks in adjacent waters in the vicinity of Dún Laoghaire Harbour (NBDC, 2025)

5.3.3 FISHING AND AQUACULTURE

FISHING

There are no inshore fishing activities overlapping with the MUL area. The only fishing activity within the vicinity includes net fishing, with the nearest site 4 km southeast the MUL area, whelk pot fishing 5 km to the east, and dredge fishing located 8 km northeast of the MUL area.

AQUACULTURE

There are no aquaculture sites overlapping or within the vicinity of the MUL area. The closest aquaculture site is Carlingford Lough for shellfish (Pacific Oyster) which is located 81 km from the MUL area.

5.3.4 ARCHAEOLOGY & CULTURAL HERITAGE

Dun Laoghaire harbour was built between 1817 and 1842. The MUL area adjoins the St Michaels Pier and Carlisle Pier.

5.3.4.1 MARINE ARCHAEOLOGY

The baseline archaeology and cultural heritage chapter of the EIS describes the known archaeology within the MUL area at the time of writing (2015)

Nationally, shipwreck data are also available through both the:

- INFOMAR project. This is a joint venture between the Geological Survey of Ireland and the Marine Institute surveying Irelands seabed. Part of this involves the identification, mapping, and archiving of shipwrecks in Irish waters.
- National Monuments Service (NMS) Database (https://www.archaeology.ie/underwater-archaeology/wreck-viewer).

The potential shipwrecks located within the MUL area and within the outer harbour walls are described below in Table 5-5 and Table 5-6 and illustrated in Figure 5-8. Only wreck W01967 is within the MUL area.

Chapter 5 Archaeological Heritage describes that there are 165 ships recorded as sinking within or close to Dun Laoghaire Harbour that do not have a recorded location.

Table 5-5: Shipwreck Information

Reference	Description
W01967	Place of Loss: Dublin, Dun Laoghaire Harbour, just inside the entrance. 53 18 3.096 N, 006 07 46.596 W
Within the MUL area	Possible wreck (INSS No. G145) identified during the National Seabed Survey. Wreck measures L. 27 m, W. 5 m with a height of 1 m off the seabed. It lies in a general sea depth of 8 m.

Reference	Description
W01966	Place of Loss: Dublin, Dun Laoghaire Harbour Entrance, end of the E Pier, 53 18 10.51 N, 6 7 33.88 W Wreck discovered by Marlin Sub Aqua Club during training dive. Wreck lies exposed on a sandy seabed beside the rocky slope of the East Pier foundation in 10–12 m of water. Wreck appears to extend into the seabed, with only 3 m of wreck visible. Remains consist 'of a few transverse ribs and part of a keel or keelson'. Pieces of iron, including an anchor, lie scattered on the lower slope of the pier.
W11481	Place of Loss: Dun Laoghaire Harbour, near the north end of the East Pier Wreck recorded by the UKHO in 1932 as being in two different sections.
W11611	Place of Loss Dun Laoghaire, along the East Pier Possible section of wreck surveyed by the Geological Survey of Ireland in 2004 as part of the Irish National Seabed Survey. Wreck measures 0.75 m long and lies in 4.3 m of water. GSI Wreck No_163d.
W11584	Place of Loss Dun Laoghaire, along the East Pier Possible section of a wreck surveyed by the Geological Survey of Ireland in 2004 as part of the Irish National Seabed Survey. Wreck measures 2 m long and lies in 4.6 m of water. GSI Wreck No_163a
W11594	Place of Loss: Dun Laoghaire, along the East Pier Section of a possible wreck surveyed by the Geological Survey of Ireland in 2004 as part of the Irish National Seabed Survey. Wreck measures 4.5 m long and lies in 4.5 m of water. GSI Wreck No_GSI_163b
W11604	Place of Loss: Dun Laoghaire, along the East Pier Section of a possible wreck surveyed by the Geological Survey of Ireland in 2004 as part of the Irish National Seabed Survey. Wreck measures 4.5 m long and lies in 4.3 m of water. GSI Wreck No_GSI_163c
W01962	Place of Loss: Dublin, Dun Laoghaire Harbour, beside the Coastguard Station, 53 17 51.282N, 06 08 24.622W PA One of three wrecks marked on a chart (Admiralty Chart 1471) of Dun Laoghaire Harbour as surveyed in 1902 (updated in 1908)

Marine geophysical survey results are summarised in Table 5-6. This information is summarised from Chapter 5 Archaeological Heritage: Proposed Cruise Berth Facility, Dun Laoghaire Harbour Environmental Impact Statement 2015. As described earlier there is partial overlap with the 2015 dredge area and this MUL.

Recorded shipwreck WO1967 is located within the MUL area.

Table 5-6: Previous Archaeology Survey Summary (EIA 2015)

Surveys	Findings Summary
Programme of archaeological monitoring during dredging works in 2003	Geophysical surveys identified 12no. anomalies, however **no archaeological features** were recorded during follow on dive surveys of these anomalies
Marine SI works 2014	Three rotary cores and 12 boreholes, **no deposits or artefacts of archaeological** potential were noted
Marine geophysical survey results (undertaken May 2014 and February 2015)	May 2014: 16no. points of archaeological interest / anomalies were noted thought to be associated with known wrecks or other man-made structure. February 2015: the survey indicated the area surrounding the potential wreck W01967 had changed considerably since May 2014. Previous seafloor scours were gone leaving a flat seabed. It was concluded the previous undulations were caused by ferry traffic that has since ceased.
Dive inspection (undertaken 3 September 2014)	Dive inspection of the points of archaeological interest/anomalies. Recorded Wreck W01966 The dive survey concluded that it comprised a series of disarticulated metal beams, girders and plates, with no discernible complete hull structure noticeable. The metallic remains were noted adjacent to, interspersed with and overlying the stone of the east Pier. The remains appeared to be scattered over an area of 28m on the gravel seafloor and the angular rock. Wreck recorded by Maritime Sites and Monuments records W01967 was described as scattered remains of a shipwreck with what appeared to be a section of gunwale. Other points of archaeological interest / anomalies found no visible traces of any cultural heritage features
Archaeological test trenching 26 November 2014 & work to locate & test WO1966 & WO1967.	Search for W01967 (15 m from recorded location and repositioned charted location). The survey work did not locate wreckage associated with the record for W01967. However, the report left a question about the location of the remains. They were considered to be outside the dredge area for this project and no archaeological mitigation was deemed necessary for W01967. Test trenches searching for W01966 found timber remains lie buried against the toe of the East Pier's rock armour.

The data base of Irish Excavation Records also summarises the findings of archaeological investigations for W01966 and W01967[2].

[2] https://excavations.ie/report/2014/Dublin/0024618/

5.3.4.2 ARCHAEOLOGICAL HERITAGE

There are three recorded archaeological sites listed within the Record of Monuments and Places:

- DU023-074- : Battery.
- DU023-052004- : Battery
- DU023-052001- : Promontory fort removed during the construction of the railway.
- DU023-052003- : Martello tower removed during the construction of the railway.

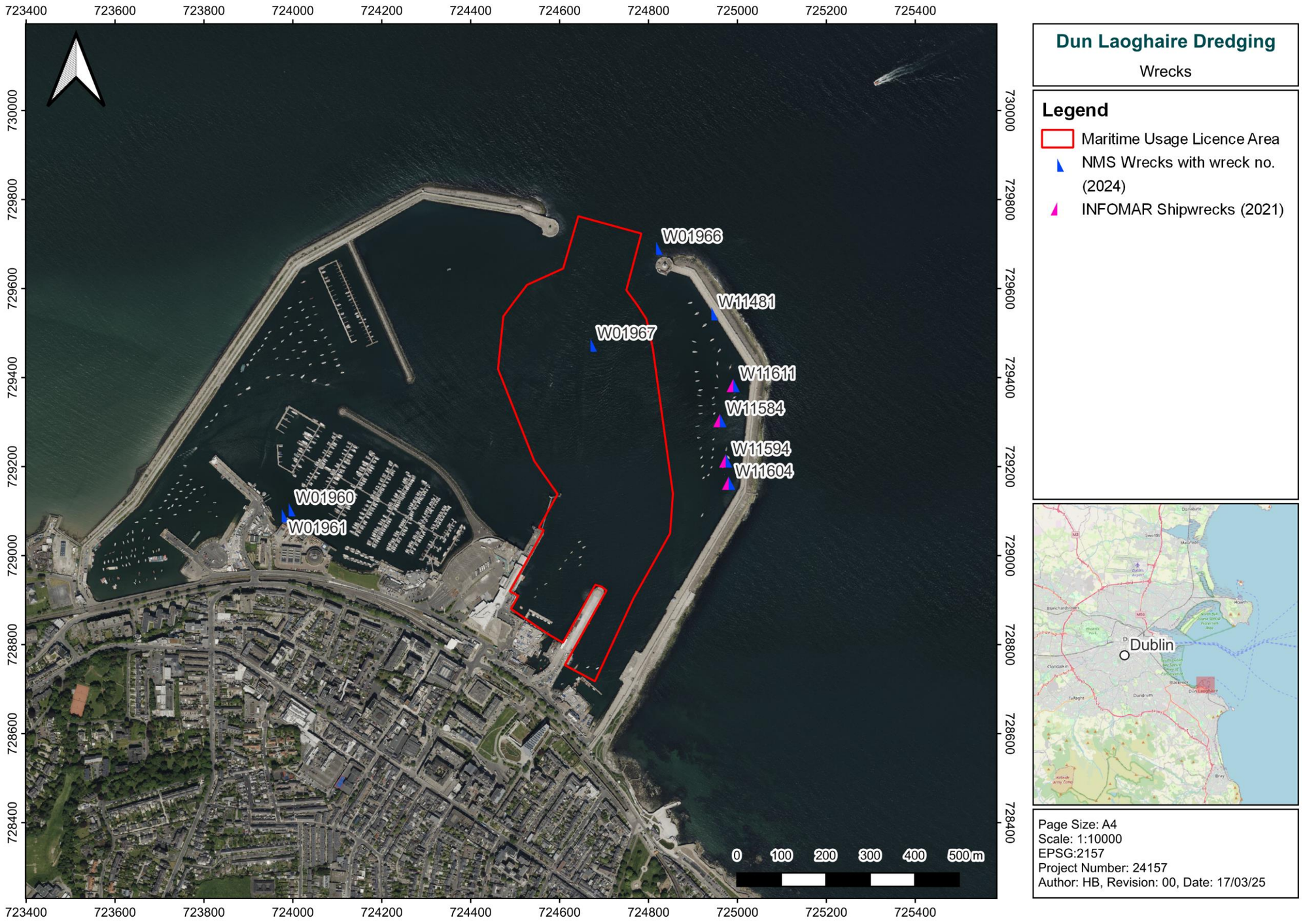

Figure 5-8: Recorded shipwrecks

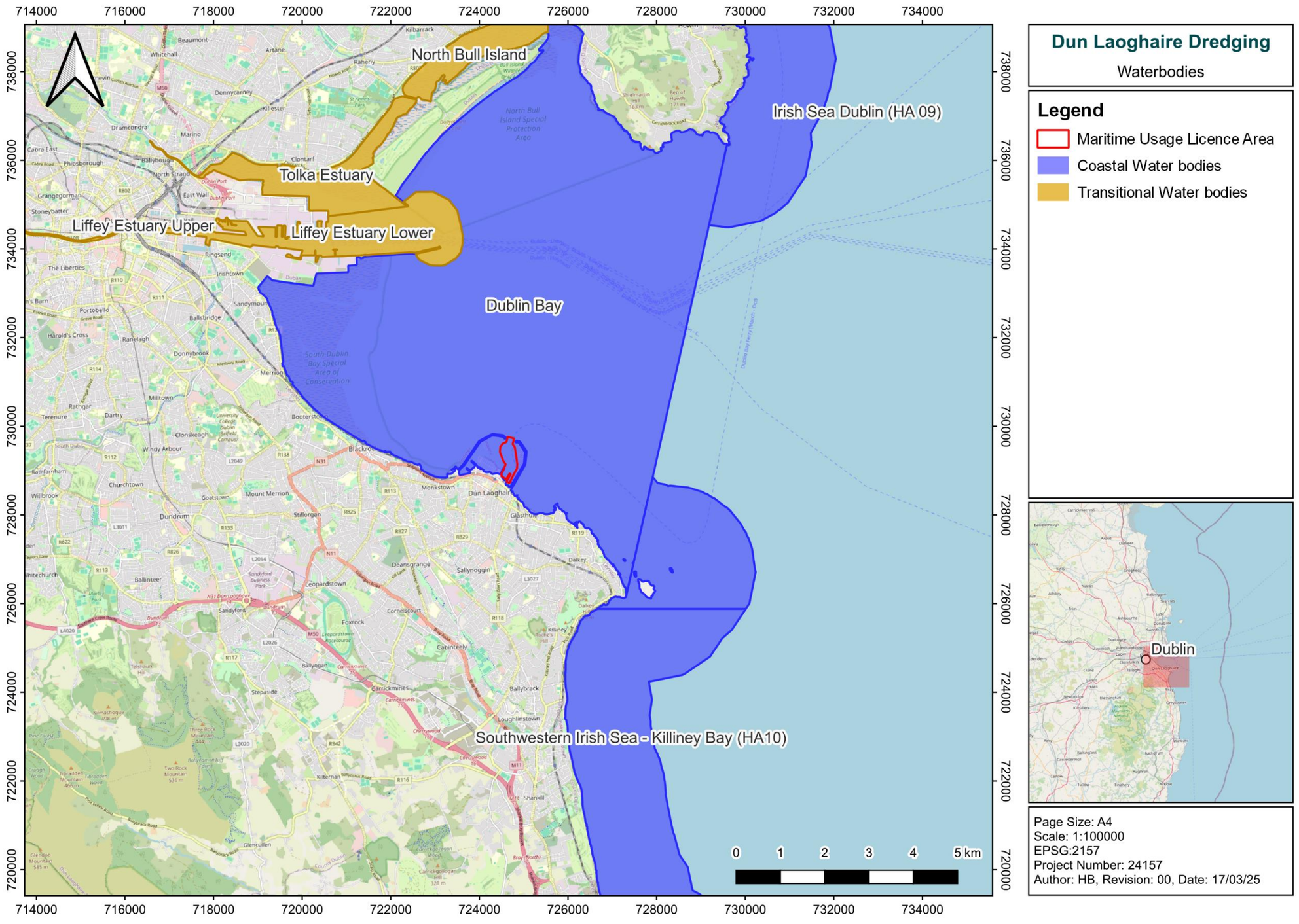

Figure 5-9: Coastal Water Quality (EPA)

5.3.5 INTERACTIONS

A review of available information for the area surrounding the MUL Application Area was undertaken to identify other potential plans, projects and activities in the area (Table 5-7). These are illustrated in Figure 5-10.

Table 5-7: Nearby Projects

No.	Project description	Applicant	Distance	Licence information
LIC230028	A Geotechnical Investigation (GI) and Geophysical site investigation surveys	Iarnród Éireann	1.2 km	Withdrawn
MUL230034	Codling Wind Park Limited intends to undertake survey mobilisations	CWPL	36 m	Applied
MUL230032	Introduction of Native Oysters into nearshore sites Area B	University College Dublin	614 m	Applied
	Area A		4.2 km	
	Area G		5.9 km	
	Area F		6.7 km	
LIC230016	Geophysical survey and site investigations for a proposed subsea fibre optic cable having a landfall in Dublin Port	Microsoft Ireland Operations Ltd	4.7 km	Determined
MUL240004	Deployment of research buoy to generate data off the coast of Dun Laoghaire	Dublin City University	1.8 km	Applied

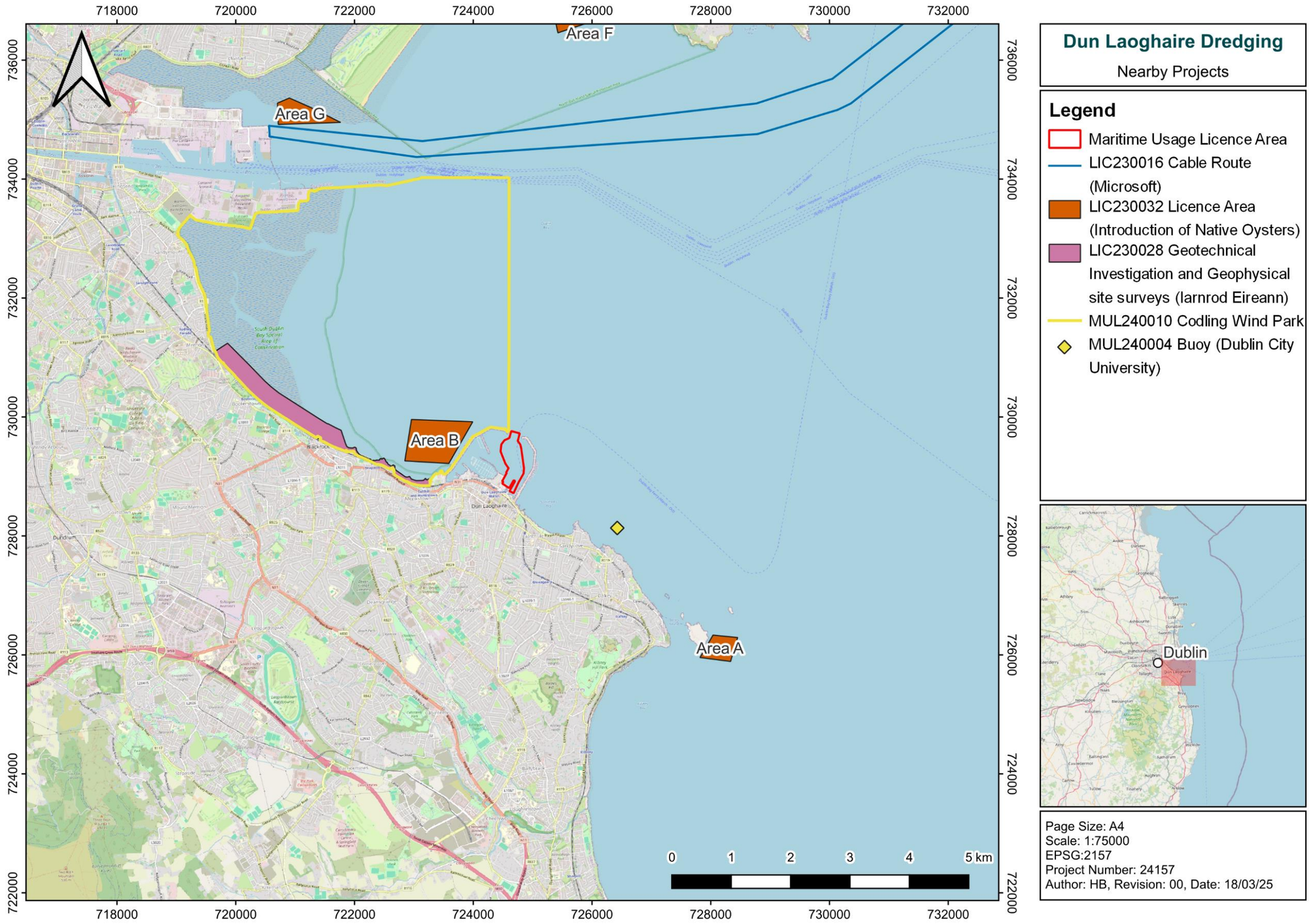

Figure 5-10: Nearby Projects

5.4 ENVIRONMENTAL ASSESSMENT

The results of the environmental assessment undertaken for this AIMU report are summarised in Table 5-8.

Table 5-8: Environmental Assessment

Environmental Topic	Environmental Setting	Potential Effects	Mitigation	Assessment of Effects
Land & Soils	SI activities are all within the marine environment. Marine sediment information and the benthic setting is described in Section 5.3	N/A	N/A	No interaction - SI works are entirely marine-based
Water	Dublin Bay CWB currently achieves 'Good' status for the 2016 – 2021 assessment period, a continuation of the previous 2013 – 2018 assessment period. Seapoint bathing water is located approximately 1.2 km west of the MUL. Dun Laoghaire Baths is located 0.3 km to the south. Based on the most recent bathing water data (EPA, 2023), these bathing areas are currently classified as having 'Excellent' water quality.	• Reduction in water quality from accidental spills • Reduction in water quality from re-suspension of sediments	There will be no planned release of potentially harmful substances from the survey vessels. Strict maritime regulations, normal vessel operating standards and precautions, compliant with all International Maritime Law and National Maritime Legislation, will ensure that the risk of a release is low and no significant effects are predicted. In addition, all vessels used, shall, as required by law, be MARPOL compliant and fully certified by the Maritime Safety Office. Therefore, it is considered not likely that there would be any occurrence of a pollution event, accidental or otherwise, that could directly or indirectly affect the environment	The risk of pollution or sediment disturbance is low given the limited scale, short duration, and embedded controls. **No significant effects**
Biodiversity - Benthic	Within the MUL Application Area, benthic habitat maps show A5.33 Infralittoral sandy mud and A5.35 Circalittoral sandy mud habitats are present. Located within the harbour environment the benthic habitat is likely to have experienced disturbance from previous dredging and vessel movement. Annex I Benthic habitats are designated features of nearby SACs (i.e. South Dublin Bay SAC and Rockabill to Dalkey SAC, Table 5-1) however the closest of these is > 1.6 km from the MUL Application Area	• Habitat loss • Local smothering from re-suspension of sediment • Reduction in water quality from accidental spills	See mitigation for water. SI activities are small in scale and spatially contained within the harbour walls and within the already busy harbour environment. No mitigation proposed for benthic ecology	Seabed disturbance from the SI activities (vibrocores and grab samples) are temporary and minor in the context of the harbour environment. **No significant effects**.
Biodiversity - Ornithology	Desk study information indicated that bird species including gulls, terns and waders (summer) and divers (winter) use the harbour. Black Guillemots were recorded breeding on Carlisle Pier in 2014. Nearby SPAs are described in Table 5-2	• Reduction in water quality from accidental spills • Displacement and/or disturbance from airborne noise • Underwater noise (diving birds)	See mitigation for water. SI activities are small in scale, and spatially contained within the harbour walls and within the already busy harbour environment. No mitigation proposed for Ornithology	Underwater / airborne noise and disturbance from the SI activities (vibrocores and grab samples) are temporary and minor in the context of the harbour environment. **No significant effects**.

Environmental Topic	Environmental Setting	Potential Effects	Mitigation	Assessment of Effects
Biodiversity - Marine Mammals & Otter	Review of ObSERVE II information indicates marine mammals are found in the Dublin Bay area. Harbour Porpoise is a QI of the Rockabill to Dalkey Island SAC, as described in Table 5-1.	• Injury, displacement and/or disturbance from underwater noise • Mortality or injury from vessel collision • Reduction in water quality from accidental spills	See mitigation for water. SI activities are small in scale, “contained” in the harbour walls and within the already busy harbour environment. No other mitigation proposed for marine mammals & Otter	Underwater noise and disturbance from the SI activities (SSS, vibrocores and grab samples) are temporary and minor in the context of the harbour environment. The RAAIVS (document reference number 24157-REP-004-00) concluded that the proposed SI activities, including short-term use of low-intensity geophysical and geotechnical survey methods within the confined waters of Dún Laoghaire Harbour, pose no risk of physical or auditory injury to marine mammals. Given the high ambient noise levels, limited spatial extent, and short duration of activities, no significant behavioural disturbance or impact is anticipated. **No significant effects**.
Biodiversity - Fish	Ireland’s Marine Atlas indicates the MUL area and surrounding coastal waters are important for fish, including species such as Cod, Haddock, Whiting, Mackerel, Horse Mackerel & Atlantic Salmon. There are no SACs with fish QIs in the vicinity of the MUL area.	• Injury, displacement and/or disturbance from underwater noise • Reduction in water quality from accidental spills	See mitigation for water. SI activities are small in scale, “contained” in the harbour walls and within the already busy harbour environment. No other mitigation proposed for fish.	Underwater noise and disturbance from the SI activities (vibrocores and grab samples) are temporary and minor in the context of the harbour environment. **No significant effects**.
Fishing & Aquaculture	Ireland’s Marine Atlas shows no overlap with any inshore fishing or aquaculture sites. The closest inshore fishing activity located 4km to the southeast of the MUL area.	• None anticipated from the temporary and minor SI activities.	Not required	The SI activities are minor, temporary, and located away from active fishing or aquaculture areas. **No significant effects**
Air Quality	The EPA manages the national ambient air quality monitoring network (https://airquality.ie/). The closes monitoring station to the MUL area is in Glenageary Road, Dún Laoghaire and the current air quality is described as Good (accessed 25 March 2025).	• None other than routine vessel exhaust emissions.	Not required	Exhaust emissions from SI vessels are temporary and minor within the context of the harbour environment. Air quality standards will not be exceeded. **No significant effects**.
Noise & Vibration	The EPA provides noise mapping and action plans (https://www.epa.ie). The MUL area is within a busy harbour environment. Background noise are predicted within the local road network https://gis.epa.ie/EPAMaps/.	• None other than vessel engine noise	Not required	Noise from SI vessel and activities are temporary and minor within the context of the harbour environment. **No significant effects**.

Environmental Topic	Environmental Setting	Potential Effects	Mitigation	Assessment of Effects
Landscape & Seascape	The site is located within SCA 15 Dublin Bay. The character of this seascape is that of a busy and active area, with the busiest port in the country and the capital city. Day and night there is shipping activity in the bay. The area is heavily urbanised with coastal settlements along a modified coastline. The area has significant ecological and biodiversity areas and is popular for recreation.	• None anticipated from the temporary and minor SI activities.	None	Effects to the seascape from SI vessel and activities are temporary and minor within the context of the harbour environment. **No significant effects**.
Traffic, Transport & Navigation	Traffic & transportation impacts on land are not applicable to this MUL application. For marine navigation, EMODnet Map Viewer shows the wider vessel movements and densities for all vessels and by type (cargo, fishing, passenger etc). Dun Laoghaire harbour is largely used for fishing and pleasure vessels. The wider area includes Dublin Port which is Irelands busiest port.	• Risk of collision with the SI vessels	Engagement with relevant stakeholders Dun Laoghaire Harbour Master / Irish Coast Guard.	Effects from vessel collision from SI vessel and activities are temporary and minor within the context of the harbour environment. **No significant effects**.
Archaeology	Potential for unrecorded shipwrecks. One recorded wreck WO1967 within the MUL area. Dive surveys and excavations did not find any evidence of remains at the recorded location.	• Disturbance to archaeological deposits	Known shipwrecks will be avoided.	Seabed disturbance from the SI activities (vibrocores and grab samples) are temporary and minor in the context of the harbour environment. **No significant effects**
Population & Human Health	Harbour environment adjacent to the town of Dún Laoghaire. The nearest residential properties on the south side of Harbour Road and the railway are on Crofton Road (Google Maps, 2025).	• Temporary nuisance	Engagement with relevant stakeholders Dun Laoghaire Harbour Master / Irish Coast Guard.	Any temporary nuisance from SI vessel and activities are temporary and minor within the context of the harbour environment. **No significant effects**.
Major Accidents & Disasters	The proposed site investigation activities are not anticipated to exacerbate natural disasters such as earthquakes, subsidence, landslides, erosion or flooding. There is the potential for an accident such as collision with another vessel within the busy harbour.	• Risk of collision with the SI vessels	Engagement with relevant stakeholders Dun Laoghaire Harbour Master / Irish Coast Guard.	Risk of collision is low given the temporary nature of the works and coordination with the Harbour Master and relevant authorities. **No significant effects**.
Climate	Harbour environment. The SI activities will be conducted over a relatively short timeframe and the effects contributing to climate change will not arise.	• SI activities are small in scale	None	The short duration and limited scale of the SI activities will not result in any measurable contribution to climate change. **No significant effect**
Waste	Harbour environment Any waste generated during the SI activities will be disposed on land. There will be no planned release of potentially harmful substances or waste from the survey vessels.	• Reduction in water quality / litter	Any waste generated during the SI activities will be disposed of on land. There will be no planned release of potentially harmful substances or waste from the vessels. See mitigation for water.	All waste will be managed onshore with no discharges to the marine environment. **No significant effect**

Environmental Topic	Environmental Setting	Potential Effects	Mitigation	Assessment of Effects
Material Assets	The Irish Marine Atlas and the Foreshore Licence database were reviewed to determine potential infrastructure underlying the Licence Area. No underwater cables or other infrastructure. Nearest underwater cable is the Scotland to Ireland Interconnector, located 30 km to the north of the MUL area.	• None	None	No known infrastructure within the MUL area and sufficient separation from nearest underwater cable. **No significant effect**
Interactions	A number of nearby proposed MUL or Licences	• None	None	**No significant effect**

6 SUMMARY OF MITIGATIONS

As described in the Environmental Assessment the SI activities are small in scale and located within the MUL area within the harbour walls. In addition, the SI activities will be conducted in a short time span and are temporary in nature.

Summary of mitigation measures are described below.

Table 6-1: Summary of Mitigation

Potential Effect	Mitigation
• Reduction in water quality from accidental spills	There will be no planned release of potentially harmful substances from the survey vessels. Strict maritime regulations, normal vessel operating standards and precautions, compliant with all International Maritime Law and National Maritime Legislation, will ensure the risk of a release is low and no significant effects are predicted. In addition, all vessels used, shall, as required by law, be MARPOL compliant and fully certified by the Maritime Safety Office.
• Risk of collision with the SI vessels	Engagement with relevant stakeholders Dun Laoghaire Harbour Master / Irish Coast Guard.
• Disturbance to archaeological deposits	Known shipwrecks will be avoided
• Reduction in water quality/litter	Any waste generated during the SI activities will be disposed on land. There will be no planned release of potentially harmful substances or waste from the vessels.

7 CONSIDERATION AND REASONED CONCLUSIONS IN RELATION TO THE:

7.1 EIA DIRECTIVE

7.1.1 APPROACH TO EIA SCREENING

The Office of the Planning Regulator issued a practice note, OPR Practice Note PN02, on EIA Screening for development proposals (Office of the Planning Regulator, 2021). While the aim of the Practice Note is to provide guidance for compliance with the planning legislation, it provides useful guidance for EIA Screening for other consent regimes.

The Practice Note recommends a step-by-step approach to EIA Screening, as follows:

Step 1: Understanding the proposal

The first step comprises the following tests:

a) Is the proposed development a project as per the EIA Directive?

If not, then the proposed development is not subject of EIA Directive, no screening is required, and no EIA is required.

b) Is the project listed in Schedule 5 Part 1 or does it meet or exceed the thresholds in Part 2 of the Planning and Development Regulations, SI 600 of 2001, as amended?

If it does, no screening is required and EIA is mandatory.

c) Is the project sub threshold?

If it is, then the project must proceed to Step 2, as preliminary examination is required.

Step 2: Preliminary Examination & Conclusion

This step consists of a preliminary examination of, at least, the nature, size, or location of the development, considering:

- Nature of the development including production of wastes and pollutants
- Size of the development
- Location of the development including proximity to ecologically sensitive sites and the potential to affect other environmental sensitivities in the area.

Step 2 will have one of three outcomes:

a) There is no real likelihood of a significant effect on the environment and no further action is required. The reasons for this conclusion will be recorded.

b) There is significant doubt as to the effects on the environment; the project must proceed to Step 3, as a formal screening determination is required.

c) There is a real likelihood of a significant effect on the environment and an EIA is required.

Step 3: Formal Screening Determination

In this step, a Screening exercise must be carried out in order to determine if the proposal is likely to have significant effects on the environment. In making the determination, the planning authority must have regard to Schedule 7 criteria, Schedule 7A information, results of other relevant EU

assessments, the location of sensitive ecological sites, or heritage or conservation designations. Mitigation measures may be considered.

The Screening Determination must record the outcome of the Screening exercise and state the main reasons and considerations, with reference to the relevant criteria listed in Schedule 7 of the Regulations and mitigation if relevant.

7.1.2 SCREENING FOR MANDATORY EIA

PART 1 OF SCHEDULE 5

All of the project types in Part 1 have been considered in the preparation of this report. The proposed site investigation activities do not constitute a project type or class listed in Part 1 of Schedule 5 of the Regulations.

PART 2 OF SCHEDULE 5

All of the project types in Part 2 have been considered in the preparation of this report. The proposed site investigation activities do not constitute a project type or class listed in Part 2 of Schedule 5 of the Regulations.

7.1.3 CONCLUSION OF THE EIA SCREENING

In answering Step 1, question (a): Is the proposed development a project as per the EIA Directive? as per OPR Practice Note 02, the answer is 'No', and the conclusion is that the proposed site investigation activities are not subject of the EIA Directive, no Screening is required, and no EIA is required.

7.2 WFD DIRECTIVE

Council Directive 2000/60/EC (the Water Framework Directive [WFD]) on establishing a framework for community action in the field of water policy was adopted by all member states in October 2000. Since 2000, the WFD has been the main law for water protection in Europe

The key objectives of the WFD are set out in Article 4. It requires Member States to use their River Basin Management Plans (RBMPs) and Programmes of Measures (PoMs) to protect and, where necessary, restore water bodies to reach good status, and to prevent deterioration. Good status means both good chemical and good ecological status.

Section 5 Environmental Assessment of Impacts outlines water quality, providing a brief outline of the WFD status, pollution status and condition (i.e. satisfactory, unsatisfactory). The section describes the status of the receiving environment's water quality, the potential effects and an assessment of those potential effects for the Licence Area.

Considering the scale and nature of the works and the mitigation measures outlined in Section 5 of the AIMU there is no significant risk of SI activities impacting the chemical or ecological status of inland, transitional, coastal surface waters and ground waters.

7.3 MSF DIRECTIVE

In 2008, the EU adopted the Marine Strategy Framework Directive (MSFD) to maintain healthy, productive and resilient marine ecosystems while securing a more sustainable use of marine resources. The MSFD requires Member States to develop national marine strategies in order to achieve, or maintain where it exists, 'good environmental status (GES)'. Such status should have been achieved by 2020.

The MSFD comprises regular assessments of the marine environment, setting objectives and targets, establishing monitoring programmes and putting in place measures to improve the state of marine waters. All these actions must be done in close coordination with neighbouring countries at regional sea level (European Commission, 2020).

Section 5 Environmental Assessment of Impacts describes the marine environment and undertakes an analysis of the likely effects of the proposed SI activities on GES (Table 7-1).

Table 7-1: Marine Strategy Framework Directive GES Descriptors

	GES Descriptors	Details
1	Biodiversity	Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.
2	Non-indigenous species	Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
3	Populations of commercial species	All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.
4	Food web structure	Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters
5	Eutrophication	Sea floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.
6	Sea floor integrity	Permanent alteration of hydrographical conditions does not adversely affect marine.
7	Alterations to hydrography	Contaminants are at a level not giving rise to pollution effects.
8	Contaminants	Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards.
9	Sea-food contaminants	Properties and quantities of marine litter do not cause harm to the coastal and marine environment.
10	Marine litter	Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.
11	Energy and noise	Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.

Considering the scale and nature of the works and the mitigation measures outlined in Section 5 of the AIMU there is no significant risk of SI activities impacting on the 'Good environmental Status (GES)'.

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APPENDIX A

A.1 VIBROCORE

Vibrocoring, a technique for collecting core samples of the seabed sub-strata sediments, consists of a vibrating mechanism attached to a metallic core which is driven into the sediment by the force of gravity, enhanced by vibration energy.

The vibrocore apparatus is generally a lightweight rig and as such does not rely on overall mass as an additional means of penetration.

Vibrocores are most effective in unconsolidated, waterlogged sediments and soils, with sandy and silty sediments of mixed grain size easiest to core. Vibrocores are less effective for relatively dry soils such as clay, compacted sand or any consolidated materials. Given that the seabed sub-strata composition at site is unknown, core retrieval depths can vary.

Once the core tube has fully penetrated the sediment and the vibration source is turned off, the core is withdrawn without losing the sample. On retrieval of the cores, they are sub-sampled into sections – Top, Middle & Bottom, and are then photographed and logged before being despatched to an accredited laboratory. https://www.aspectsurveys.com/survey-services/geophysical/seabed-sampling/

Figure A-1: Examples of Vibrocore (https://www.aspectsurveys.com/survey-services/geophysical/seabed-sampling/)

A.2 GRAB SAMPLES

Single Van Veen Grab: It is ideal for the collection of sediment samples for biological and environmental sampling. In a range of sizes (0.025m^2, 0.1m^2, 0.2m^2, 0.3m+) each model has a marine grade stainless steel bucket with hinged access flaps on the top allowing sub sampling of the collected sediment before it is emptied from the grab. The bucket is operated with a pair of stainless-steel lever arms that increase the tension to secure the sample securely in the grab as it is retrieved to the surface. Additional lead weights can be added to the back of the bucket to improve stability in strong currents and to the lever arms to increase the equipment's ability to perform in harder conditions. More information on the technical specifications can be found at: https://www.cms-geotech.co.uk/single-van-veen-grabs.

Figure A-2: Single Van-Veen-grab (OSIL

A.3 SIDE SCAN SONAR (SSS)

Side Scan Sonar (SSS) is a sensor which is typically towed behind the vessel on an armoured tow cable, although some models can be pole mounted on the side of the vessel. A dual frequency SSS system will be used to provide detailed imagery of the seabed throughout the Licence Area which will aid with seafloor sediment/bedrock and geomorphology mapping as well as for identifying any shallow geohazards.

Side scan systems are available from a number of manufacturers. These units vary in size, working and technical characteristics and acquisition configuration (towed or vessel mounted). Dual frequency digital systems allow more survey flexibility; some systems can acquire and record both frequencies swaths independently and simultaneously. Using these systems, operator may use a higher frequency to produce sharper images and narrow swath or use the lower frequencies to obtain wider seabed coverage at lower resolutions. The exact equipment used will be confirmed following the appointment of a survey contractor.

The system will be adequate to the depth range of the study area and the seabed discrimination level required. The design of transects will consider the geographic and depth extent of the study area, seabed coverage ratio, overlap coverage desired, priority areas to survey, prevailing winds and currents, etc. Often, the complete coverage of the seabed is the ultimate goal of an acoustic survey design, to enable the creation of full mosaics. In these cases, theoretically, parallel transects should be run to produce swath overlapping of, at least, 50%. When complete coverage is not necessary to define seabed boundaries, consecutive swaths overlapping 20 to 30% can be adequate. However, in some cases, transect spacing of at least 75% of the swath width can provide reasonable overlapping to compensate any loss of resolution at the outer range limits. This is very dependable on weather conditions and the survey will be planned accordingly by an experienced sonar operator.

SSS is non-intrusive therefore does not interact with the seabed. SSS may be undertaken across the MUL Application Area to a suitable percentage coverage.

Figure A-3: EdgeTech 4205 MP Side Scan Sonar Towfish (EdgeTech)

A.4 MAGNETOMETER

A magnetometer is a passive device that is towed behind a survey vessel. It is used to detect ferrous objects on the surface or in the subsurface. Magnetometer surveys are widely used prior to intrusive works to highlight any obstruction or potential risk such as existing infrastructure, shipwrecks and unexploded ordnance (Figure A-4).

The vessel will tow the magnetometer in a submerged pod. The exact equipment used will be confirmed following the appointment of a survey contractor though it is expected the magnetometer will be of the Caesium Vapour type and capable of recording variations in magnetic field strength during survey to an accuracy of ±0.5 nT.

A Magnetometer is non-intrusive therefore does not interact with the seabed. It may be undertaken across the MUL Application Area to a suitable percentage coverage and the parameters of the survey may be determined by the requirements of the Underwater Archaeology Unit (UAU) of the National Monuments Service. Typical UAU requirements for magnetometer and SSS survey are set out in Table A-1.

Table A-1: Underwater Archaeology Unit Requirements for Magnetometer Survey

Survey Type	Requirements for Archaeological Purposes
Side Scan Sonar	Operational frequency of 410/500 kHz. 50 m survey line spacing. 100% site coverage (overlap of areas may be required)
Magnetometer	Proton or caesium magnetometer 50m side spacing

Figure A-4: Magnetometer (Geometrics)

APPENDIX B

Table B-1: Policy review outlining consistency of this MUL with relevant policies

Policy	Description	Discussion	Conclusions
Ports, Harbours and Shipping Policy 1	To provide for shipping activity and freedom of navigation the following factors will be taken into account when reaching decisions regarding development and use: • The extent to which the locational decision interferes with existing or planned routes used by shipping, access to ports and harbours and navigational safety. This includes commercial anchorages and approaches to ports as well as key littoral and offshore routes • A mandatory Navigation Risk Assessment • Where interference is likely: whether reasonable alternatives can be identified • Where there are no reasonable alternatives: whether mitigation through measures adopted in accordance with the principles and procedures established by the International Maritime Organisation can be achieved at no significant cost to the shipping or ports sector.	This MUL is for site investigations only. The results will be used to inform the concept design and environmental assessments required for maintenance dredging to be undertaken.	The site investigation works proposed are consistent and compliant with Ports, Harbours and Shipping Policy 1, assuming the policy is applicable to developers.
Ports, Harbours and Shipping Policy 2	Proposals that may have a significant impact upon current activity and future opportunity for expansion of port and harbour activities should demonstrate that they will, in order of preference: a) avoid, b) minimise, or c) mitigate significant adverse impacts, and d) if it is not possible to mitigate significant adverse impacts on current activity and future opportunity for expansion of port and harbour activities, proposals should set out the reasons for proceeding	This MUL is for site investigations only. The results will be used to inform the concept design and environmental assessments required for maintenance dredging to be undertaken.	The site investigation works proposed are consistent and compliant with Ports, Harbours and Shipping Policy 2, which indicated that the application should be supported.
Ports, Harbours and Shipping Policy 3	Proposals that may have significant impact upon current activity and future opportunity for expansion of port and harbour activities must demonstrate consideration of the National Ports Policy, the National Planning Framework, and relevant provisions related to the TEN-T network	This MUL is for site investigations only. The results will be used to inform the concept design and environmental assessments required for maintenance dredging to be undertaken.	The site investigation works proposed are consistent and compliant with Ports, Harbours and Shipping Policy 3, which indicated that the application should be supported.
Ports, Harbours and Shipping Policy 4	Proposals within ports limits, beside or in the vicinity of ports, and / or that impact upon the main routes of significance to a port, must demonstrate within applications that they have: • been informed by consultation at pre-application stage or earlier with the relevant port authority • have carried out a navigational risk assessment including an analysis of maritime traffic in the area • have consulted Department of Transport, MSO and Commissioners of Irish Lights. Applicants must continue to engage parties identified in pre-application processes as appropriate during the decision-making process.	This MUL is for site investigations only. The results will be used to inform the concept design and environmental assessments required for maintenance dredging to be undertaken. Port authority is applicant for proposed dredging; NRA and appropriate consultations will be undertaken as part of dredging application.	The site investigation works proposed are consistent and compliant with Ports, Harbours and Shipping Policy 4, which indicated that the application should be supported
Ports, Harbours and Shipping Policy 5	Proposals for capital dredging will be supported where it is necessary to safeguard national port capacity and Ireland's international connectivity, and where required compliance assessments associated with authorisations have been carried out and incorporated into subsequent competent authority decision(s).	This is not a MUL application for capital dredging – not applicable.	N/A

Policy	Description	Discussion	Conclusions
Ports, Harbours and Shipping Policy 6	In areas of authorised dredging activity, including those subject to navigational dredging, proposals for other activities will not be supported unless they are compatible with the dredging activity.	This MUL is for site investigations only. The results will be used to inform the concept design and environmental assessments required for maintenance dredging to be undertaken.	The site investigation works proposed are consistent and compliant with Ports, Harbours and Shipping Policy 6, which indicated that the application should be supported
Ports, Harbours and Shipping Policy 7	Proposals for maintenance dredging activity will be supported where: • relevant decisions by competent authorities incorporate the outcome of statutory environmental assessment processes, as well as necessary compliance assessments associated with authorisations, including in relation to the planning process; • there will be no significant adverse impact on marine activities or uses or the maritime area. Any potential adverse impact will be, in order of preference, avoided, minimised or mitigated; • dredged waste is managed in accordance with internationally agreed hierarchy of waste management options for sea disposal; • if disposing of dredged material at sea, existing registered disposal sites are used, in preference to new disposal sites; and • where they contribute to the policies and objectives of this NMPF	This MUL is for site investigations only. The results will be used to inform the concept design and environmental assessments required for maintenance dredging to be undertaken.	The site investigation works proposed are consistent and compliant with Ports, Harbours and Shipping Policy 7, which indicated that the application should be supported
Ports, Harbours and Shipping Policy 8	Proposals that cause significant adverse impacts on licensed disposal areas should not be supported. Proposals that cannot avoid such impact must, in order of preference: a) minimise, b) mitigate, or c) if it is not possible to mitigate the significant adverse impacts, proposals must set out the reasons for proceeding.	This MUL is for site investigations only. The results will be used to inform the concept design and environmental assessments required for maintenance dredging to be undertaken.	The site investigation works proposed are consistent and compliant with Ports, Harbours and Shipping Policy 8, which indicated that the application should be supported
Ports, Harbours and Shipping Policy 9	Proposals for the management of dredged material must demonstrate that they have been assessed against the waste hierarchy (see Glossary).	This MUL is for site investigations only. The results will be used to inform the concept design and environmental assessments required for maintenance dredging to be undertaken.	The site investigation works proposed are consistent and compliant with Ports, Harbours and Shipping Policy 9, which indicated that the application should be supported
Ports, Harbours and Shipping Policy 10	Proposals identifying new dredge disposal sites which are subject to best practice and guidance from previous studies should be supported where: • competent authority decisions incorporate necessary compliance assessments associated with authorisations; and • they contribute to the policies and objectives of this NMPF. Proposals must include an adequate characterisation study, be assessed against the waste hierarchy and must be informed by consultation with all relevant stakeholders.	This MUL is for site investigations only. The results will be used to inform the concept design and environmental assessments required for maintenance dredging to be undertaken.	The site investigation works proposed are consistent and compliant with Ports, Harbours and Shipping Policy 10, which indicated that the application should be supported

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