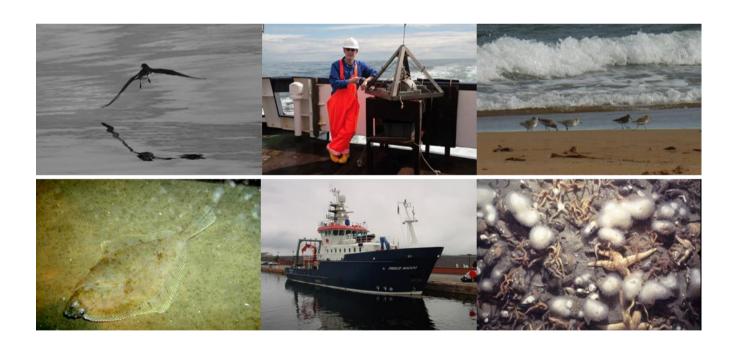
# **Hartley Anderson Limited**

Marine Environmental Science and Consultancy

# **Screening for Appropriate Assessment**

Dublin Port Company MP2 Project Foreshore Lease, Licence and Consent Application Ref. No. FS006893

Report to Department of Housing, Local Government and Heritage



December 2021

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### **SECTION 1 - INTRODUCTION**

#### 1.1 Background

Arup with Hartley Anderson Limited have been commissioned by the Department of Housing, Local Government and Heritage (DHLGH) to conduct a Screening for Appropriate Assessment (AA) (stage 1 screening for the likelihood of significant effects on Natura 2000 sites), from an application by Dublin Port Company (DPC) for a Foreshore Lease, Licence and Consent (hereafter Consent) for the MP2 Project which is the second Strategic Infrastructure Development (SID) at Dublin Port to be brought forward to planning stage from the Dublin Port Masterplan 2040. The purpose of the proposed development is to provide for the redevelopment of existing port lands and complement the previously permitted Alexandra Basin Redevelopment (ABR) Project in providing capacity for growth in the Ro-Ro and Lo-Lo modes on the north side of the Port in accordance with the Port Masterplan. The project will involve the placement of permanent structures on the foreshore.

DPC submitted an application for planning permission to An Bord Pleanála on 11<sup>th</sup> July 2019 for the MP2 Project. An Oral Hearing was held on 16<sup>th</sup> December 2019 and the planning permission was granted by An Bord Pleanála on 1<sup>st</sup> July 2020.

DPC applied to the Environmental Protection Agency (EPA) for a dumping at sea permit on 4<sup>th</sup> August 2020 for loading and dumping at sea activities associated with capital dredging within Dublin Harbour as part of the MP2 Project. The permit application proposes that all capital dredging activities to be undertaken for the duration of the activities (15 years) will be restricted to the winter months only (October to March), commencing October 2021.

The application is currently under assessment by the EPA in accordance with the requirements of the Dumping at Sea Act 1996 as amended. The EPA issued three requests for additional information, most recently in October 2021, and the applicant submitted a revised AA Screening and NIS in September 2021. The EPA will issue a determination in due course.

## 1.2 Application documents submitted

A number of application documents submitted by DPC have informed this AA Screening, including:

- Application form [Applicant: Dublin Port Company]
- Dublin Port MP2 Section 10 Consent Map
- Dublin Port MP2 Foreshore Consent Map 1 of 2
- Dublin Port MP2 Foreshore Consent Map 2 of 2
- Dublin Port MP2 AA Screening and NIS Report [RPS Ireland Ltd (NI), 4 July 2019]
- AA Screening and NIS Appendices
- Draft Construction Environment Management Plan [RPS Ireland Ltd (NI), 7 July 2020]
- Dublin Port MP2 Summary of Mitigation Measures [RPS Ireland Ltd (NI), undated]
- Dublin Port MP2 Project Rationale [RPS Ireland Ltd (NI), 11 July 2019]
- Dublin Port MP2 ABP Decision [ABP-304888-19, 1 July 2020]
- Dublin Port MP2 ABP Inspector's Report [ABP-304888-19, March 2020
- Dublin Port MP2 ABP Order 304888-19 [undated]
- · Series of drawings
- Prescribed Bodies Consultation
  - Prescribed Bodies Observations
  - Applicant's response to Public Bodies Observations

- Dumping at Sea Permit Application
  - S0024-02 Response to Section 5(2) Request for Further Information. Revised AA Screening & NIS [RPS Ireland Ltd (NI), September 2021]
  - Response to Section 5(2) Notice: Additional sediment plume modelling [RPS, 8 November 2021]
  - Response to Section 5(2) Notice issued by the EPA on 22<sup>nd</sup> Sept 2021: MP2 Project – Further material sampling and analysis [RPS, 11 November 2021]
- MP2 Project DPC clarification of dredge volumes [DPC letter to Foreshore Consenting Unit, 22 November 2021]

### 1.3 Relevant consultation responses

The licence application was open for public consultation between 25<sup>th</sup> November 2020 to 3<sup>rd</sup> February 2021.

Consultation responses from the prescribed bodies are provided in Table 1.1. Note that most of the responses are not directed at the Habitats Directive aspects of the proposal.

Table 1.1: Responses from prescribed bodies to the consultation

Statutory Body	Applicant's Response
Sea Fisheries Protection Authority (SFPA)  The Sea Fisheries Protection Authority noted that a number of fisheries surveys were conducted, and the results are contained in Vol 2 part 1 of the EIAR under the heading fishing (7.3.4) and aquaculture (7.3.5). The greater Dublin Bay is a nursery area for commercially important fish species due to the hydrography and nutrient input in Dublin Bay. The main fish species present during the surveys in the SFPA's opinion are not present in sufficient numbers to be a concern. Additionally, no concern was raised during the ABP (An Bord Pleanála) process over loss of habitat for fish species within the berths/docks.  The proposed development and foreshore licence are in an area where no commercial fishing takes place due to its location and water depth. Fisheries control activities can be conducted close to the application area subject to consent being granted by the port authority, which controls all vessels operating within its port jurisdiction.  The proposed development and foreshore licence are in an area where no classified shellfish production area (Malahide) is a distance of 19km and should a pollution event occur the correct reporting procedures are in place for the SFPA to take measures to protect human health.  The applicant has included in its foreshore application mitigation measures and waste and pollution control measures.	The Applicant noted that:  • the SFPA did not request further information or seek clarification on any matters.  • the SFPA concurred with fisheries and marine benthos impact assessments in the EIAR.  The Applicant would accept a condition that all the fisheries mitigation measures, set out in the EIAR, are implemented during construction and operation.
Marine Institute  Potential Impacts: Impacts on the marine environment, as well as on aquaculture and fisheries in the area, could arise as a result of alteration to coastal processes, loss / disturbance of marine habitats and deterioration in water and sediment quality through the introduction of pollutants.  Coastal Processes Impacts on coastal processes are addressed in Section 12 of the EIAR. The MIKE 21/3 hydrodynamic numerical modelling software package was used.	The Applicant noted that the Marine Institute did not request further information or seek clarification on any matters. The Marine Institute concluded that in their view, subject to compliance with the Conditions recommended below, the MP2 Project is not likely to have significant impacts on marine environmental quality, or on aquaculture and fisheries, in the area, and has no objections to a Foreshore Licence being granted. The Marine Institute proposed three conditions to be attached to any licence which may be issued.  The Applicant confirmed acceptance of the proposed conditions.

Statutory Body	Applicant's Response
These models were used in conjunction with hydrographic survey data and site- specific water quality monitoring data to assess the construction and operational impacts of the MP2 Project.	
<ul> <li>The impact of the proposed MP2 Project was assessed by using a series of model simulations to investigate the following:</li> <li>The dispersion and settlement of sediment plumes generated during dredging operations;</li> <li>Impacts on the tidal regime;</li> <li>Sediment dynamics and the morphological response of the seabed within Dublin Port;</li> <li>Impacts on the inshore wave climate;</li> <li>Flood risk to the surrounding areas.</li> </ul>	
<ul> <li>On the basis of the modelling simulations it was concluded that:</li> <li>The dredging operations required for Berth 53 will not result in any significant impact to either the water quality in terms of suspended sediments, or the nearby environmentally designated areas in terms of sediment deposition.</li> <li>When considered in terms of background conditions, the dredging operations required for the channel dredging works will not result in any significant impact to either the water quality in terms of suspend sediments, or the nearby environmentally designated areas in terms of sediment deposition.</li> <li>The dredging operations required for the Oil Berth 3 and Berth 50A will not result in any significant impact to either the water quality in terms of suspended sediments, or the nearby environmentally designated areas in terms of sediment deposition.</li> <li>The increased levels of suspended sediment concentrations at the power station intakes and Ringsend WWTP outfall are generally very small by comparison with background levels in the Liffey Estuary and are unlikely to have any effect on the quality of intake waters at power stations in terms of suspended solids content.</li> </ul>	

Statutory Body	Applicant's Response
The tidal regime is predicted to remain substantially unchanged post MP2 Project. Given the localised nature and small absolute magnitude of any predicted changes in tidal current velocity it is unlikely that there will be any significant change in net scouring or deposition of sediments within the Liffey Estuary or Dublin Bay resulting from the MP2 Project.	
Changes in bathymetry due to dredging activities have the potential to alter the energy with which waves break and could conceivably result in wave overtopping of structures and flood defences. However, consideration of changes to the wave climate due to the MP2 Project presented above show no discernible change in relevant proximate areas such as Clontarf, Fairview and Ballybough bordering the Tolka Estuary. Changes in wave height within the Port beyond the immediate footprint of the MP2 Project works are predicted to be less than ±0.075m during typical storm conditions. These changes are not considered significant and will not impact operations within the Port. Therefore the risk of potential coastal flooding due to the MP2 Project in these areas is determined to be negligible.	
On the basis of the outputs of the modelling studies the Marine Institute is of the view that significant impacts / alteration to coastal processes resulting from the MP2 Project works are not considered likely.	
Aquaculture and Fisheries: There are no licenced aquaculture sites in the vicinity of the proposed development area and therefore the Marine Institute is of the view that no aquaculture activities will be impacted.	
There is a razor clam fishery located within the Malahide Shellfish Growing Water. This designated shellfish growing water area is located circa 20 Km from the main development area within the Port. Noncompliance with the shellfish water quality parameters values outlined in Annex I of the Shellfish Waters Directive (2006/113/EC) and Schedules 2 and 4 of the Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006) are not considered likely.	
On the basis of the information provided in the EIAR it is considered that the loss / disturbance of subtidal habitats within the Port area and approach channel will constitute a negligible adverse impact in terms of lost fisheries habitat because of	

Statutory Body	Applicant's Response
the widespread occurrence of similar habitats throughout the wider Dublin Bay area. While some fish species, as well as food sources for fish, may be removed during the dredging and other construction works it is considered that the habitat will recover rapidly and any impact will be localised and temporary. It is noted that the approach channel is already subject to ongoing / recurring maintenance dredging and that no significant commercial fishing activity takes place within this area.	
Habitat Loss / Disturbance: Impacts on benthic ecology are addressed in Section 7.3 of the EIAR and are based on the analysis of 20 sediment samples taken within the proposed development area, the location of which are shown in Figure 7.2 in the EIAR.	
Results from the Particle Size Assessment (PSA) indicates the presence of sandy muds and muddy sands across large parts of the survey area. Mixed sediments are present along parts of the Intertidal stretches. The species identified in the survey are typical of shallow subtidal communities. Results from the benthic survey of the Dublin Port area indicate the presence of a single habitat type. The dominant species present in the area is the polychaete worm <i>Capitella capitata</i> . The faunal group identified has been classified as <i>Capitella capitata</i> in enriched sublittoral muddy sediments. This concurs with the findings of the baseline survey undertaken in 2015 as part of the ABR Project, which noted this as the dominant habitat in the Dublin Port area out to the Poolbeg lighthouse. This biotope extends into the intertidal stretches of the survey area, with greater <i>C. capitata</i> abundances present at stations close to the shipping channel, and reducing numbers further from the shipping channel.	
The MP2 Project will require dredging of approximately 424,644m³ of sediment associated with the proposed dredging elements of the project. It is proposed that dredging and disposal events will only occur during winter i.e. a six month period from October to March and there will be no overlap with the ABR Project capital dredging or any other Dublin Port Company dredging campaign. It is noted that the dredging operations for the MP2 Project will span at least four winter seasons, between 2024 and 2031, with no more than 272,000m³ of spoil being disposed of in any given winter season.	

Statutory Body	Applicant's Response
The MP2 Project includes the reclamation of 2.18ha of benthic soft sediment with the infilling of Oil Berth 4. Results from the present survey indicate the communities present in this area are dominated by highly opportunistic species, such as <i>Capitella capitata</i> , which are common in the general area of the Port. This impact is considered permanent, slight negative. Part of the development will result in the removal of Pier Head at the Eastern Breakwater. This will result in a gain of 0.28 ha of subtidal soft benthos. This impact is considered permanent, slight positive.	
As part of the construction works, it is proposed to place concrete mats on the sloping edges of the dredge areas across a limited area to prevent slumping of sediment in the area. This will result in the permanent loss of 1.9 ha of soft sediment benthos in these areas.	
The MP2 Project will result in the dredging of 10.33 ha of soft sediment subtidal benthos, less the 1.78 ha of concrete mattresses which will be placed on the seabed. The communities present in these areas are dominated by highly opportunistic species, such as <i>Capitella capitata</i> and <i>Tubificoides</i> spp. Dredging of these areas will result in the temporary removal of these communities in the footprints of the dredge areas. However, recovery in these areas is expected to be rapid due to the highly opportunistic nature of the fauna present and the large area of similar habitat which is present in the general area of Dublin Port. As such, the impact on the benthos associated with the dredging in the MP2 Project area is considered a negative, temporary to short-term, slight impact.	
The impact associated with the dredging of approximately 424,644m³ of sediment from 10.33 ha within the development area, in addition to ongoing capital dredge works associated with the ABR Project and regular maintenance dredging will have no cumulative effect, as there will be no overlap between the MP2 Project works, and either the capital dredging works associated with the ABR Project or ongoing maintenance dredging. These works will be undertaken separately from each other, allowing recovery to occur at each site as dredging is completed. As such, the cumulative impacts associated with these dredging activities is considered slight, negative.	

Applicant's Response

Statutory Body	Applicant's Response
Considering the nature and location of the proposed development, which would take place within an existing operating port facility, the Marine Institute is of the view that project is not likely to have long term significant effects on water quality or sediment quality in the Lower Liffey Estuary and Dublin Bay water bodies provided that all mitigation measures in the EIAR and associated documents are implemented in full.	
Conclusion: On the basis of the above the Marine Institute is of the view that, subject to compliance with the Conditions recommended below, the MP2 Project is not likely to have significant impacts on marine environmental quality, or on aquaculture and fisheries, in the area, and has no objections to a Foreshore Licence being granted.	
It is recommended the following Conditions should be attached to any Licence that may issue.	
<ol> <li>The Licensee shall use that part of the Foreshore the subject matter of this licence for the purposes as outlined in the application and for no other purposes whatsoever.</li> <li>The Licensee shall ensure that all mitigation measures set out of the Environmental Impact Assessment Report and associated documentation are implemented in full.</li> <li>Prior to the commencement of any works on the foreshore a Construction Environmental Management Plan (CEMP), shall be drawn up for the approval of the Minister (subject to such modifications, if any, as he may deem appropriate). The CEMP shall provide detailed construction methodology and shall further consider all potential and predicted impacts and how they shall be managed, the mitigation and control measures and how they shall be implemented as well as monitoring proposed.</li> </ol>	
Environmental Protection Agency (EPA)  The EPA advised:  1. Dublin Port Company currently holds a Dumping at Sea Permit, Reg. No. S0024-01, which authorises loading and dumping activities associated with capital dredging activities as part of the Alexandra Basin Redevelopment Project until 31st March 2021. Condition 3.2 of this	The Applicant noted that the EPA did not request further information or seek clarification on any matters.  Dumping at Sea Permit S0024-01 for the Alexandra Basin Redevelopment Project will have expired prior to the proposed capital dredging as part of the MP2 Project.

permit restricts the timing of loading and dumping activities to the winter months (1st October to 31st March), to reduce interference with amenity and other users and to avoid any impacts on the foraging activity of birds during the breeding season and the calving and breeding season for Harbour Porpoise.

- 2. Dublin Port Company also holds a Dumping at Sea Permit, Reg. No. S0004-02, which authorises loading and dumping activities associated with maintenance dredging activities within Dublin Harbour over the period July 2020 September 2021. Schedule A.3 Closed Periods of this permit provides for the temporal separation of activities associated with ongoing capital dredging (Alexandra Basin Redevelopment Project) and loading and dumping activities associated with maintenance dredging, to ensure that there is no overlap between these activities and no cumulative impact on the receiving waters. Thus, loading and dumping activities associated with maintenance dredging are confined to the months April to September, with the exception of activities in the loading areas in the inner Liffey channel upstream of Berth 49, including the main channel and channel-side berths but not including basins, where a further closed period (1st April 14th May) applies, to protect migrating Atlantic salmon smolts and River lamprey.
- 3. Dublin Port Company applied to the EPA for a dumping at sea permit on 4th August 2020 for loading and dumping at sea activities associated with capital dredging within Dublin Harbour as part of the MP2 Project in the following areas:
  - Berthing pocket and approach to new riverside Berth 53.
  - Lengthening of existing Berth 50A.
  - Deepening and widening of existing Oil Berth 3.
  - Localised widening of the main navigation channel, along its southern margin.

The permit application proposes that all capital dredging activities to be undertaken for the duration of the activities (15 years) will be restricted to the winter months only (October to March), commencing October 2021. The full application, Reg. No. S0024-02, including Natura Impact Statement (July 2019) may be viewed on the Agency's website. The application is currently under assessment by the EPA in accordance with

#### **Applicant's Response**

Dumping at Sea Permit S0004-02 for maintenance dredging at Dublin Port and is valid to 30th September 2021. This permit will have expired prior to the proposed capital dredging as part of the MP2 Project.

The Applicant intends to apply for Foreshore licence and Dumping at Sea permit S004-03 for an eight-year maintenance dredging programme 2022-2029 to be undertaken during the summer months (1st April to 30 September) with the same seasonal constraints as in permit S0004-02.

It is proposed that the capital dredging as part of the MP2 Project will be restricted to the winter months (October to 31st March). This is to ensure there is no overlap between the proposed MP2 Project capital dredging activities and future maintenance dredging activities and no cumulative impact on the receiving waters.

Cumulative impact is addressed in Chapter 18 of the MP2 Project Environmental Impact Assessment Report (EIAR).

Dumping at Sea Permit S0024-02 for the for the MP2 Project: The Applicant applied to the EPA for a Dumping at Sea Permit on 4th August 2020 for loading and dumping at sea activities associated with capital dredging as part of the MP2 Project. The application is currently under assessment by the EPA in accordance with the requirements of the Dumping at Sea Act 1996 as amended and a determination will issue in due course.

The Applicant would be pleased to accept a Foreshore Licence Condition that capital dredging cannot proceed without a Dumping at Sea Permit being granted by the EPA.

Licensed disposal site: This site has been licensed since 1996 and has been subject to a number of benthic and fisheries surveys which have demonstrated that there has been no long-term impact at the dump site from repeated dumping activity.

Statutory Body	Applicant's Response
the requirements of the Dumping at Sea Act 1996 as amended and a	
determination will issue in due course.	The MP2 Project requires the capital dredging of
Each of the authorised and proposed loading and dumping activities	weight) equivalent to 424,644m3 over a 15-year p
involve dumping of dredged material at an established offshore disposal	construction programme. The total quantity of ma

The Agency advised that the proposed activity shall not result in a contravention of the Water Framework Directive 2000/60/EC, Habitats Directive 92/43/EEC, Birds Directive 2009/147/EC, Marine Strategy Framework Directive 2008/56/EC, Bathing Water Directive 73/160/EEC or Environmental Liabilities Directive 2004/35/EC.

site located at the entrance to Dublin Bay to the west of the Burford Bank.

The MP2 Project requires the capital dredging of 700,663 Tonnes (wet weight) equivalent to 424,644m³ over a 15-year period to suit the construction programme. The total quantity of material to be dredged per winter season is therefore relatively small compared to the ABR Project. The marine sediments have also been classified as Class 1 - Uncontaminated: no biological effects likely.

No significant impact on marine biodiversity is expected from proposed loading and dumping activity under the MP2 Project, with mitigation measures in place, as set out in Chapter 7 of the MP2 Project EIAR.

Compliance with European Directives: The MP2 Project, with mitigation measures in place, will not result in a contravention of the Water Framework Directive 2000/60/EC, Habitats Directive 92/43/EEC, Birds Directive 2009/147/EC, Marine Strategy Framework Directive 2008/56/EC, Bathing Water Directive 73/160/EEC or Environmental Liabilities Directive 2004/35/EC.

Compliance with the following Directives is addressed in Chapter 9 of the MP2 Project EIAR: Water Framework Directive 2000/60/EC, Marine Strategy Framework Directive 2008/56/EC and Bathing Water Directive 73/160/EEC.

Compliance with the following Directives is addressed in the MP2 Project AA Screening and NIS: Habitats Directive 92/43/EEC and Birds Directive 2009/147/EC.

The Environmental Liabilities Directive 2004/35/EC was transposed into Irish Law through the European Communities (Environmental liability) Regulations 2008. The objective of the Directive and Regulations is the prevention and remediation of environmental damage, which is defined as water damage that has significant adverse effects on water status under the Water Framework Directive, land damage that creates a significant risk to human health as a result

Statutory Body	Applicant's Response
	of the direct or indirect introduction, in, on or under land, of substances, preparations, organisms or micro-organisms, and damage to protected species and natural habitats. The MP2 Project has been designed to prevent the risk of environmental damage as set out throughout the supporting EIAR.
	The Applicant's current Dumping at Sea Permits set out specific conditions to address environmental incidents, for example, Condition 5 (Incident Prevention and Emergency Response) and Condition 6 (Notification, Records and Reports) of S0004-02. No environmental incidents have occurred under the Applicant's current Dumping at Sea Permits. The Applicant's would be pleased to accept similar conditions for the proposed MP2 Project Dumping at Sea Permit and linked to the Foreshore Licence, if granted.
Department of Housing, Local Government and Heritage Marine Advisory Unit (MAU)  Coastal Processes:  Based on the information supplied in the application process the Marine Advisory	The Applicant noted that the MAU did not request further information or seek clarification on any matters and that the MAU had no objection to the granting of a Section 3 licence and a Section 10 consent subject to the conditions it proposed.
Unit (MAU) is satisfied that the proposed works will have no impact on the existing coastal processes.  Construction Environmental Management Plan:	The Applicant requested amendments to condition 8, proposed by the MAU for the Section 3 licence, and condition 4, proposed by the MAU for the Section 10 consent, to allow for dredging tolerances.
The MAU noted that, as part of their application, the applicant has submitted a Construction Environmental Management Plan (CEMP). A suite of Construction Phase Management Plans will be prepared in association with the preferred Contractor(s). These Management Plans will be agreed with DPC and the relevant competent authorities in advance of the final Contract being signed.	Condition 8, proposed by the MAU for the Section 3 licence, is as follows "The total capital dredge amount shall not be more than 424,644m³ with a maximum dredge depth of-13.0m Chart Datum."
The Final CEMP can only be produced after the Foreshore Licence and the Dumping at Sea Permit are granted in order to address any conditions imposed	The Applicant proposed that Condition 8 of the Section 3 licence be amended to:
by the relevant statutory bodies. The most Recent CEMP available when drafting this report was dated July 2020.	"8. The total capital dredge amount shall not be more than 424,644m <sup>3</sup> and be limited to achieve the following standard depths:  Berth 53 - Standard Depth of -10.0mCD
The Final CEMP should be submitted to the Minister for consideration before work commences on site.	Berth 50A - Standard Depth of -10.0mCD  Oil Berth 3 - Standard Depth of -13.0mCD  Localised Channel Widening - Standard Depth of -10.0mCD.

#### **Applicant's Response**

#### Estate Management:

The MAU note that Dublin Port claim ownership of foreshore in the port area. Therefore, the foreshore the subject of this application consists of two distinct parcel, one State owned to which Section 3 applies and the other parcel is privately owned by Dublin Port to which Section 10 applies. Dumping at this site is not a part of the foreshore application; however the proprietary elements of the dumpsite are subject to foreshore approval and form part of this application process and should therefore be included in the Section 3 consent.

The proposed total area of foreshore associated with the works is 229.68ha. The area of State foreshore subject to the proposed MP2 project is 215.61ha (212.5ha for the dumpsite and 3.11ha for the dredge site) and the area of private Foreshore subject to the proposed MP2 project is 14.07ha.

The applicant shall use that part of the foreshore, the subject matter of the application, for the purposes as outlined in the application and for no other purposes whatsoever. Where relevant the foreshore and adjacent seashore area shall be restored to its natural state on completion of the works to the satisfaction of the Department of Housing, Local Government and Heritage.

#### Public Interest:

The MSU noted that Section 2 and 3 of the 1933 Foreshore Act, as amended, states that a lease or licence of State foreshore may be granted "If, in the opinion of the Minister, it is in the public interest". As foreshore is a finite and valuable national resource and public amenity, it is important that each plan and project is fully assessed to ensure, that if consented to, it is a sustainable and proper use of that finite and valuable resource. Having considered and assessed the relevant issues associated with the proposed MP2 project, while taking note that the State owned foreshore is finite resource which must be utilised sustainably, the MAU is satisfied that the proposed works are in the Public Interest.

#### Conclusion:

The MAU had no objection to the granting of a Section 3 Licence and a Section 10 consent subject to the following conditions:

Section 3 Conditions:

The Standard Depth is the minimum depth to which the navigation channel or berths will be maintained. It is the minimum depth available for vessels, measured from Chart Datum. The capital dredged depth may be below the Standard Depth to allow for dredging tolerances."

Condition 4, proposed by the MAU for the Section 10 consent, is as follows:

"4. The capital dredge works shall have a maximum dredge depth of - 13.0m Chart Datum."

The Applicant proposed that Condition 8 of the Section 3 licence be amended to:

"4. The capital dredge works shall be limited to achieve the following standard depths:

Berth 53 - Standard Depth of -10.0mCD

Berth 50A - Standard Depth of -11.0mCD

Oil Berth 3 - Standard Depth of -13.0mCD

Localised Channel Widening - Standard Depth of-10.0m CD.

The Standard Depth is the minimum depth to which the navigation channel or berths will be maintained. It is the minimum depth available for vessels, measured from Chart Datum. The capital dredged depth may be below the Standard Depth to allow for dredging tolerances."

Statutory Body	Applicant's Response
1. The Licensee shall use that part of the foreshore, the subject matter of this	
licence for the purposes as outlined in the application and for no other purposes	
whatsoever.	
2. The works shall be located as outlined on: Drawing number: CP1770-BLP-ZZ-	
ZZ-M2-MA-0007 Rev C02 dated 24/09/19 entitled "Section 3 Foreshore Licence	
Map Overall Plan Sheet 1 of 2". Drawing number: CP1770-BLP-ZZ-ZZ-M2-MA-	
0008 Rev 02 dated 24/09/19 entitled "Section 3 Foreshore Licence Map Sheet 2	
of 2".	
3. The Licensee shall notify the Department of Housing, Local Government and	
Heritage at least 14 days in advance of the commencement of any works on the	
foreshore.	
4. During the course of the works the Licensee shall ensure that existing public	
access arrangements are maintained, where possible, and all necessary	
precautions are put in place to protect the public in accordance with relevant	
Health and Safety Legislation.	
5. To ensure no residual impact on the coastal processes within Dublin Bay and	
Port, all mitigation measures set out in Document IBE1429 Rev F entitled	
"Summary of Mitigation Measures" submitted by the applicant shall be	
implemented in full.  6. The final Construction Environmental Management Plan (CEMP) shall be	
6. The final Construction Environmental Management Plan (CEMP) shall be submitted by the licensee at least one month before work commences on site.	
7. Dredging and disposal of material at sea for the MP2 Project shall commence	
at least one winter after the final maintenance dredging campaign, and not	
concurrently.	
8. The total capital dredge amount shall not be more than 424,644m³ with a	
maximum dredge depth of -13.0m Chart Datum.	
Seach year, the licensee shall submit a revised Programme of Works setting out	
the works planned for the coming calendar year and the programme for the	
overall completion of the works associated with the licence.	
10. The licensee must possess a valid EPA Dumping at Sea Licence for the	
proposed dredging and dumping operations.	
11. Works on the foreshore shall be certified by a Chartered Engineer stating that	
they conform to the relevant Irish or British Standard Specification or Codes of	
Practice for strength, stability and durability and that the said works have been	
completed in accordance with the Plans and Drawings approved by the Minister.	

Statutory Body	Applicant's Response
12. On completion of the works, the foreshore and adjacent seashore area shall be restored to its natural state to the satisfaction of the Department of Housing, Local Government and Heritage.  13. The Licensee shall ensure that contractors, and their subcontractors, are made aware of all conditions and project specific requirements and they are required to have briefings on these to ensure all parties are fully aware of these requirements.	
Section 10 Conditions:  1. The consent holder shall complete the works in accordance with the drawings and documents submitted in support of the application and use that part of the foreshore, the subject matter of this consent for the purposes as outlined in the application and for no other purposes whatsoever.  2. The works shall be located as outlined on Drawing number: CP1770-BLP-ZZ-ZZ-M2-MA-0006 Rev 02 dated 24/09/19 entitled "Section 10 Consent Map".  3. The consent holder shall notify the Department of Housing, Local Government and Heritage at least 14 days in advance of the commencement of any works on the foreshore.  4. The capital dredge works shall have a maximum dredge depth of -13.0m Chart Datum.  5. The final Construction Environmental Management Plan (CEMP) shall be submitted for consideration at least one month before work commences on site.  6. During the course of the works the consent holder shall ensure that existing public access arrangements are maintained, where possible, and all necessary precautions are put in place to protect the public in accordance with relevant Health and Safety Legislation.  7. Works on the foreshore shall be certified by a Chartered Engineer stating that they conform to the relevant Irish or British Standard Specification or Codes of Practice for strength, stability and durability and that the said works have been completed in accordance with the Plans and Drawings approved by the Minister.  8. The consent holder shall ensure that contractors, and their subcontractors, are made aware of all conditions and project specific requirements and they are required to have briefings on these to ensure all parties are fully aware of these requirements.	
Irish Coast Guard No submission received	No response made

#### Inland Fisheries Ireland (IFI) 1

The dredging will occur from October – March to negate any potential impact on salmonid migration. The dredger will work on one half of the channel at a time. This is important to ensure the species migrating over winter can continue to do so along the undisturbed side of the channel once the dredger has stopped. It will be undertaken between 08:00 and 20:00, and only 6 days per week.

No piling work will take place during March to May for salmon smolts and glass eel/elver migrating upstream. Lamprey migrating upstream will benefit. These measures are all suitable measures to mitigate the effect this work will have the fish community. The piling will involve vibratory pile driver along with an impact hammer driver required for approximately half of the required sheet piles. The estimated time for pile driving is 20 months over 2-3 years. Have Dublin Port looked at measures to mitigate or reduce the sound wave from the pile driving such as a bubble curtain?

IFI would point out that the mitigation measures and guidance of NPWS in regard to marine mammals are not transferrable to fish species. The fish remain invisible to any shore or boat-based observer. Mitigation measures should aim to reduce the sound generated, in intensity and duration. The use of soft-start and ramp-up procedures for any sound-generating surveys undertaken — both on a day-to-day basis and on re-start after any stoppages within any day should be undertaken. This measure should be a condition of the foreshore licence. The comments of IFI in this regard relate to fish species of conservation significance and of leisure angling significance all of which constitute part of IFI's brief.

There is a lack of information on the effect of maintenance dredging on habitat use by fish species. It would be a worthwhile task for the Dublin Port Company to investigate this effect. For example, by showing that the fish return to the port waters once dredging is completed using telemetry studies or a before and after hydroacoustic survey. This would be of benefit to the company when applying for maintenance dredging foreshore licence in the future.

This application has a detailed mitigation measures for pollution and for the construction works. The Dublin Port Company have liaised with local IFI staff over

#### **Applicant's Response**

The Applicant clarified observations of the IFI.

#### Capital dredging mitigation

The dredging will occur from October - March to negate any potential impact on salmonid migration and the dredger will work on one half of the channel at a time. However, the proposed capital dredging operations will be undertaken on a 24/7 basis.

Additional mitigation measures, listed in Chapter 19 of EIAR, are as follows: no over-spilling at the surface of the dredger will be permitted when operating in the River Liffey Channel; if a trailer suction head dredger is used, the pumps will be switched off when the drag head is being lifted and returned from the bottom, as the dredger turns between successive lines of dredging, to minimise the risk of fish entrainment; and a maximum of 4,100m³ of sediment and entrained water will be loaded into the dredger's hopper for each loading/dumping cycle, equivalent to approximately of 2,030 tonnes (wet weight).

The proposed mitigation measures have been successfully used for the Alexandra Basin Redevelopment (ABR) Project capital dredging programme (2017-2021)

#### Piling Closure Periods

Normal piling activities will operate between the hours of 08:00 and 18:00 on Monday to Fridays, between 08:00 and 13:00 on Saturdays and there will be no activity on Sundays or Bank Holidays in accordance with the requirements of the EIAR.

The closed period for piling is set out in Chapter 19, Table 19-1 of the EIAR. No piling will take place along the riverside of the Liffey channel during the three months of the year when smolts are likely to run in their highest numbers, which are March to May inclusive. This closed period does not apply to the Oil berth basin (Oil Berth 3).

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the last few years in relation to this project and we recommend that notice is given to the local Environmental officers in advance of commencement of work.	The Applicant noted that IFI consider the above measures to be suitable to mitigate the effect of the piling on the fish community.
	Piling Operation Mitigation Measures Chapter 11 (Section 11.2) of the EIAR presents a detailed assessment of the likely underwater noise impacts including the potential impact of piling operations on marine mammals and fish in the inner Liffey channel and Dublin Bay.
	The results of the sound propagation modelling undertaken for this assessment show that the maximum potential impact zone, associated with the impact piling of large diameter piles, giving rise to injury or mortality in fish is limited to 10m-12m from the piling operations.
	The assessment is supported by the results of underwater noise surveys undertaken during piling operations associated with the construction of the Alexandra Basin Redevelopment Project within Dublin Harbour. At all locations the underwater noise levels were significantly below the harm threshold. Even at the closest location, mid channel directly opposite the piling operation, the measured levels were some 30 dB below the harm threshold.
	<ul> <li>The Applicant discounted the potential use of bubble curtains as a mitigation measure for the following reasons:</li> <li>The results of the detailed underwater noise assessment together with the proposed precautionary mitigation measures are sufficient to ensure no significant impact on fisheries within Dublin Harbour and Dublin Bay.</li> <li>Bubble curtains were developed as a potential mechanism for mitigating piling noise, particularly for offshore wind turbine foundations in the North Sea. Piling energy levels for monopile foundations are in the order of 3,000-3,500 kJ. The energy which will be used in Dublin Port is in the order of one tenth of this energy level. Bubble curtains also require massive quantities of compressed air to operate even in non-tidal offshore settings. In a confined tidal area such as Dublin</li> </ul>

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	Harbour, the quantity of compressed air would require assessment for the potential impact on fish due to air bubbles being transported downstream and the level of sediment disturbed by their operation. The operation of an air curtain would also require the operation of multiple diesel-fuelled compressors in the port. These potential environmental effects would arise for no additional mitigation effectiveness. The use of a bubble curtain would be as big a logistical operation as the piling operation and would lead to the lengthening of the piling programme.
	<ul> <li>In summary, the use of bubble curtains was discounted because:</li> <li>The port is a confined area and underwater noise levels are only elevated close to the source,</li> <li>Piling will not be carried out at night after 18:00 hrs, providing additional windows for migratory fish passage,</li> <li>The strong tidal streams would make bubble curtains less effective,</li> <li>The effects of air bubbles and sediment disturbance offset any benefit from bubble curtains,</li> <li>The introduction of multiple diesel-fuelled air compressors is undesirable, and</li> <li>Extensive mitigation in accordance with appropriate guidelines is set out in the EIAR and NIS.</li> </ul>
	Overall piling duration Piling activities in the marine environment are required for the construction of elements of the MP2 Project which will be undertaken within the overall 15-year construction period.
	The piling activity for each element will be subject to the piling closure periods and piling mitigation measures outlined above and will not be continuous for the duration of the construction period.
	Observations undertaken during similar piling activity for the Alexandra Basin Redevelopment Project showed the piling noise was the

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	intermittent. While piling was underway 'all day', the actual piling strikes occur for one third of the time. This is due to the need to ensure the piles are properly aligned, piling depth checks, changes in piling settings, meal breaks and equipment checks. The average 'striking period' duration was under 12 minutes per pile with varying breaks in between.
	Maintenance dredging and potential fisheries monitoring The MP2 Project application includes for capital dredging only. The monitoring of the impact maintenance dredging campaigns on habitats used by fish species does not arise.
	The Applicant recognises the value of fisheries enhancement work and in the EIAR reconfirmed its commitment to work with IFI and 3rd level institutions to explore fisheries enhancement measures within the framework of the MP2 Project area, concentrating in particular in optimising biodiversity and fisheries biomass associated with new harbour structures.
	Pollution control measures  Detailed mitigation measures for pollution control during the construction phase of the MP2 Project are set out in Chapter 9 of the EIAR and summarised in Chapter 19. The Applicant acknowledges IFI's contribution to the development of these pollution control measures through liaison with local IFI staff in relation to the MP2 Project.
	Communication A Project Liaison Group for the ABR Project has been overseeing the construction phase that project since the commencement of the works in 2016. IFI are a corresponding member of this liaison group and receives a record of construction progress on a quarterly basis including an outlook for the tasks to be undertaken over the next quarter.

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	The MP2 Project Construction Environmental Management Plan (CEMP) confirms the Applicant 's intention to extend this liaison group to also cover the MP2 Project. The Applicant would welcome IFI's continued involvement in the liaison group, either through attendance at its meetings or as a corresponding member. This structured means of communication will enable local IFI Environmental Officers to have full knowledge of the MP2 Project construction phase.
Inland Fisheries 2 IFI had no further comment on the applicant's response other than to state that a soft start ramp up should be a condition of any foreshore licence that may be granted.	The Applicant noted the condition proposed by the IFI, that a soft start ramp up (for piling) should be a condition of any foreshore licence that may be granted.
	The Applicant accepted the above condition.
Marine Survey Office: After a comprehensive review of the licence application the Marine Survey Office had no objection with regard to the safety of navigation so far as the licence application refers.  It is a Marine Survey Office requirement that Dublin Port Company advise all maritime users within the licence area of any changes to navigation within the licence area or hazards to navigation arising as a result of proposed works within the licence area, via all means at their disposal.	The Applicant noted that Marine Survey Office did not seek further information or clarification on any of the application material.  Dublin Bay, the approaches to the Port and the shipping channel are monitored at all times by Vessel Traffic Services (VTS). All vessels are advised regarding works, developments or issues that are ongoing in Dublin Port Company's area of jurisdiction. Prior to the commencement of any works associated with the MP2 Project "Notice to Mariners" will be published setting out the planned work and dates. During the works the vessel traffic will be supervised and controlled.
	Dublin Bay is very busy with marine leisure events and small craft movements especially during the summer months. Agreement was reached with all the sailing and motor clubs how best to co-exist. To that end the commercial shipping channels, access routes and anchorage areas are well defined and kept clear. The organised leisure industry operates within the confines of the areas agreed for their events. Individual craft must operate within the international maritime legislation governing all vessels, big and small.  Marine activity will be able to operate with little or no disruption as the MP2 Project works proceed. Leisure craft are not normally allowed to operate within the confines of the main approach channel to the Port.

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	When small craft are entering or leaving the Port, they must do so under the control of VTS. Consequently, they will be well informed and aware of any MP2 Project works and of the requirement to stay clear. This is in compliance with international maritime legislation.
Underwater Archaeology Unit Having reviewed the Archaeological Assessment and other documentation associated with the scheme, the Underwater Archaeology Unit noted that the predicted impact of the proposed scheme upon archaeological heritage and the relevant Mitigation Measures are detailed in sections 14.4 and 14.5 of volume 2 of the EIAR.  The Underwater Archaeology Unit recommended that the Mitigation Measures detailed are carried out in full.	The Applicant noted that the Underwater Archaeology Unit recommended that the mitigation measures detailed archaeological assessment in the EIAR be carried out in full.  The Applicant is committed to adhering to the mitigation measures, including monitoring, proposed in relation to underwater archaeology as set out in the EIAR and would be pleased to accept a condition to this effect in the Foreshore consent, if granted.
National Parks and Wildlife Service (NPWS)  Impact on European (Natura 2000) Sites  The NPWS noted that an AA screening report and NIS were submitted in the application. The AA Screening identified the possibility that the proposed project might have significant effects on the Qualifying Interests (QIs) or Special Conservation Interests (SCIs) of six European sites. The application boundary of the MP2 Project is located outside of any European site, and as such no direct habitat loss from any European site is anticipated as a result of any aspect of the MP2 Project within the application boundary. However, the proposed development is located very close to the boundary of South Dublin Bay and River Tolka Estuary Special Protection Area (SPA). The main impacts associated with the development would centre on the construction activities associated with the development and these could variously result in water quality issues and potential habitat deterioration. Due to its proximity these would be most likely to occur mainly within the adjacent SPA, but it was considered that there was also the potential for effects on three other Dublin Bay Natura sites, namely the North Bull Island SPA and the South Dublin Bay candidate Special Area of Conservation (cSAC) and the North Dublin Bay cSAC. The possibility of pollution arising during the construction phase affecting water quality was therefore considered in the NIS. The potential for the contamination of water with sedimentary material mobilised by dredging and demolition works or by contact with wet cement or concrete or the accidental discharge of oils as the result of the operation and	The Applicant noted that NPWS did not seek further information or clarification on any of the application material.  NPWS propose that four conditions be applied to the Foreshore Consent. The Applicant believes these conditions to be consistent and/or complementary to the planning conditions set by An Bord Pleanála in the MP2 Project Planning Decision ABP: 304888-19. The Applicant confirmed its acceptance of the four conditions proposed by NPWS.

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refuelling of machinery was recognised, and measures to avoid such pollution occurring during construction were proposed.	
Changes in Tidal Patterns, Currents, Wave Action The possibility that the construction and operation of the Berth 53 jetty could result in changes in tidal pattern, currents and wave action leading to the deterioration in the value of the adjacent section of the South Dublin Bay and River Tolka Estuary SPA as a resource for breeding and non-migratory birds was recognised. The modelling of such possible changes using MIKE 3 Hydrodynamic and Sediment Transport model software suggested that scour from the operation of ship propellers and in particular bow thrusters by vessels manoeuvring to dock in or depart from Berth 53 could result in the removal of sediments from the part of the SPA near the jetty. A wave protection structure composed of concrete mattresses to be laid on the dredged slope along the length of the jetty was therefore designed. With this scour protection structure in place along the Berth 53 jetty the modelling suggests operation of the berth should cause negligible effects to wetland habitat within the adjacent SPA.	
Noise and Disturbance of Special Conservation Interest Bird Species The AA Screening identified the possibility that aerial noise and visual disturbance during the construction and operation of Berth 53 might affect the usage of this nearby part of the SPA by bird species which are SCIs for the South Dublin Bay and River Tolka Estuary SPA and/or the North Bull Island SPA. The seabed of the SPA near the proposed Berth 53 jetty site is only exposed at for an hour at low tides 23 times a year, some of which exposures occur at night. To attempt to assess the potential significance of noise and visual disturbance affecting the usage of this area by non-wintering birds, surveys of this area were carried out on eight occasions in 2018 and 2019 in the months from October to March. Only a relatively small usage of the adjacent section of the SPA by birds was revealed by these surveys, especially by SCI species for the SPAs, with 400 black-headed	
gulls recorded on one occasion, and during other counts, 43 black-tailed godwits and 15 oystercatchers. Nevertheless, it was considered the range, timing, and intensity of use of this part of the South Dublin Bay and River Tolka Estuary SPA by the six 'feature' bird species for this SPA which use it might decrease as a result of the construction or operation of Berth 53. To address such possible impacts the implementation of a bird management plan is proposed. The principal	

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elements of this plan are that construction works on the Berth 53 jetty will be	
suspended during the extreme low spring tides when the seabed of the SPA near	
the jetty becomes exposed. Also to minimise the potential for disturbance to birds	
during the operation of Berth 53, gates will be installed on the nearby stretch of Greenway and closed to prevent public access during extreme low spring tide	
events.	
events.	
Effects of Disposal at Sea of Dredged Material on Reef Habitats	
The construction and operation of the proposed development would also require	
dredging and disposal of the dredged material from the Liffey channel. This	
material would be disposed of at an established site at the Burford Bank. The NIS	
examines the potential interaction with the qualifying interest habitats Reef for	
Rockabill to Dalkey Island SAC. It notes that the intertidal reef community	
complex is recorded on the south coast of Howth, where the exposure regime of	
the complex ranges from exposed to moderately exposed reef. Exposed reef is	
also recorded on the east side of Dalkey Island, on the east and southern shores	
of Ireland's Eye and on all shores of Rockabill and the Muglins. Moderately	
exposed reef occurs on the western shores of Dalkey and at Howth and Ireland's	
Eye. The subtidal reef community complex is recorded off the islands within the	
site and also off the coast between Lambay Island and Rush Village. The	
exposure regime here ranges from moderately exposed reef at the Muglins to exposed reef over the remainder of the site. The coastlines of Howth Head,	
Dalkey Island and Ireland's Eye are 3.3km, 5.1km and 7.5km respectively from	
the proposed disposal site. Lambay Island is 16km north of the proposed disposal	
site and Rockabill is approximately 30km to the north. The closest qualifying reef	
habitat is located 3.3km north of the proposed disposal site and 5km from the	
MP2 Project in Dublin Port. The NIS considered whether elevated concentrations	
of suspended sediments or pollutants could result in likely significant effects on	
the qualifying reef habitat. The potential interaction is considered in the context of	
the conservation objectives of the site. Extensive water quality monitoring using	
real time turbidity measurements during previous dredging campaigns has shown	
that during disposal of dredged fine sands at the licensed disposal site, the fine	
sand falls rapidly to the bottom and any sediment plume is short lived and is not	
dispersed widely. However, sediments to be dredged in the MP2 Project are finer	
and contain a substantial silt fraction. Modelling of the dispersal of the various	

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fractions from the sediment showed that the plume was fairly concentrated and would not have an impact on reef habitat.	
Underwater Noise and Disturbance Effects on Marine Mammals Qualifying Interests  The harbour porpoise is a qualifying interest for the Rockabill to Dalkey Island SAC. Grey seal and harbour seal are qualifying interests of the Lambay Island SAC. The AA Screening determined that the possibility of underwater noise and disturbance effects on these species during the construction phase of the MP2 project could not be excluded. These possibilities were assessed in the NIS in the context of marine mammal surveying already in progress as part of the monitoring of the impacts on the previously permitted port ABR Project. The NIS proposed the implementation of a Marine Mammal Management Plan to avoid any ill effects to harbour porpoise, grey seals or harbour seals during the construction phase of MP2. This plan envisages the continued employment of Marine Mammal Observers during construction and dredging operations, the carrying out of noise producing activities only during daylight hours, the gradual 'ramping up' of piling operations and the suspension of works if marine mammals are identified in proximity to them.	
Conclusion of NIS  The port development and associated works have been evaluated in the NIS and the conclusion of this document is that the proposed works are unlikely to pose a significant likely risk to Natura sites in the vicinity with the application of appropriate mitigation. The National Parks and Wildlife Service concur with this conclusion in relation to marine Annex I habitats provided that all mitigation outlined in relation to the Water Quality Management Plan, Construction Phase Best Practice Measures and Dredging Management Plan outlined in Section 5.7 of the NIS and set out as draft plans in the supporting Construction Environment Management Plan (CEMP) are implemented in full.  The NPWS accepts that if the mitigation measures set out in the Draft Birds and Marine Ecology Plan and the Draft Marine Mammal Management Plan included in the CEMP and referred to in Section 5.7 of the NIS are implemented in full, carrying out the MP2 Project should not result in any detrimental effects on the special conservation interests for the South Dublin Bay and River Tolka Estuary	

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SPA or the North Bull Island SPA, or on the harbour porpoise or the grey seal and harbour seal, which are qualifying interests for the Rockabill to Dalkey Island SAC and Lambay Island SAC, respectively.	
Effects on all Biodiversity, Flora and Fauna Chapter 7 Biodiversity, flora and fauna of the EIAR considers the potential overall effects of the MP2 Project on plants and animals and not just the species which are qualifying interests / special conservation interests for Natura 2000 sites. In particular it assesses the possible impacts of the project on river lamprey, salmon and eel, which migrate through the Liffey Estuary, and black guillemot, the only bird species identified as nesting within the foot print of the proposed development.	
Black Guillemot The black guillemot, unlike other auk species, does not nest in large colonies, but breeds in small dispersed colonies or as individual pairs, spread out around the Irish coast. Its nest sites are under rocks at the foot of cliffs or in artificial structures. The black guillemot has colonised Dublin Port in the last forty years, nesting in the quay walls and loading ramps up as far as the Matt Talbot Bridge, but the number of nesting birds has declined in recent years. Surveys of the numbers of black guillemots occurring in the breeding season in Dublin Port from 2013 to 2019 presented in the EIAR show the number of individuals recorded dropped from 82 in 2013 to 48 in 2019. The EIAR suggests this decline may be due to an increase in the frequency of winter storms in the Irish Sea affecting the survival of black guillemots after the breeding season when they disperse out to sea. The population nesting in the port must still be considered of county importance. The black guillemot also constitutes something of a tourist asset, because due to its north-western distribution in Ireland, Great Britain and Europe as whole most visitors will not be familiar with this bird.	
The EIAR estimates the nesting sites of possibly three pairs of black guillemots are likely to be removed as a result of the MP2 Project. When black guillemot nest sites were similarly lost in the port due to the ABR Project, suitable nest boxes were provided in adjacent areas, and some were successfully used by nesting pairs. It is proposed to install additional nest boxes for black guillemots in nearby sections of Dublin Port to substitute for the nest sites to be destroyed by the MP2	

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Project. The NPWS considers that in order to maintain and if possible increase the population of black guillemots in Dublin Port existing nesting sites of these birds elsewhere in the port should also be secured and nest boxes suitable for these birds provided in areas from which they have recently disappeared, such as the Custom House Quay downstream of Séan O'Casey Bridge, in case a loss of nest sites in these areas has contributed to the observed decline in the port population.	
NPWS Recommended Conditions In the light of the above the NPWS recommends that any Foreshore Licence issued in response to the present application shall be subject to the following conditions:  1. That all the measures to mitigate the potential detrimental effects of the MP2 Project on flora and fauna set out in Section 5.7 of the supporting NIS, the CEMP and Chapter 7 of the EIAR including the QIs/SCIs for nearby Natura 2000 sites shall be implemented in full, including all those set in the draft plans incorporated in the CEMP, namely the Draft Water Quality Plan, The Draft Dredging Plan, Draft Construction Waste Management Plan, Draft Pollution Incident Response Plan, Draft Birds and Aquatic Ecology Plan and the Draft Marine Mammal Management Plan.  Reason: To conserve biodiversity.	
2. That the finalised Bird and Aquatic Ecology Management Plan to be submitted to the planning authority prior to commencement of the MP2 Project shall include:  (a) Details of the locations of the gates to be installed in the Greenway adjacent to the section of the South Dublin Bay and River Tolka Estuary SPA and a schedule of the dates of the extreme low spring tides over the 15 year timespan of the planning permission granted when works on the construction works of Berth 53 will cease and/ or the gates on the Greenway will be closed to exclude the public to avoid disturbance to birds utilising the SPA; at the end of this 15 year period a schedule of the dates the Greenway gates are to be closed over the following five years to be submitted to the planning authority, and a similar schedule to be submitted every subsequent five years.  (b) A Dublin Port Black Guillemot Conservation Plan incorporating a schedule and map or diagram of the recently known black guillemot nesting sites within the port, the current status of these nesting sites, their potential to be retained into the	

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future and any measures required to secure or repair them; this plan also to include the location of nest boxes to be installed in the port area to compensate for any recent losses of black guillemot nest sites in the port or to be lost as a result of the proposed MP2 Project.  Reason: To conserve populations of bird species occurring in Dublin Port and adjacent areas.	
3. That the finalised Marine Mammal Management Plan to be submitted to the planning authority before the commencement of the MP2 Project shall include: (a) All measures to mitigate the effects of noise during development works set out in the document 'Guidance to Manage the Risk to Marine Mammals from Manmade Sound Sources in Irish Waters' published by the Department of Arts, Heritage and the Gaeltacht.  (b) Details of all monitoring of marine mammals to undertaken in the course of the dredging, piling and other construction works to be carried out as part of the MP2 Project by suitably qualified Marine Mammal Observers (MMOs), and the monitoring of seal and harbour porpoise populations in Dublin Bay by both MMOs and static acoustic monitoring as proposed in the NIS; this monitoring to be continued for two years subsequent to the completion of this project. Reason: To conserve harbour seal, grey seal and harbour porpoise populations occurring in Dublin Port and the Dublin Bay area.	
4. That copies of the proposed Dublin Port Black Guillemot Conservation Plan to be included in the Bird and Aquatic Ecology Plan to be submitted to the planning authority and the annual results of the monitoring of bird species to be carried out as part of the latter plan, and the annual results of the monitoring of marine mammals to be carried out under the Marine Mammal Management Plan, both sets of which results are to also to be submitted to the planning authority, shall be forwarded to NPWS.  Reason: So as to inform the NPWS as the body with primary responsibility for the conservation of biodiversity of the current status of species of birds and marine mammals in Dublin Port and Dublin Bay.	
Department of Agriculture, Food and the Marine: In reference to the request for observations from the Department, of Agriculture, Food and the Marine in relation to the Dublin Port MP2 Project.	The Applicant noted that Department of Agriculture, Food and the Marine did not seek further information or clarification on any of the application material. The applicant confirmed acceptance of DAFM's proposed Foreshore Licence Condition.

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The following should be included in any licence that may issue.  1. Best practice must be followed during the project to ensure dredge, transport and release avoids unwanted discharge of material during the works and that the spoil disposal site is not overloaded through proper sequencing and monitoring should the various proposed operations coincide in time of execution.	Capital dredging is required as an integral part of the MP2 Project, described in Chapter 3, Section 3.2 of the EIAR. The estimated total volume of marine sediments to be dredged is circa 424,644m³ [Note: in response to a Section 5(2) notice from the EPA with respect to their Dumping at Sea Application (S0024-02) this has been revised to
	Chapter 8, Section 8.4.10 of the EIAR presents the results of the comprehensive sediment chemistry sampling and analysis programme which was undertaken for the MP2 Project in order to determine the suitability of dredged marine sediments for disposal at sea. The full results of the sediment chemistry sampling and analysis were provided to the Marine Institute who examined the results in detail in combination with other relevant data held by the Marine Institute. The Marine Institute confirmed that they would have no objection to the disposal of this sediment at the licensed offshore disposal site located at the approaches to Dublin Bay west of the Burford Bank. The marine sediments can therefore be classified as Class 1 (Uncontaminated: no biological effects likely).
	Chapter 12, Section 12.5.1.2 of the EIAR presents the environmental appraisal of disposing the dredge material licenced offshore disposal site located at the entrance to Dublin Bay, west of the Burford Bank. The licensed offshore disposal site has been proven to be suitable for the safe disposal of dredge spoil arising from the MP2 Project. The site also has the advantage that it is dispersive for clays and silts but sands and gravel are retained within the natural Dublin Bay sediment cell.
	Chapter 3, Section 3.3.2 of the EIAR sets out the proposed phasing of the works. The capital dredging for the MP2 Project will be undertaken over a number of winter dredging seasons (October – March) to suit the construction works for the proposed port infrastructure. Undertaking the capital dredging during the winter

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	months provides separation with ongoing maintenance dredging which is restricted to the summer months (April – September).  Chapter 18, Section 8.1.2 of the EIAR presents the Assessment of Cumulative Effects which shows that the temporal separation between
	capital and maintenance dredging works prevents cumulative impacts from occurring at the licenced dump site.
Commissioners of Irish Lights: Irish Lights has reviewed the above application and is familiar with the development based on the previous EIA scoping.  Irish Lights supports the development and reiterates the requirement to ensure safe navigation and the provision of aids to navigation marking the development during construction and operation.	The Applicant noted that Commissioners of Irish Lights did not seek further information or clarification on any of the application material. The Applicant confirmed its commitment to ensuring safe navigation including the provision of aids to navigation, marking the development during construction and operation.
Bord lascaigh Mhara: No response received.	No response made
Department of Defence: Having consulted with our Military colleagues, the Department of Defence has no observations on Dublin Port MP2 Project.	The Applicant noted that Department of Defence did not seek further information or clarification on any of the application material and had no observations on the project.
Met Eireann: After studying the application and accompanying EIAR, there is no projected impact on the Met Eireann observing systems.	The Applicant noted that Met Eireann did not seek further information or clarification on any of the application material and also Met Eireann's view that there is no projected impact on the Met Eireann observing systems.
Inland Waterways and Marine (Heritage Council): No response received	No response made
Bird Watch Ireland (BWI): BirdWatch Ireland (BWI) wanted to draw attention to the need for sufficient screening and care with proximity of the pedestrian walkway to the Tolka Quay wall itself to avoid disturbance of Species of Conservation Interest (SCI) that are known to roost on the wall at a rising and high tide. There are both anecdotal and survey-based records of flocks of Redshank, but also other species, roosting on the Tolka Quay Wall and BWI is concerned that the introduction of a walkway immediately adjacent to it will cause disturbance to this SCI.	The Applicant noted that the observations made by BWI were focused on the development of the Greenway and Heritage Zone and the potential disturbance of roosting birds of Species of Conservation Interest (SCI) adjacent to the Tolka Estuary. The development of the Greenway and Heritage Zone lie above the high water mark and do not form part of the current Foreshore application.  The new 4km Greenway already has Planning Permission from Dublin City Council (Dublin Port Internal Road Network - Reg. Ref. 3084/16). Construction of the northern section of the Greenway has

BirdWatch Ireland noted the proposed cessation of construction at Berth 53 and the heritage installations and the closure of gates on the greenway to avoid potential disturbance at extreme low spring tides. (BWI made a previous submission in September 2019 outlining this, and other concerns including potential disturbance caused by capital dredging works adjacent to a location at the base of the Great South Wall where SCIs forage): "Construction of Berth 53 and heritage installations will temporarily cease during periods of greatest low spring tides to avoid disturbance at exposed feeding grounds within the Tolka Estuary. Gates will be used at the site of the Greenway to control the movement of people during periods of greatest low spring tides, again, to avoid disturbance at feeding grounds within the Tolka Estuary. Following the implementation of mitigation to prevent disturbance, construction and operation of the MP2 Project will not adversely affect the integrity of the South Dublin Bay and River Tolka Estuary SPA." BWI also requests that appropriate screening measures and attention is given to ensuring an appropriate distance of the walkway from the guay wall in relation to avoiding disturbance of birds roosting on the guay wall at a rising and high tide.

#### **Applicant's Response**

commenced. The Heritage Zone will converge with the end of the Greenway and already has Planning Permission from An Bord Pleanála as part of the MP2 Project (Ref. ABP - 304888-19).

The following mitigation measures are proposed to prevent disturbance to the waterbirds within the Tolka Estuary:

- Mitigation by engineering design has been used as the primary measure to prevent disturbance: A 2.0m high screen has been designed along the entire length of Berth 53. This will avoid any indirect impacts on waterbirds during operation of Berth 53 as personnel using the facility will not be visible to the birds on the intertidal area within the Tolka Estuary.
- Gates will be installed on the Greenway to control the movement of people during periods of greatest low spring tides to avoid disturbance at feeding grounds within the Tolka Estuary.
- Construction of Berth 53 and heritage installations will temporarily cease during periods of greatest low spring tides to avoid disturbance at exposed feeding grounds within the Tolka Estuary. These periods can be predicted for the full period of construction based on tide tables. This will avoid any indirect effects of human disturbance on the birds.
- To mitigate the potential propeller and thruster jet scouring of the Tolka Estuary, associated with manoeuvring vessels in the Berth 53 area, a wash protection structure will be installed. The design and performance of this wash protection structure was assessed through an extensive numerical modelling programme.

#### **Geological Survey of Ireland:**

The Geological Survey Ireland (a division of the Department of Environment, Climate and Communications) had the following comments.

It was pleased to see use of Geological Survey Ireland's online mapping resources and data within the desk studies of the EIAR.

Other Comments:

The Applicant noted that the Geological Survey Ireland did not request further information or seek clarification on any matters.

The MP2 Project will be constructed entirely within the eastern end of the Dublin North Port, which comprises made ground. The capital dredging will remove marine sediments but will not encounter rock in the dredge depths. No bedrock cuttings will be exposed.

Statutory Body	Applicant's Response
Should development go ahead the Geological Survey Ireland requested a copy of reports detailing any site investigations carried out. Geological Survey Ireland asked that, should any significant bedrock cuttings be created, that they will be designed to remain visible as rock exposure rather than covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. In areas where natural exposures are few, or deeply weathered, this measure would permit on-going improvement of geological knowledge of the subsurface and could be included as additional sites of the geoheritage dataset, if appropriate.  Alternatively, we ask that a digital photographic record of significant new excavations could be provided. Potential visits from Geological Survey Ireland to personally document exposures could also be arranged.  The data would be added to Geological Survey Ireland's national database of site	The Applicant will provide copies of reports detailing any site investigations carried out.
investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to the Land Mapping Unit of GSI.	
Health and Safety Authority: The Health and Safety Authority had no observations to make on the foreshore application from Dublin Port Company.	The Applicant noted that the Health and Safety Authority had no observations to make on the application and did not request further information or seek clarification on any matters.
	The assessment of the risks of major accidents and disasters was included in the EIAR. A standalone Control of Major Accident Hazards (COMAH) Land Use Planning Assessment of the MP2 Project was also prepared to support the Foreshore Application in accordance with HSA's COMAH land use planning guidance.
Commission for the Regulation of Utilities (CRU): Having reviewed the documents, the CRU had no comment on this matter.	The Applicant noted that the CRU had no comments to make on the application and did not request further information or seek clarification on any matters.
Dublin City Council: As part of Decision ABP: 304888-19, An Bord Pleanála concluded that, subject to conditions, the proposed development would assist in meeting the economic	The Applicant noted that Dublin City Council did not request further information or seek clarification on any matters.
growth projected for Dublin Port within the Dublin Port Masterplan 2040, which is supported by National and Local planning policy, by consolidating and improving the existing Port lands facilitating the berthing of larger ships and future proofing the use of infrastructure within the Port estate enabling Dublin Port. The proposed development complies with EU Directives, national and local policy and would be	Dublin City Council noted that as part of the Planning Decision ABP: 304888-19, An Bord Pleanála concluded that, subject to conditions, the proposed development would assist in meeting the economic growth projected for Dublin Port within the Dublin Port Masterplan 2040, which is supported by National and Local planning policy. The

# acceptable in terms of biodiversity, noise, landscape, cultural heritage and traffic. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

#### Based on:

- An Bord Pleanála Decision ABP: 304888-19.
- The objectives of the Department of Transport's National Port Policy 2013 and Department of Housing, Planning and Local Government's National Planning Framework 2018 to facilitate the development of the port at this site.
- The objectives of the Eastern and Midlands Regional Authority set out in the Regional Spatial and Economic Strategy translating national policy to the region with respect to the port and policies and,
- The objectives of the Dublin City Development Plan 2016-2022,

the MP2 Project will continue the long-established use of Dublin Port and further the objective of its Masterplan (which is supported at all levels of the planning policy hierarchy). The proposed development will be in accordance with proper planning and sustainable development.

Dublin City Council Planning Department have no objection to the granting of a foreshore Lease, Licence or Consent under the Foreshore Act 1933 (as amended).

#### **Applicant's Response**

proposed development complies with EU Directives, national and local policy and would be acceptable in terms of biodiversity, noise, landscape, cultural heritage and traffic. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Dublin City Council further commented that the MP2 Project will continue the long-established use of Dublin Port and further the objective of its Masterplan (which is supported at all levels of the planning policy hierarchy), the proposed development will be in accordance with proper planning and sustainable development.

Dublin City Council Planning Department had no objection to the granting of a foreshore Lease, Licence or Consent under the Foreshore Act 1933 (as amended).

The Applicant confirmed its commitment to comply with all conditions set out in Planning Decision ABP: 304888-19 and would welcome a Foreshore Condition for DPC to adhere to the Planning Conditions.

#### 1.4 Legislative context

The Foreshore Act 1933 (as amended), requires that a lease or licence must be obtained from the Minister for Housing, Local Government and Heritage for the carrying out of works or placing structures or material on, or for the occupation of or removal of material from, State-owned foreshore.

The 1992 EU Habitats Directive (Council Directive 92/43/EC) and Birds Directive (2009/147/EC) are transposed into Irish law by Part XAB of the *Planning and Development Act 2000* (as amended) and the *European Communities (Birds and Natural Habitats) Regulations 2011* (as amended). The latter outlines the requirements for screening for AA and AA under Regulation 42:

- 42. (1) A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.
- (2) A public authority shall carry out a screening for Appropriate Assessment under paragraph (1) before consent for a plan or project is given, or a decision to undertake or adopt a plan or project is taken.
- (6) The public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site.

Given that an application for statutory approval has also been made to An Bord Pleanála with respect to the project, the following is also relevant:

- 42. (21)(a) Where a public authority, referred to in this paragraph as "the first authority", has carried out a screening for Appropriate Assessment or an Appropriate Assessment in relation to a plan or project, any other public authority, referred to in this Regulation as "the second authority", that is required to carry out a screening for Appropriate Assessment or an Appropriate Assessment of the same plan or project shall take account of the screening for Appropriate Assessment or Appropriate Assessment of the first authority in relation to that plan or project, and of any information, including a Natura Impact Statement that was prepared for consideration by the first authority or another second authority in relation to the plan or project.
- (b) In taking account of a screening for Appropriate Assessment or Appropriate Assessment in relation to a plan or project and of a Natura Impact Statement, the second authority shall consider the extent to which the scope of that screening for Appropriate Assessment or Appropriate Assessment or Natura Impact Statement covers the issues that would be required to be addressed by the second authority in a screening for Appropriate Assessment or Appropriate Assessment of the plan or project in view of the scope of the consent to be given by it, and shall identify any issues that have not, in that regard, been adequately addressed.

(c) Subject to subparagraph (b) and without prejudice to its right to request all such information as it considers necessary to carry out a screening for Appropriate Assessment or Appropriate Assessment, the second authority may limit its requirement for information, including a Natura Impact Statement, to those issues that it determines have not been adequately addressed for the purposes of the second authority in the process of screening for Appropriate Assessment and Appropriate Assessment by the first authority or by another second authority.

Relevant guidance informing the AA screening includes that at a European (European Commission 2019, European Commission 2021) and national (DoEHLG 2010, Office of the Planning Regulator 2021) level.

## **SECTION 2 - DESCRIPTION OF PROPOSED WORKS**

#### 2.1 Site Location

The application site is located in the north-eastern part of the Dublin Port Estate, on the northern side of the River Liffey navigation channel. The Port is bounded to the north and east by the Tolka Estuary, with the North Bull Wall to the northwest. To the south of the site, other Port uses are located on the southern banks of the River Liffey navigation channel. The Great South Wall is located to the southeast of the site boundary. The North Bull Wall and the Great South Wall are the eastern limits of Dublin harbour.

The Foreshore boundary of the proposed works is indicated on Figure 2.1, with those elements requiring consent under Section 10 and Section 3 identified in Figure 2.2.

# 2.2 Summary of MP2 Project

The proposed development is called the MP2 Project which comprises a number of elements outlined below. In the description below, the term "consented" indicates that the element has received planning permission. It is noted that not all the elements of the MP2 Project require a Foreshore consent:

- Construction of a new Ro-Ro jetty, Berth 53, for ferries up to 240m in length on an alignment north of the Port's fairway and south and parallel to the boundary of the South Dublin Bay and River Tolka Special Protection Area.
- A reorientation of the already consented Berth 52. Berth 52 is also designed to accommodate ferries up to 240m in length. The works will also comprise an amendment to the consented open dolphin structure to create a closed berthing face at the eastern end of Berth 49. The extension of the existing Berth 49, part of the ABR Project, will make this berth also capable of accommodating ferries up to 240m in length. The combination of the ABR Project with the MP2 Project will therefore deliver three river berths all capable of accommodating ferries up to 240m in length.
- A lengthening of an existing river Berth 50A to provide the DFT Container Freight Terminal with additional capacity to handle larger container ships. These works will include the infilling of the basin east of the now virtually redundant Oil Berth 4 on the Eastern Oil Jetty. These works will also include dredging to a standard depth of -11.0m Chart Datum (CD) which is a proposed amendment to the channel dredging as permitted under the ABR Project.
- As part of the infilling of Oil Berth 4, it is proposed to redevelop Oil Berth 3 as a future deep-water container berth (standard depth of -13.0m CD) for the DFT Container Freight Terminal. This will facilitate the change of use of the berth from petroleum importation to container handling when the throughput of petroleum products through Dublin Port declines as a result of national policies to decarbonise the economy.
- The dredging of a berthing pocket to a standard depth of -13.0m CD at Oil Berth 3 will
  require stabilisation of the existing quay wall at Jetty Road. It is not proposed to use
  this quay wall for the berthing of vessels.
- Dredging at the proposed Berth 53 and channel widening to a standard depth of -10.0m
   CD which is a proposed amendment to the channel dredging as permitted under the ABR Project.
- Consolidation of passenger terminal buildings, demolition of redundant structures and buildings, and removal of connecting roads to increase the area of land for the transit storage of Ro-Ro freight units as a Unified Ferry Terminal (UFT). Works include reorganisation of access roads; two proposed check-in areas comprising a total of 14 check-in lanes; proposed set down and parking area for the existing Terminal 1

- building; proposed pedestrian underpass to access the existing Terminal 1 building; three proposed toilet blocks and a proposed ESB Substation. These works will comprise amendments to consented developments including the ABR Project.
- A heritage zone adjacent to Berth 53 and the Unified Ferry Terminal set down area.
   This will comprise an alteration to consented development planning.

# 2.3 Project elements requiring Foreshore Consent Under Section 10

Consent is required under Section 10 of the Foreshore Act 1933, as amended, for the erection of structures on tidal lands not belonging to the State. The applicant has applied for consent under Section 10 of the Foreshore Act 1933, as amended, for the following elements of the MP2 Project (see Figures 2.1 and 2.2).

In response to a 5(2) notice with respect to their Dumping at Sea Application (S0024-02), the applicant has submitted a supplement application to increase both the loading area and volume of dredged material in the vicinity of the proposed riverside Berths 52 & 53. This change is required to advance the construction of Berth 52, Berth 53 and the Unified Ferry Terminal ahead of programme in order to meet the post Brexit priority demands of national port infrastructure. A DPC letter clarifying the revised capital dredging requirements was sent to the Foreshore Consenting Unit (22 November). The increased loading area is shown on Figure 2.3 and appears to fall within the existing Section 10 consent Area A (shown on Figures 2.1 and 2.2).

#### 2.3.1 Berth 52

Permission was obtained under the ABR project to fill in the basin between the existing Berths 52 and 53 and to construct a new Berth 52 on the southern face of the infilled area. Under the MP2 project, it is proposed that the Berth 52 jetty structure, *ca.* 288m in length, will be rotated onto a west-north-west – east-south-east alignment. The structure will comprise a combination of a steel pile cellular wall, steel sheet pile combi wall, and an open piled structure at its eastern end, adjacent to the western end of Berth 53. The proposed combi wall will be comprised of circular piles of *ca.* 1.6m diameter with sheet pile infill panels. These piles will be driven to a depth of *ca.* -30m CD. The open pile structure will comprise pairs of tubular steel piles supporting reinforced concrete cross beams, which in turn support a reinforced concrete deck.

The proposed linkspan for Berth 52, located at the eastern end of Berth 49, will be rotated to align with the new orientation of Berth 52 and will provide two-tier access to the Ro-Ro ferries. A reinforced concrete bank seat will be constructed at the eastern end of Berth 52 to support the linkspan to give access to Berth 53.

Jetty furniture including fenders, mooring bollards, handrails and an automated mooring system will be installed at Berth 52.

Construction of a new sheet pile quay wall structure approximately 52m in length, at 90° to Berth 52, at its western end, to accommodate the linkspan structure and to provide additional operational quayside space at Berth 49. The 52m sheet pile wall connected to the 40m extension to Berth 49, described below, and will be backfilled with granular fill material.

#### 2.3.2 Berth 49

The construction of Berth 52 requires changes to existing Berth 49 which sits immediately east of Berth 52. The eastern mooring dolphins associated with Berth 49 will be encapsulated in a

new sheet pile quay wall structure, approximately 40m in length, extending eastwards from the eastern end of Berth 49. The 40m long sheet pile wall will connect to the 52m sheet pile wall at the western end of Berth 52. The area behind the 40m and 52m sheet pile walls will be backfilled with granular fill material.

#### 2.3.3 Berth 53

The proposed works at Berth 53 will comprise:

- The construction of a new Ro-Ro jetty structure approximately 406m in length overall.
- The construction of eight reinforced concrete mooring dolphins on tubular steel piles of *ca*. 1.0m to 1.2m diameter to provide a new berthing face approximately 284m in length. The dolphins are at 34m centres, apart from the easternmost dolphins which are 40m apart. The dolphins are linked by a reinforced concrete deck.
- Dredging of a berthing pocket to a standard depth of -10.0m CD. The estimated volume of material to be dredged, as stated in the Foreshore consent application, is 159,595m³. It is noted that in response to a request for information from the EPA, in relation to the Dumping at Sea permit application reference S0024-02, DPC indicated that the volume of material to be dredged at Berth 53 will be 403,268m³.
- Installation of scour protection mattresses, 27m in width, on the dredged side slope under the mooring dolphins and eastwards for 237m to the east of the easternmost dolphin. The scour mattress will provide slope stabilisation and scour protection on the northern face of the berth to the dredged berthing pocket.
- Installation of a propellor wash protection structure on the north side of the 406m jetty structure.
- Installation of jetty furniture including visual screening barriers, fenders, mooring bollards, handrails, emergency ladders and an automated mooring system.
- The mooring dolphins will be supported on a system of tubular steel piles constructed in a vertical and raking alignment. The access structures to the linkspan will be constructed of tubular steel vertical piles.

Figure 2.1:Dublin Port Foreshore boundary (red) showing proposed works (taken from Dublin Port MP2 Drawing MA 0010-01)

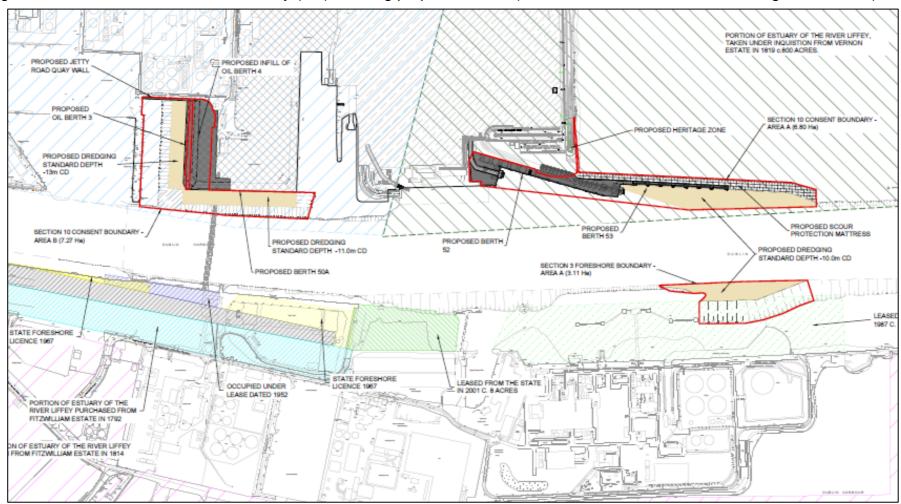


Figure 2.2: Foreshore Consent Maps (Section 10 and Section 3 areas)

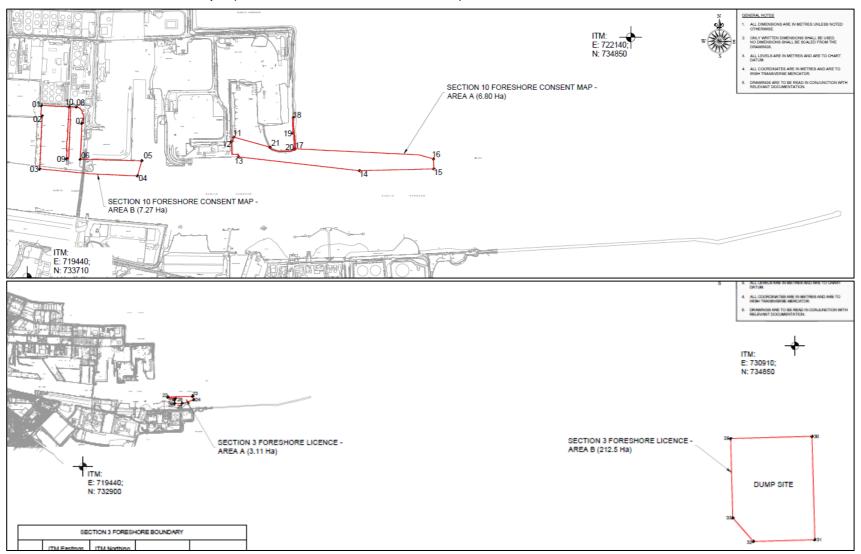
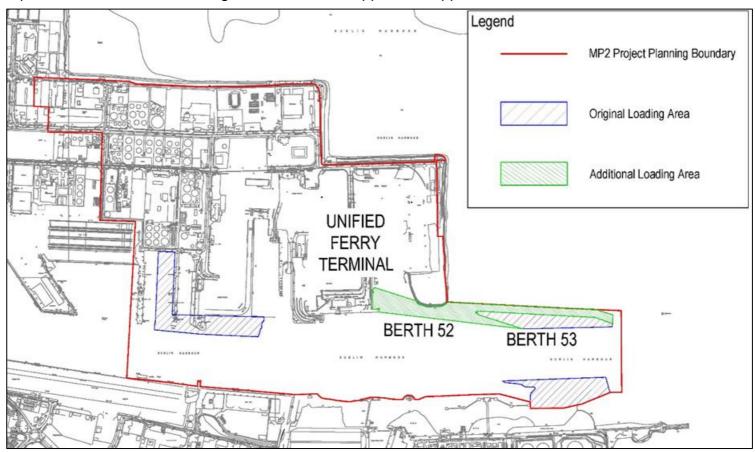


Figure 2.3: Proposed increase to the loading area under the Supplement application



### 2.3.4 Berth 50A

It is proposed to extend the existing Berth 50A to provide a multi-purpose predominately Lo-Lo Container Vessel berth. The existing berth is 180m and the extension will be 125m. The proposed works at Berth 50A will comprise the following:

- Demolition of the Pier Head to the west of the existing Berth 50A. The footprint of the area to be demolished is 2,950m<sup>2</sup>. The Pier Head was the seaward end of the 19<sup>th</sup> century Eastern Breakwater for the Port. The works will include the salvage and storage of masonry units for future use in heritage gain projects,
- Demolition of the southern end of the Eastern Oil Jetty. The footprint of the area to be demolished is 275m<sup>2</sup>.
- Construction of a new steel sheet pile combi-wall which will act as the berthing face.
  The proposed combi wall will be comprised of circular piles of ca. 1.4m diameter with
  sheet pile infill panels. The new section of quay wall will be approximately 125m in
  length, providing an overall quay length of approximately 305m,
- Installation of a sheet pile anchor wall and ties to support the combi-wall,
- Construction of a bridging structure to avoid disruption to existing 220KV High Voltage ESB Cables which cross the channel and run through the site on an approximately north-south alignment, to include for temporary protection works;
- Backfilling of the new sheet pile combi-wall with engineering fill material and construction and demolition waste (as part of Oil Berth 3 works),
- Construction of a new reinforced concrete deck over the infilled area,
- Installation of new tubular steel piles to support the extension of the existing crane rails on the concrete deck,
- Dredging of a berthing pocket to a standard depth of -11.0m CD. The estimated volume of material to be dredged is 69,640m<sup>3</sup>.
- Installation of jetty furniture including crane rails, fenders, mooring bollards and emergency ladders.

#### 2.3.5 Oil Berth 3

The Eastern Oil Jetty comprises Oil Berth 3 to the west and Oil Berth 4 to the east. The proposed development will involve the removal of Oil Berth 4 and consolidating operations to Oil Berth 3. The berth will be designed as a multi-purpose structure, initially for oil tanker berthing, with a future potential use as a container vessel berth.

The basin at Oil Berth 4 will be infilled to provide an additional storage area for the DFT Container Freight Terminal.

The works will comprise the following elements:

- Temporary support of the oil berth gantry (framework) and equipment,
- Demolition of the existing pilot boat pontoon and gangway, with a total footprint of 198m<sup>2</sup>.
- Construction of a new steel sheet pile combi-wall between 5m and 7m west of the face of the existing Oil Berth 3,
- The proposed combi wall will be comprised of circular piles of *ca.* 1.4m diameter with sheet pile infill panels. The new quay wall will be approximately 239m long,
- Retention of the Eastern Oil Jetty structure.
- Infilling of the basin east of Oil Berth 4 with engineered fill material and suitable recycled construction and demolition waste arising from proposed demolition works within the footprint of the MP2 Project development area.

- Infilling the void between the existing Oil Berth 3 and the proposed new sheet pile wall with engineered fill material. The quantity of fill material required will be approximately 145,000m<sup>3</sup>.
- Installation of a sheet pile anchor wall and ties to support the combi-wall,
- Installation of new tubular steel piles to support the potential future extension of the crane rails in the concrete deck of the infilled area,
- Construction of a new reinforced concrete deck. The new deck will have a plan area of 20,000m<sup>2</sup> which will be an increase of 17,500m<sup>2</sup> over the existing deck area,
- Installation of jetty furniture including Fenders (panel and corner roller fenders), mooring bollards and emergency ladders, and
- Dredging of a berthing pocket to a standard depth of -13.0m CD. The estimated volume of material to be dredged is 83,414m<sup>3</sup>.

# 2.3.6 Jetty Road Quay Wall

The dredging of the berthing pocket to a standard depth of -13.0m CD at Oil Berth 3 will require the stabilisation of the existing quay wall at Jetty Road. It is not proposed to use this quay wall for the berthing of vessels. The works will comprise the following elements:

- Construction of a new steel sheet pile combi-wall 5m in front of the face of the existing
  Jetty Road quay wall. The proposed combi wall will be comprised of circular piles of
  ca. 1.4m diameter with sheet pile infill panels. It is proposed to retain the existing
  structure in position throughout the works. The new quay wall will be approximately
  120m long,
- Installation of ground anchors to stabilise the new sheet pile combi-wall. These
  anchors will be fixed into bedrock. This system negates the need for a sheet pile
  anchor wall,
- Installation of fill material behind the new wall,
- Construction of a new reinforced concrete capping beam,
- Re-decking the existing Jetty Road, and
- Installation of furniture including emergency ladders and handrails.

# 2.4 Project elements requiring a Foreshore Consent Under Section 3

# 2.4.1 Channel Widening Works

The applicant has applied for a licence under Section 3 of the Foreshore Act 1933, as amended, for channel widening works on the southern side of the main navigation channel and the disposal of dredge spoil in the Dublin Port Company's dump site in Dublin Bay Channel. The widening works will be required to facilitate the safe navigation and turning of vessels of up to 240m in length and the expected increased frequency of sailings.

Widening will be carried out via dredging works. The standard depth of the channel will be - 10.0m CD.

The existing navigation channel has consent to be deepened from -7.8m CD to -10.0m CD under the ABR Project. The capital dredging scheme for the ABR Project commenced in October 2017 with dredging activity taking place within the navigation channel and fairway within Dublin Bay. The ABR Project capital dredging of the section of navigation channel adjacent to the proposed MP2 Project channel widening was scheduled for the winter season October 2020 March 2021.

The estimated volume of material to be dredged is 111,995m<sup>3</sup>.

# 2.4.2 Disposal of Dredge Spoil

The volume of capital dredging required for each element of the works, as described in the previous sections, is tabulated in Table 2.1.

Table 2.1: Dredging summary in Foreshore Consent Application

Element	Standard depth	Volume	Revised volume <sup>1</sup>
Berth 53	-10.0m CD	159,595m <sup>3</sup>	403,268m <sup>3</sup>
Channel Widening	-10.0m CD	111,995m <sup>3</sup>	111,995m <sup>3</sup>
Oil Berth 3	-13.0m CD	83,414m³	83,414m <sup>3</sup>
Berth 50A	-11.0m CD	69,640m <sup>3</sup>	69,640m <sup>3</sup>
Total volume to be dredged		424,644m³ (note 1)	668,317m <sup>3</sup>

Note: <sup>1</sup>In response to a request for information from the EPA, in relation to the Dumping at Sea permit application S0024-02, Dublin Port Company provided a supplement application to increase the volume of material to be dredged at Berth 53 by 243,673m<sup>3</sup> to 403,268m<sup>3</sup>.

It is proposed to dispose of the dredged material at sea at the Dublin Port Company's dump site to the west of the Burford Bank in Dublin Bay. Dublin Port Company has obtained Dumping at Sea Permits for the use of this site previously. A Dumping at Sea Permit will be required for the disposal of the MP2 dredged material at this site.

The disposal site is located approximately 7 km east of the Great South Wall. The nearest shore is Baily at Howth which is approximately 3 km from the dump site. Water depths at the disposal site range from -12m CD to -24m CD. The dump site covers an area of 2.27 km<sup>2</sup>.

Dredge spoil has been dumped in the general area of the dump site going back 100 years or more as this is the closest point where a north-south current is encountered to take dredged silts away to the open sea.

The site was first licensed in 1996 after the previous disposal site, located nearby, closed. The area has been subjected to regular dredge spoil disposal since it was first licensed.

The licensed disposal site has been selected to keep the fine sands deposited at the site within the natural Dublin Bay sediment cell. Over time the fine sands will migrate from the site, particularly as a result of storm action and will remain part of the natural coastal processes regime of Dublin Bay. Silts disposed of at the offshore disposal site will also be dispersed in a north-south direction to the wider Irish Sea.

## 2.5 Landside Elements of the MP2 Project

The landside elements of the MP2 Project (see Section 3.28 of the applicant's AA Screening and NIS) are the elements which do not require a Foreshore consent of licence and are therefore not described further.

# 2.6 Construction

# 2.6.1 Construct Sequence Summary

The construction sequence indicated in the Foreshore Consent application is summarised in Table 2.2 below.

Table 2.2: Construction sequence in the Foreshore Consent Application

Phase	Duration	Commencement date	Comment
Phase L1 – Northern Access Road	6 months	Quarter 1 of 2022	Phase L1 will include demolition and construction work at the north-eastern corner of the United Ferry Terminal. These works will be outside the Foreshore application area.
Phase M1 – Berth 52	33 months	Quarter 1 of 2022	Phase M1 will include completion of the filling of the basin between existing Berths 52 and 53, construction of Berth 52, commencement of piling for Berth 53
Phase M2 – Berth 53	24 months	Quarter 1 2025	Phase M2 will commence after Phase M1 is completed. Dredging of berth pocket and construction of Berth 53
Phase L2 – Eastern Access Road	6 months	Quarter 1 of 2027	Works in Phase L2 will commence and after the completion of Phase M2. It will include demolition of buildings, installation of services and construction of access routes. All the works will be outside the Foreshore application area.
Phase L3 – Unified Ferry Terminal Yard	12 months	Quarter 3 of 2027	Phase L3 will be the final phase of works at the Unified Ferry Terminal Yard. It will include demolition, installation of underground services, connection to the L1 and L2 road networks, internal upgrade works to the existing Terminal 1 Building and erection of above ground structures
Phase M3 – Channel Widening Works	1 month	Quarter 1 of 2027	Phase M3 will comprise the dredging and disposal at sea of seabed from the Liffey Channel. The works will be carried out after the dredging in Phase M2, but during the M2 primary jetty construction works.
Phase M4 – Jetty Road	12 months	Quarter 1 of 2027	Phase M4 will commence after the completion of Phase M3. Phase M4 will include the construction of a new sheet pile combi wall at the jetty road and filling the void between the new wall and the existing Jetty Road wall.
Phase M5 – Oil Berth 3	12 months	Quarter 1 of 2030	Phase M5 will occur after Phase M4 is completed. Phase M5 will include the construction of the new steel combi sheet pile wall at Oil Berth 3, filling the voids between the existing wall at Oil

Phase	Duration	Commencement date	Comment
			Berth 3 and the proposed new wall, the dredging of the berth pocket to a standard depth of -13.0m CD.
Phase M6 – Berth 50A	15 months	Quarter 1 of 2031	Phase M6 will commence after Phase M5 is completed. Phase M6 will include the removal of the eastern Breakwater pier head, construction of a new sheet pile wall at the west end of Berth 50A, filling the voids between the existing wall at Oil Berth 3 and the proposed new wall, and other works.
Phase L4 – Heritage Installation	9 months	Quarter 3 of 2031	Phase L4 will commence mid-way through Phase M6. The works will comprise the construction of the heritage zone incorporating the masonry blocks recovered during Phase M6 and the installation of the heritage structures.
Phase M7 – Dredging of Berth 50A	1 month	Quarter 1 of 2032	Phase M7 will commence upon completion of Phase M6. Phase M7 will comprise the dredging in front of the existing Berth 50A to a standard depth of -11.0m CD.

In response to a request for information from the EPA, in relation to the Dumping at Sea permit application S0024-02, Dublin Port Company indicated that the construction programme would be altered. The programme changes are required to advance the construction of Berth 52, Berth 53 and the Unified Ferry Terminal ahead of the original programme in order to meet the post Brexit priority demands of national port infrastructure.

The revised sequence would deliver the MP2 Project in two main phases:

- Construction of Berth 52, Berth 53, the Unified Ferry Terminal and Channel Widening commencing in either Q1 2022 or Q3 2022 depending on the timing of the grant of a Foreshore Consent and Dumping at Sea Permit; and
- Construction of Oil Berth 3, infill of Oil Berth 4 and Berth 50A commencing in Q3 2028.

The updated MP2 Project programme from that envisaged at the time of the application originally being made is described below and presented in Table 2.3.

Table 2.3: Revised MP2 Project construction programme (September 2021)

Item	Works	Start	Finish	Duration
1	Berth 52	Q1 2022 or Q3 2022	Q4 2027	63 months
1a	Channel Widening	Q1 2022 or Q3 2022	Q1 2024	24 months
2	Berth 53	Q1 2022 or Q3 2022	Q3 2025	36 months
2a	B52/ B53 Landside works	Q3 2022	Q4 2029	87 months
3	Oil Berth 3 and infill of Oil Berth 4	Q3 2028	Q1 2031	30 months
4	Berth 50A	Q1 2031	Q2 2032	18 Months

# 2.6.2 Construction Methods Berth 52 (Phase M1)

The construction of Berth 52 will commence after the filling of the basin between the existing Berths 52 and 53. It is proposed that a causeway constructed from clean, inert, rock will be used to seal the basin during the filling works. The causeway will then be used as a platform to commence the construction of Berth 52.

The construction of the steel sheet pile cellular wall will be the first section of the wall to be constructed. Plant will be positioned on the causeway and allow the craneage and piling of sheet piles. The cellular wall will not require a sheet pile anchor wall to be installed. The sheet piles will be driven to circa -30.0mCD. The cells will be filled with suitable granular material.

When the sheet pile cellular wall has been completed, works will commence on the sheet pile combi wall to the east. This wall will require the installation of an anchor wall to restrain the berthing wall in position. The anchor wall will be driven through the existing land. The combi wall will comprise tubular steel piles with steel sheet piles driven between the piles.

Piling in the River Liffey Channel will not take place between March and May to avoid the main salmon smolt run.

When the sheet piles have been installed, reinforced concrete panels will be installed as the berthing face to the sheet piles. These panels will be precast and lowered into position by crane.

The completion of the works to the east end of Berth 52 will facilitate the commencement of the works to Berth 53. Berth 52 will effectively act as a working platform.

# Berth 53 (Phase M2)

The dredging works to Berth 53 will take place in advance of the main construction works to the berth. The materials to be dredged will predominantly be clay. This material will be dredged using a trailer suction hopper dredge or equivalent. The dredged material will be loaded into barges and disposed of at the licensed offshore disposal site located at the approaches to Dublin Bay to the west of the Burford Bank. Ancillary dredging vessels such as a survey vessel and a bed leveller will be required throughout the dredging activities. All capital dredging works will take place within the period October to March.

As the dredging progresses in an eastward direction, concrete mattresses will be installed on the dredge side slopes to stabilise the slopes. The mattresses will be manufactured off site and comprise articulated concrete blocks which will adapt to the shape of the dredge side slope. Spaces will be left in the mattresses to accommodate the installation of piles for the jetty structure.

The dredging and mattress installation works will take approximately 2.5 months to complete and will be completed before the piling commences.

Piling works for the jetty structure at Berth 53 will commence at the west end, after the completion of Berth 52. The first number of piles will be installed from Berth 52. Most of the piles will require installation from barges.

Three barges will be required to install the piles comprising:

- A jack-up barge is a mobile buoyant barge/platform which is fitted with a number of moveable legs and is capable of lifting itself above the water. For Berth 53 construction works, a jack-up barge will be fitted with a pile gate which will be used as a template to position the piles,
- 2. A spud-leg barge is similar to a jack-up barge. However, it is not capable of lifting itself above the water. The moveable legs on this type of barge keep the barge in position, while the barge remains afloat. For Berth 53 construction works, a spudleg barge will be positioned beside the jack-up barge. A crane will be positioned on the spud-leg barge which will be used for installing the piles. The spud-leg barge will be positioned to the south, east and north of the jack-up barge, as required,
- 3. A smaller support barge will be used to service the jack-up and spud-leg barges (e.g. to deliver piles to the site). This will be a floating barge which will not have legs and will moor to the other barges.

Other ancillary craft (safety boat, transport vessel etc.) will also be located on site. These vessels will be similar to vessels currently operating day-to-day at the port.

Each dolphin will take approximately 1 week to pile. Piles will be driven by an impact hammer, which will operate for approximately 10-minute intervals. Each pile may take approximately 1 hour to drive. The vertical piles at the east end approach to the berth will have an approximate diameter of 1.0m, the vertical and raking piles to the dolphins will have an approximate diameter of 1.2m.

The spud-leg barge will be used to crane the hollow precast concrete upper structures of the dolphins into position on the piles. When positioned on the piles, the precast superstructures will be filled with reinforced concrete.

Precast concrete bridge beams will be installed by the crane on the spud-leg barge. These will span between the dolphins. The precast bridge beams will also be filled with reinforced concrete, with voids being maintained for services. The spud-leg barge will also be used for the installation of fenders and ladders.

Construction works will temporarily cease at Berth 53 during extremely low Spring Tides when bird feeding habitat becomes available within the SPA immediately to the north of the works area.

# Channel Widening (Phase M3)

Channel widening via dredging will take place to the south of the Liffey Channel. The materials to be dredged will comprise clays, sands and gravels. Most of the material will be dredged using a trailer suction hopper dredge. The dredged material will be loaded into barges and disposed of at the licensed offshore disposal site located at the approaches to Dublin Bay to the west of the Burford Bank. There will also be a requirement for a back-hoe dredger on site to carry out the finer elements of the dredging works. This material will be loaded into a hopper barge and disposed of at the licenced sea disposal site. The dredging will proceed from north to south, with the dredger working in a west to east direction. Ancillary dredging vessels such as a survey vessel, work boats and a bed leveller shall be required throughout the dredging activities. These vessels will be similar to vessels currently operating day-to-day at the port.

All capital dredging works will take place within the period October to March.

# Jetty Road (Phase M4)

In advance of the construction works at Oil Berth 3 and Jetty Road, the existing bitumen and gas importation pipelines will be removed from the berth and repositioned on the Western Oli Jetty.

A jack-up barge and spud-leg barge will be mobilised to site for the installation of the steel sheet pile combi wall at the Jetty Road. The works will commence on the west end of Jetty Road and work in an easterly direction, dependent on the expected landing of gas. The jack-up barge will be fitted with a pile gate to ensure the accuracy of the tubular steel pile locations. The piles will be pitched and driven from the spud-leg barge. The piles will be driven using a vibro hammer and impact hammer. The tubular steel piles will have a diameter of 1.4m. The piles will be driven to approximately -30m CD. Steel sheet piles will be driven between adjacent tubular steel piles. The spud-barge will be used for the installation of ground anchors to retain the steel combi-wall in position. When the ground anchors are installed, the rear to the new wall will be filled with engineering fill material sourced from local quarries. The engineering fill material will comprise crushed rock transported by road from the quarries.

# Oil Berth 3 (Phase M5)

Oil Berth 3 comprises a gantry with pipelines on top of a concrete deck which spans upon concrete caissons.

The steel sheet pile combi-wall will be installed at Oil Berth 3 in the same manner as the Jetty Road. The piles will be driven using a vibro hammer and impact hammer. The tubular steel piles will have a diameter of *ca.* 1.4m. Steel sheet piles will be driven between adjacent tubular steel piles. When the combi-wall is constructed, a frame will be installed to support the existing pipeline gantry. The deck which spans between the concrete caissons will then be removed to allow the space between the new wall structure and the existing basin, to be filled with engineering fill material. When mid tide level is reached with the fill material, tubular steel piles will be installed which will support the future potential crane rail installation. The deadman anchor wall will also be installed. The anchor wall will be connected via tie rods to the combiwall. Trenches will be cut in the existing deck to facilitate this. Precast concrete panels will be installed on the front of the combi-wall as a berthing face. The filling will then continue to the deck formation level, where provision will be made for the installation of services. The reinforced concrete deck will then be cast on the fill material. Quay furniture and services will then be installed.

When all the piles are installed, a back-hoe dredger will mobilise to site to dredge the berth pocket to -13.0m CD. The material will be loaded into a hopper barge and disposed of at the licensed offshore disposal site located at the approaches to Dublin Bay to the west of the Burford Bank. All capital dredging works will take place within the period October to March.

A new in-situ reinforced concrete wall will be constructed on the deck to separate the Oil Berth Zone from the DFT Container Freight Terminal yard.

# Berth 50A (Phase M6)

The demolition of the Port Operations building, and existing mast will take place at the outset of construction works in this area.

To limit the works in the water, it is proposed to install the steel sheet pile combi wall from the existing Eastern Breakwater. The fill material to Oil Berth 3 will also be used as a working platform. Piles will be driven through the existing overburden and into the seabed to an approximate level of -30m CD. The combi-wall will comprise *ca.* 1.4m diameter tubular steel

piles, with sheet piles driven between adjacent tubular piles. The driving of the deadman anchor wall will also be undertaken from the land.

When the piles are driven, excavation of the existing Eastern Breakwater will commence. The existing granite structure will be recorded and moved to the proposed heritage installation location. The existing fill material will be excavated and disposed of at the licensed offshore disposal site located at the approaches to Dublin Bay to the west of the Burford Bank.

Five ESB 220kV feeder cable ducts pass under the existing Eastern Breakwater. It is proposed to keep these cables in position during the works. Before the Eastern Breakwater is removed, a steel sheet pile cofferdam, approximately 50m long x 15m wide, will be constructed in the proximity of the ducts. Temporary works will be employed to brace the cofferdam and support excavations. When the cofferdam is installed, the overburden above the ducts will be excavated, exposing the ducts. They will then be encased in concrete at the location of the proposed new quay wall. The cofferdam will remain part of the permanent works where it intersects the proposed new quay wall. The void between the cofferdam, at the intersection of the new quay wall will be filled with reinforced concrete to deck level. A concrete mattress will be placed over the southern side of the ducts to act as protection from future dredging campaigns.

All works in the vicinity of the ESB 220Kv cables shall be by agreement with ESB.

# Berth 50A Dredging (Phase M7)

Phase M7 will comprise the dredging in front of the existing and proposed Berth 50A to a standard depth of -11.0m CD and disposal at sea of the material. This phase will commence after the works at Phase M6. The dredging works will take one month to complete. All capital dredging works will take place within the period October to March.

The dredging will be carried out using a back-hoe dredger. This material will be loaded into a hopper barge and disposed of at the licensed offshore disposal site located at the approaches to Dublin Bay to the west of the Burford Bank.

Ancillary dredging vessels such as a survey vessel, work boats and a bed leveller shall be required throughout the dredging activities. These vessels will be similar to vessels currently operating day-to-day at the port.

## 2.7 Operational Phase

The key objective of the MP2 Project is to increase the throughput of cargo and passengers by providing the infrastructure required to maximise the efficient use of existing port lands. A description of the existing port operations forms part of the application for consent. There will be no significant changes to the existing types of operations, processes and activities (regular and occasional) when the MP2 Project is operational, however, there will be associated capacity increases which are described below (from applicant's Appendix A MP2 Project: Project rationale document).

## 2.7.1 Additional Ro-Ro and Lo-Lo Capacity

# General

The MP2 Project will provide additional capacity for Ro-Ro ferry operations in the Unified Ferry Terminal by providing a total of five berths, three long river berths (49, 52 and 53), all with

double tier ramps, in addition to the existing Berth 51, which has a double-tiered ramp, and the existing Berth 51A, which has a single tiered ramp.

The MP2 Project will also provide additional capacity for Lo-Lo operations in the DFT container freight yard. There will be additional yard area, created by infilling Oil Berth 4, a longer and deeper Berth 50A replacing existing Berth 50, and a deeper Oil Berth 3, which will be suitable for Lo-Lo operations. These will operate in addition to the existing Berth 50.

# Ro-Ro Capacity Increase

Table 2.4 indicates the Ro-Ro and Lo-Lo capacity increases which will result from the MP2 project. Table 2.5 indicates the increase in Ro-Ro throughput in the Unified Ferry Terminal from 2018 to 2040.

Table 2.4: Contribution of the MP2 Project to increasing Dublin Port's throughput

	Units /TEU <sup>1</sup>	<b>Gross Tonnes</b>
Unified Ferry Terminal increased Ro-Ro capacity above 2018 throughput	439,000 units	10.6m
DFT container freight yard increased Lo-Lo capacity above 2018 throughput	409,000 TEU	4.0m
MP2 Project increased tonnes		14.6m
Masterplan increased tonnes		48.3m
MP2 Project increased capacity as % of Masterplan increase		30.2%

Table 2.5: Increase in Ro-Ro throughput from 2018 to 2040

	2018	2040	% Increase
Volume (units) (land capacity)	725,000	1,164,000	61%
Average units per day	1,986	3,189	61%
Average sailings per day	13	18	38%
Average units per sailing	153	177	16%

The Ro-Ro berth capacity for the five berths will be 1,280,000 units, whereas the land capacity, shown in Table 2.5 is 1,164,000 units. A margin of surplus berth capacity over land capacity is required to provide contingency capacity for berth downtime for a range of reasons including planned maintenance, equipment failure and impact of adverse weather on ship schedules.

The layout of the land area of Unified Ferry Terminal will be capable of being adapted to the requirements of the trade.

In general, the higher the proportion of accompanied Ro-Ro units, the greater will be the throughput capacity of the Unified Ferry Terminal. Should there be a higher proportion of unaccompanied Ro-Ro in 2040 than is envisaged in Table 2.4, then it will be necessary for Dublin Port Company to implement measures to increase the utilisation of the capacity of the

<sup>&</sup>lt;sup>1</sup> The twenty-foot equivalent unit (TEU) is an inexact unit of cargo capacity, often used for container ships and container ports, https://en.wikipedia.org/wiki/Twenty-foot\_equivalent\_unit

Unified Ferry Terminal, such as moving trailer units to back areas within Dublin Port and or implementing pricing initiatives which financially penalise trailers with long dwell times.

# Lo-Lo Capacity Increase

The Lo-Lo developments entail the immediate loss of Oil Berth 4 and the planned cessation of petroleum imports through Oil Berth 3 at some point in the future as petroleum imports decline. The loss of Oil Berth 4 will have no impact on the Port's overall throughput capacity. Although both the throughput and utilisation of OB3 are also low, it provides essential back-up capacity in the event of an outage on OB1 or OB2.

The MP2 Project will significantly increase both the berthage and the land area of the Container Terminal. Table 2.6 shows the increase in shipping activity and throughput by 2040.

Table 2.6: Indicative increase in Lo-Lo throughput and utilisation levels in Container Terminal from 2018 to 2040

	2018	2040	% Increase
Berthage	560 metres	927 metres	65%
Berth usage (TEU per metre p.a.)	590	798	35.0%
Land area	12.7 ha	18.5 ha (note 1)	46%
Land usage (TEU per hectare p.a.)	26,027	40,000	54%
Capacity (TEU p.a.)	508,000	740,000	147%
Capacity utilisation	65%	100%	
Average TEU per week	6,357	14,231	124%
Ships per week	8.3	11.0	33%
Average TEU per ship	766	1,294	69%

Note 1: includes a 2.8ha site on Tolka Quay Road and MP2 project 3ha

# 2.7.2 Ferry Passenger Traffic

Table 2.7 indicates the Passenger numbers passing through the Port in 2018.

Table 2.7: Dublin Port Passenger Numbers in 2018

Mode	Number	Percentage
Ferries	1,827,674	90.3%
Cruise	196,899	9.7%
Total	2,024,573	100.0%

While the focus of the MP2 Project is to increase cargo capacity, the numbers of passengers are expected to grow as a result of the MP2 Project and the Masterplan's other developments.

#### 2.7.3 Increase in Ship Size

The future growth in Ro-Ro and Lo-Lo will be accompanied by increases in ship sizes and the MP2 Project will provide longer and deeper berths both for Ro-Ro ferries and for Lo-Lo container ships.

Under the ABR Project Dublin Port is being deepened to -10.0m CD. Table 2.8 shows the draught handling capabilities at -10.0m CD.

Table 2.8: Draught handling capabilities at -10.0m CD

	Mean high water	Channel depth	Max draught	Mean low water	Channel depth	Max draught
Spring tides	4.1m	14.1m	13.1m	0.7m	10.7m	9.7m
Neap tides	3.4m	13.4m	12.4m	1.5m	11.4m	10.4m

Note: max draughts assume an under-keel clearance of 1.0m

To maintain set schedules, Ro-Ro ferries need to be able to access Dublin Port at all stages of the tide. Table 2.8 above indicates that ferries with draughts up to about 9.7 metres will be able to access the port. The proposed draught at Berth 52 and at Berth 53 is -10.0m CD. This will be sufficient for any conceivable size of Ro-Ro ferry that might be deployed by operators in the future.

Currently the Port handles Ro-Ro ferries up to 234m in length and 8.2m draught. A 240m ship is in operation in the UK and two ships of 240m length are under construction for an existing ferry operator.

For Lo-Lo container ships, the maximum size which can currently be handled in Dublin Port is limited by a combination of constraints, including berth depths and channel depth to give a practical maximum draught in the region of 9.0m. In 2018 432 container ships were handled at the DFT Container Terminal. The median ship nominal capacity was 864 TEU. The maximum size of container ship which has called to the Port in recent years is in the order of 1,400 TEU.

The deepening of the Port to -10.0m CD as part of the ABR Project will remove the channel constraint. The lengthening of Berth 50A and the redevelopment of Oil Berth 3 will lessen the existing berth constraints and allow large container ships to operate at the DFT Container Terminal.

Worldwide, container ships in the 1,000 to 3,500 TEU range, vary in size from 100m with 8m draught to 300m with 14m draught. The greatest number of ships vary in length from 200m to 250m and draught from 9m to 12m. The MP2 Project will enable a large proportion of the world fleet of container ships in the capacity range from 1,000 TEU to 3,500 TEU to be handled at the DFT Container Terminal.

#### 2.7.4 Maintenance

During the operational stage, maintenance of the quay/jetty structures will be minimal. Some maintenance of fenders, bollards, link spans and service infrastructure may be required. Maintenance access will be carried out from the deck of the structure.

There will be a requirement for maintenance dredging to be carried out within the berthing pockets and the navigation channel area. Future maintenance dredging will be subject to consents from the EPA and the Department of Housing, Local Government and Heritage.

### 2.7.5 Pollution Control

#### Storm Water

There will be limited additional hardstanding area developed as part of the project. At Berth 53 it is proposed to collect storm water from the new hardstanding areas in a closed system and discharge via a new silt trap and oil interceptor/separator to the local storm water drainage network (which is consented under the ABR Project).

The storm drainage network ultimately discharges to the sea at Berth 52 via a flap vale (or similar) in the quay wall. Minor modifications will be made to the drainage consented under the ABR Project to facilitate the Berth 52 realignment.

Rainfall on the new hardstanding at the infilled basin at Oil Berth 4 will be collected by a series of gullies and drains. The new network will be routed through new silt traps and oil interceptors/separators before discharge to the sea at the new the quay wall.

The methodology above was discussed and agreed in principle with Dublin City Council Drainage Department.

#### Wastewater

A gravity sewer is proposed to link the proposed toilet blocks to the existing gravity sewer serving Terminal 5 (which is to be demolished). The existing toilet provision at Terminal 1 Building is considered adequate for the proposed use. The existing network servicing the unified ferry terminal discharges via a series of gravity sewers and pumping stations to the main public foul network outside the Dublin Port Estate.

It is not anticipated that there will be any increase in the peak wastewater discharge to the public sewer as a result of the development.

#### Waste Disposal from Vessels

All waste from berthed vessels will be disposed of in accordance with the Dublin Port Ship's Waste Management Plan contained in Appendix 17-1 of the applicant's EIAR. The storage of waste at the berth will not be permitted. Waste will be collected directly by a licensed waste disposal contractor.

Disposal from vessels directly into the water at the berth, Liffey Channel, or Dublin Bay is strictly prohibited.

# Ship to Shore Power

Ship to Shore Power facilities will be provided for vessels on Berth 52 and Berth 53 to provide required hoteling load for vessels. This will allow engines to be turned off when vessels are berthed.

## 2.8 Review of proposed works

EC (2002, 2021) guidance indicates that a project description should identify all those elements of the project, alone or in combination with other projects or plans, that have the potential for having significant effects on the Natura 2000 site. To this end, the guidance (EC 2021) provides an indicative list of the key parameters of the plan or project to be identified. Table 2.14 of the AA Screening and NIS provides relevant information.

Size (e.g. in relation to direct land-take)	Yes: The foreshore boundary of the proposed works is detailed in Figures 2.1 and 2.2 above.
Overall affected area including the area affected by indirect impacts (e.g. noise, turbidity, vibrations)	Yes: Although the definition of the project's ZoI not always clear, all Natura 2000 within the likely Zone of Influence of the project have been considered.
Physical changes in the environment (e.g. modification of riverbeds or morphology of other water bodies, changes in the density of forest cover)	Yes: The potential physical changes to the environment from the proposed works are summarised in Section 2.3 and 2.4.
Changes in the intensity of an existing pressure (e.g. increase in noise, pollution or traffic);	Yes: During construction phase, increase in dredging and disposal activities (increased suspended sediment, vessel activity), noise associated with piling and construction activities. Increased size and number of vessels associated with operational phase.
Resource requirements (e.g. water abstraction, mineral extraction);	Yes: Section 3.3.4 of the applicant's AA Screening and NIS report describes the source and volume of fill material to be used for the proposed works.
Emissions (e.g. nitrogen deposition) and waste (and whether they are disposed of on land, water or in the air)	Yes: See Section 3.2 potential effects on water quality and habitat deterioration.
Transportation requirements (e.g. access roads)	Yes: Section 3.3.6 of the applicant's AA Screening and NIS report describes construction traffic.
Duration of construction, operation, decommissioning, etc.	Yes: Section 2.6.1 above.
Temporal aspects (timing of the different stages of a plan or project)	Yes: Section 2.6.1 above.
Distance from Natura 2000 sites and in particular from their designating features	Yes: See Section 3 of this report.
Cumulative impacts with other projects or plans	Yes: Addressed in Section 3.5 of this report.

#### SECTION 3 - STAGE 1 SCREENING FOR APPROPRIATE ASSESSMENT

# 3.1 Basis for screening the project

Article 6(3) of the Habitats Directive indicates that, "Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph  $4^2$ , the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public." These provisions are transposed under regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).

The project, as defined in Section 2, is not directly connected with the management of a Natura 2000 site, and under the provisions of the *European Communities (Birds and Natural Habitats) Regulations 2011* (as amended), and the Competent Authority (in this case the Department of Housing, Local Government and Heritage) must therefore determine whether an Appropriate Assessment is required.

Relevant guidance informing the AA screening includes that at a European (European Commission 2019, European Commission 2021) and national (DoEHLG 2010, Office of the Planning Regulator 2021) level.

# 3.2 Identification of possible effects

The applicant has used a source-pathway-receptor approach for screening consistent with OPR (2021). They have defined 'source' as the individual elements of the proposed works that have the potential to affect the identified ecological receptors. 'Pathway' was defined as the means or route by which a source can affect the ecological receptor. 'Ecological receptor' was defined as the Special Conservation Interests (for SPAs) or Qualifying Interests (of SACs/cSACs) for which conservation objectives have been set for the European sites under consideration. An effect is created when there is a linkage between the source, pathway and receptor. The applicant described possible effects under four themes:

#### Habitat loss

The application boundary of the MP2 Project is located outside of any European site, and as such no direct habitat loss from any European site was anticipated as a result of any aspect of the MP2 Project within the application boundary. The applicant also considered the potential for the proposed works to impact the habitats of sites in close proximity or to have indirect effects on qualifying habitats of sites further afield (see Section 3.3).

## Water quality and habitat deterioration

As well as the possibility of mobilised suspended sediments due to dredging or disposal, cement release through general construction activities or spillages of polluting substances

<sup>&</sup>lt;sup>2</sup> Article 6(4) relates to plans or projects which must be undertaken despite identification of an assessment determining a negative effect on a given site due to imperative reasons of overriding public interest (IROPI), including those of a social or economic nature. Suitable compensatory measures are required to maintain the coherence of the network should such a case be made.

were identified as potential sources of pollution to the marine environment at construction phase, as a result of:

- Demolition of buildings & structures;
- Berth Construction including the construction of waterside berths, quay walls, jetties, open piled structures
- Landside ancillary works to serve the marine operations including the construction of ramps and deck structures to access linkspans, services and drainage installation, and installation of jetty furniture and fender systems
- Accidental release of highly alkaline contaminants from concrete and cement during the demolition of buildings and structures and the construction of hardstand areas, waterside berths, quay walls, jetties, bridging structures
- General water quality impacts associated with works machinery, infrastructure and onland operations including the temporary storage of construction materials, oils, fuels and chemicals

Operational phase impacts associated with the MP2 Project (buildings/structures, berths and associated marine berthing and manoeuvring, and landside works) represents an increase in use of the land over the current normal day-to-day port activities. The principal potential sources of water quality impact were identified as:

- Increased suspended sediment levels due to port operations including the ongoing maintenance dredging of the proposed new berths;
- General water quality impacts associated with works machinery, infrastructure and onland operations including the temporary storage of construction materials, oils, fuels and chemicals, and releases associated with the operation and maintenance of surface water drainage systems;
- Discharges from dredging vessels at construction stage and vessels using the berths
  of the operational MP2 Project (ballast water, wastewater, oil spillages, fuel bunkering);
- Discharges from cargo handling (leakages from containers, bulk material spillages, losses from conveyor systems);
- Discharges from cargo storage areas and onward transportation (losses from hoppers, flat bulk stores and HGVs).

## Underwater noise and disturbance

As described in Section 2, some aspects of the MP2 Project will require activities in the marine environment and new marine infrastructure to be constructed and operated. Those elements of the proposed works which could produce underwater noise were identified as:

- Ground investigation works to assess the nature of the bedrock and overburden materials including cable percussion boring, rotary coring, and penetration testing
- Demolition of buildings and maritime infrastructure close to the Liffey channel
- Marine piling
- Dredging of 424,644m³ (note this was updated to 668,317m³ in response to a request for information from the EPA, in relation to the Dumping at Sea permit application S0024-02) of sediment to achieve desired depths in the various berths and channel widening
- Disposal of the dredged material at the proposed disposal site
- Increased vessel traffic following construction and operation of new port facilities

These activities carry an inherent risk of noise induced effects upon some marine species as a result of underwater acoustic energy being released into the marine environment.

#### Aerial noise and visual disturbance

Construction and operation the MP2 Project will involve a range of activities emitting aerial noise and associated movement of people, vehicles and vessels. There is a potential for disturbance to the overwintering special conservation interests of South Dublin Bay & River Tolka Estuary SPA and North Bull Island SPA from construction noise and the presence of construction operatives and their plant at the eastern end of the Port in the MP2 Project area and dredging activity in the river channel.

The proposed construction works will be undertaken over a period of approximately 9 years, with existing port operations continuing during the construction period.

At operational phase, there is also the potential for disturbance to the overwintering special conservation interests of these same SPAs from normal operational port activities in the MP2 Project area and in particular from the operation of Berth 53 and the operation of the Greenway with the proposed Heritage Zone adjacent to the Tolka Estuary as a destination for amenity users.

**Summary**: It is concluded that the applicant correctly identifies the possible effects for relevant Natura 2000 sites and their related qualifying interests, from the proposed works.

#### 3.3 Identification of relevant sites and features

As indicated in Section 3.2, a source-pathway-receptor approach was used to identify possible effects and relevant sites (Figures 3.1 and 3.2) and qualifying interests (see Table 3.1). The applicant's screening assessment of possible effects(Section 4.3 of the AA Screening and NS report) was robust and clearly linked to the Conservation Objectives and targets of the qualifying interests and SCIs of the relevant sites.

It should be noted that a number of the sites identified by the applicant were candidate SACs (see Figure 3.1), all of which have since been the subject of a Statutory Instrument and are now designated SACs.

#### Habitat loss

As indicated in Section 3.2, the MP2 Project is located outside of any European site, and as such no direct habitat loss from any European site is anticipated as a result of any aspect of the MP2 Project within the application boundary.

## Water quality and habitat deterioration

The applicant proposes to construct a new Ro-Ro jetty structure of *ca.* 406m in length as a new river berth (Berth 53). The berth is to be constructed 20m from the South Dublin Bay and River Tolka Estuary SPA boundary, and running parallel to it in a seaward direction. Below the water line, dredging is required up to the SPA boundary to achieve the design depth of -10.0m CD at the berthing pocket in front of the berth. Following dredging, installation of concrete mattresses to provide slope stabilisation and scour protection to the dredged berthing pocket will be required.

The applicant indicates that dredging activities could result in a plume of suspended sediments entering the South Dublin Bay & River Tolka Estuary SPA, with potential effects upon the adjacent intertidal area of the SPA, where the qualifying populations of overwintering waders

and waterbirds of both South Dublin Bay & River Tolka Estuary SPA and North Bull Island SPA can occur. At operational stage, there is a possibility that the new berth could result in changes to the existing tidal patterns and currents in this adjacent area of the SPA, or localised increases in wave heights due to changes in wave refraction patterns. Such occurrences may result in localised changes to the transport sediment regime in this part of the SPA and potentially result in changes to the morphology of the seafloor. There is also the potential for pollution associated with the construction and operational phase of the MP2 Project (see Section 3.2 above) to enter the South Dublin Bay & River Tolka Estuary SPA. The possibility of likely significant effects for both South Dublin Bay & River Tolka Estuary SPA and North Bull Island SPA could not be excluded.

With respect to the breeding and passage seabirds SCI (roseate, Arctic and common tern species) of the South Dublin Bay & River Tolka Estuary SPA, the applicant identified that potential sources of water pollution at construction and operational stage, as well as the risk of localised changes to the transport sediment regime or morphology of the seafloor to the north of Berth 53 may also present a risk to achieving or maintaining the conservation target for prey biomass available. Accordingly, the possibility of likely significant effects could not be excluded.

The proposed disposal site is located within Rockabill to Dalkey Island SAC. It is proposed to dispose of 668,317m<sup>3</sup> of dredge material at the proposed disposal site over a series of winter seasons between 2022 and 2032, periodically levelling the seabed to remove peaks and troughs created by the disposed material.

The applicant indicates that the closest qualifying reef habitat within the site is located 3.3km north of the proposed disposal site and 5km from the MP2 Project in Dublin Port. It is indicated that there is a possibility that the community structure target to conserve the intertidal and subtidal reef community complexes in a natural condition may be affected by plumes arising from the disposal of dredged material or polluting events if the activities resulted in elevated concentrations of suspended sediments or pollutants in or at the reef community complexes for prolonged periods. Accordingly, the possibility of likely significant effects could not be excluded. The potential for suspended sediments or polluting substances associated with the project to cause the deterioration of key resources of the harbour porpoise qualifying interest was ruled out.

The applicant indicates that the North Dublin Bay SAC Annex I habitat mudflat and sandflats not covered by seawater at low tide is less than 1km by sea from the proposed capital dredging locations. They identified a risk of suspended sediments as a result of dredging and/or pollutants associated with construction and operational phases escaping into the marine environment and impacting the Annex I habitat. The potential for future emissions from vehicles and shipping vessels during the operational phase to impact on local air quality, leading to greater levels of deposition of gaseous pollutants on to the Annex I habitat was also identified as a risk. Accordingly, the possibility of likely significant effects could not be excluded.

The applicant indicated that the same consideration was also relevant to the South Dublin Bay SAC Annex I mudflat and sandflats not covered by seawater at low tide qualifying habitat.

#### Underwater noise and disturbance

Relevant sites with potentially sensitive Annex II marine mammal receptors were identified by the applicant as Lambay Island SAC, designated for its populations of harbour and grey seals and Rockabill to Dalkey Island SAC, designated for its harbour porpoise community. It was also noted that Bull Island (less than 2km from the proposed dredging areas) is a known seal

haul out site and grey seals occur here and also at Lambay Island (16km from the disposal site) and Ireland's Eye (7.6km from the disposal site) which are known breeding sites. Harbour seals also haul out at Bull Island, Lambay Island and Ireland's Eye.

The applicant indicated the potential for exposure to underwater noise at both the construction (associated with demolition and piling operations within Dublin Port and disturbance during dredging at the berths and channel widening works, and disposal of dredged material at the proposed disposal site) and operational stages (associated with increased vessel noise) to affect the Rockabill to Dalkey Island SAC harbour porpoise qualifying interest and the Lambay Island SAC harbour and grey seal qualifying interests. Accordingly, the possibility of likely significant effects could not be excluded.

#### Aerial noise and visual disturbance

The overwintering SCIs of South Dublin Bay & River Tolka Estuary SPA and North Bull Island SPA forage in the Tolka Estuary adjacent to aspects of the MP2 Project. The applicant indicates that waterbird use of the Tolka Estuary is strongly constrained by tidal conditions, with all non-swimming birds, or those that forage in shallow water, typically forced to leave this part of the estuary as the tide rises. However, the area immediately north of Berth 53 was found to be very important for foraging when the sand and mudflats were exposed at low tide. The area of intertidal mud available to waterbirds increases in size during low spring tides, when a larger portion of the sand and mudflats are exposed. The feature species that use this part of the site do so only at very low tides. At normal barometric pressure there will be on average only 40 occasions per year when the tidal levels are low enough (below 0.35m CD) for waders to feed in this part of the SPA (and approximately 23 low tides each year between September and March when the non-breeding SCIs are generally present and using the SPA). Each event when the tide is below 0.35m will on average last for just under 1 hour.

The applicant identified the potential for disturbance to the overwintering SCIs of South Dublin Bay & River Tolka Estuary SPA and North Bull Island SPA from construction noise and the presence of construction operatives and their plant at the eastern end of the Port in the MP2 Project area and dredging activity in the river channel. At operational phase, there was also the potential for disturbance to the overwintering SCIs of these same SPAs from normal operational port activities, in particular from the operation of Berth 53 and the operation of the Greenway with the proposed Heritage Zone adjacent to the Tolka Estuary as a destination for amenity users. The applicant also identified the risk that construction or operation of the MP2 Project in proximity to intertidal feeding areas of the South Dublin Bay & River Tolka Estuary SPA might result in disturbance and/or loss of attractiveness of the areas used by the breeding and passage terns SCIs of that SPA. Accordingly, the possibility of likely significant effects could not be excluded.

**Summary:** It is considered that, though not well defined within the applicant's screening, the ZoI associated with the potential effects has identified the relevant sites and qualifying interests. The potential for significant impacts on additional mobile species from Natura 2000 sites outside of those identified by the applicant is not considered likely.

# 3.4 Sites identified by the applicant to be screened for AA

The sites identified by the applicant to be within the ZoI of the works associated with the proposed project were subject to screening assessment. The high level outcome for each site is presented in Table 3.1. The table lists the sources of potential likely significant effect which are considered against each of the relevant sites and their qualifying interests. Where a

potential for LSE has been identified (shaded cell) this is indicated for the relevant qualifying interest against the possible effect.

Figure 3.1: SACs considered in the screening



Figure 3.2: SPAs considered in the screening

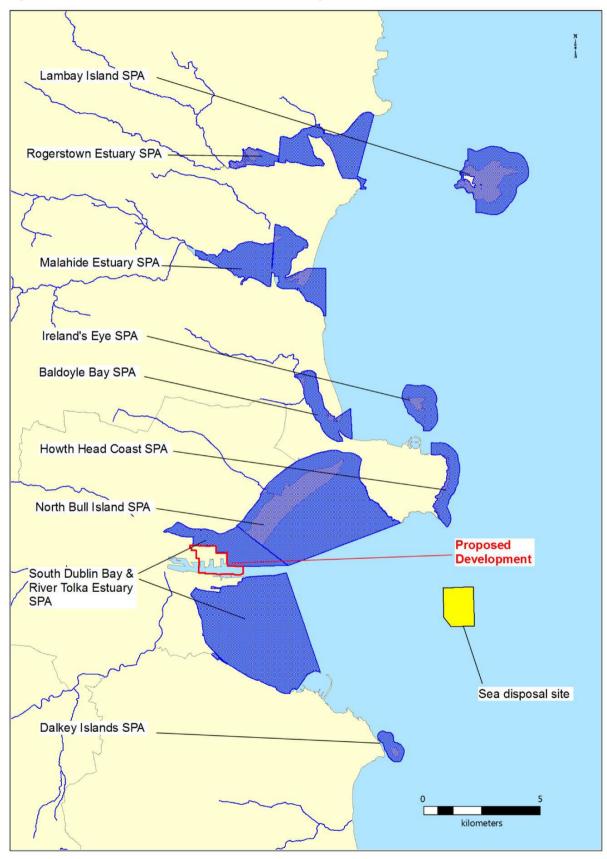


Table 3.1: Sites screened for likely significant effect and the high level outcome for each site

		applic	nce to cation (km)		Ø	habitat n	e and	and visual ance	effects
Site name	Site code	Development	Disposal site	Qualifying interests	Habitat loss	Water quality and habitat deterioration	Underwater noise disturbance	Aerial noise and v disturbance	In-combination effects
				SACs					
Lambay	000204	21.6	16	Reefs					
Island				Vegetated sea cliffs of the Atlantic and Baltic coasts					
				Grey seal					
				Harbour seal					
Rogerstown	000208	23.5	19	Mudflats and sandflats not covered by seawater at low tide					
Estuary				Salicornia and other annuals colonising mud and sand					
				Atlantic salt meadows					
				Shifting dunes along the shoreline with Ammophila arenaria					
				Fixed coastal dunes with herbaceous vegetation					
Malahide	000205	18.8	16	Mudflats and sandflats not covered by seawater at low tide					
Estuary				Salicornia and other annuals colonising mud and sand					
				Atlantic salt meadows					
				Shifting dunes along the shoreline with Ammophila arenaria					
	000100	10.0		Fixed coastal dunes with herbaceous vegetation					
Baldoyle	000199	13.8	8.4	Mudflats and sandflats not covered by seawater at low tide					
Bay				Salicornia and other annuals colonising mud and sand Atlantic salt meadows					
				Mediterranean salt meadows					
	002193	12.9	7.6	Perennial vegetation of stony banks		1			

			nce to cation (km)		y v	habitat n	e and	and visual ance	effects
Site name	Site code	Development	Disposal site	Qualifying interests	Habitat loss	Water quality and habitat deterioration	Underwater noise disturbance	Aerial noise and v disturbance	In-combination effects
Ireland's Eye				Vegetated sea cliffs of the Atlantic and Baltic coasts					
Howth Head	000202	5.6	3	Vegetated sea cliffs of the Atlantic and Baltic coasts  European dry heaths					
North Dublin Bay	000206	0.95	4.8	Mudflats and sandflats not covered by seawater at low tide Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi) Embryonic shifting dunes Shifting dunes along the shoreline with Ammophila arenaria (white dunes) Fixed coastal dunes with herbaceous vegetation (grey dunes) Humid dune slacks Petalwort					
South Dublin Bay	000210	0.03	8	Mudflats and sandflats not covered by seawater at low tide Annual vegetation of drift lines  Salicornia and other annuals colonising mud and sand Embryonic shifting dunes					
Rockabill to Dalkey Island	003000	5	0	Reefs Harbour porpoise					
Codling Fault Zone	003015	31.9	22.9	Submarine structures made by leaking gases					

Site name	Site code	Distance to application area (km)			SSC	nd habitat ion	oise and	id visual ice	n effects
		Development	Disposal site	Habitat loss Water quality and habitat deterioration Underwater noise and disturbance	Aerial noise and visual disturbance	In-combination effects			
			I.	SPAs		L			
South	004024	0.02	-	Light-bellied brent goose					
Dublin Bay				Oystercatcher					
& River				Ringed plover					
Tolka				Grey plover					
Estuary				Knot					
				Sanderling					
				Dunlin					
				Bar-tailed godwit					
				Redshank					
				Black-headed gull Roseate tern					
				Common tern					
				Arctic tern					
				Wetland and waterbirds					
North Bull	004006	0.875	_	Light-bellied Brent Goose					
Island				Shelduck					
				Teal					
				Pintail					
				Shoveler					
				Oystercatcher					
				Golden Plover					
				Grey Plover					
				Knot			]		

Site name	Site code	Distance to application area (km)			S	habitat n	e and	and visual ance	effects
		Development	Disposal site	Qualifying interests	Habitat loss	Water quality and habitat deterioration	Underwater noise disturbance	Aerial noise and v disturbance	In-combination effects
				Sanderling					
				Dunlin					
				Black-tailed Godwit					
				Bar-tailed Godwit					
				Curlew					
				Redshank					ļ
				Turnstone					
				Black-headed Gull					
Dalla Is	004040	45.4		Wetland and Waterbirds					
Baldoyle	004016	15.4	-	Light-bellied brent goose					
Bay				Shelduck Diagond planer					
				Ringed plover Golden plover					
				Grey plover					
				Bar-tailed godwit					
				Wetland and waterbirds					
Howth Head Coast	004113	7.9	2.6	Kittiwake					
Ireland's	004117	12.3	9.1	Cormorant					
Eye				Herring gull					
				Kittiwake					
				Guillemot					
				Razorbill					
	004172	9	5.5	Roseate tern					

		Distance to application area (km)			S	habitat ın	se and e	visual e	effects
Site name	Site code	Development	Disposal site	Qualifying interests	Habitat loss	Water quality and habitat deterioration	Underwater noise disturbance	Aerial noise and v disturbance	In-combination effects
Dalkey				Common tern					
Islands				Arctic tern					
Malahide	004025	20	14	Great Crested Grebe					
Estuary				Light-bellied Brent Goose					
				Shelduck					
				Pintail					
				Goldeneye					
				Red-breasted Merganser					
				Oystercatcher					
				Golden Plover					
				Grey Plover					
				Knot Dunlin					
				Black-tailed Godwit					
				Bar-tailed Godwit					
				Redshank					
				Wetland and Waterbirds					
Rogerstown	004015	19.3	15.1	Greylag Goose					
Estuary	004013	10.0	10.1	Light-bellied Brent Goose					
Lottdary				Shelduck					
				Shoveler					
				Oystercatcher					
				Ringed Plover	1				
				Grey Plover					

Site name	Site code	applic	Disposal site (km)	Qualifying interests	Habitat loss	Water quality and habitat deterioration	Underwater noise and disturbance	Aerial noise and visual disturbance	In-combination effects
		_		Knot		Š		٩	
				Dunlin					
				Black-tailed Godwit					
				Redshank					
				Wetland and Waterbirds					
Lambay	004069	21.6	16	Fulmar					
Island				Cormorant					
				Shag					
				Greylag goose					
				Lesser black-backed gull Kittiwake					
				Guillemot					
				Razorbill					
				Puffin					

#### 3.5 In-combination effects

The applicant considered a range of other projects in terms of their potential to have incombination effects with the MP2 Project. Relevant plans and projects were described in Section 4.4 and illustrated on Figures 4.5 and 4.6 of the AA screening and NIS report and included:

## Other Projects within the MP2 Project Area

- Alexandra Basin Redevelopment (ABR)
- Extension Terminal 2 Check-In Area
- Vehicular and Pedestrian Entrances off Breakwater Road South
- Dublin Port Internal Road Network
- Demolition of Buildings and Provision of Yard
- Floating Dock Section
- Vehicle Service/Maintenance Facility and Office Accommodation
- Asahi Demolition and Provision of Yard
- Demolition of Calor Offices and Provision of Yard
- Interim Unified Passenger Terminal
- Alexandra Road, Dublin Port, Dublin 1
- Dublin Ferry port Terminal Access
- Berth 49 Ramp
- DPC Post 2019/2021 Maintenance Dredging Campaign (Subject to Dumping at Sea Licence)

#### Other Projects surrounding the MP2 Project Area

- Dublin Inland Port
- North Lotts & Grand Canal Dock Planning Scheme 2014
- Exo Building
- Poolbeg West SDZ
- Irish Water Ringsend WwTP Upgrade Project
- Howth Yacht Club Marina Extension

A search of other plans and projects which were advanced since the NIS was originally submitted, with potential to have in-combination effects with the MP2 Project, was made by the applicant in order to update the in-combination appraisal in response to an EPA RFI as part of the MP2 Dumping at Sea permit application. The search of other plans and projects identified the following two projects:

- Dublin Port 2022 2029 Maintenance Dredging Programme (Dumping at Sea application submitted to the EPA on 25th February 2021 (Ref S0004-03), not yet determined.
- Dublin Harbour Capital Dredging Project (Dumping at Sea application submitted to the EPA on 26th August 2021 (Ref S0033-01), not yet determined.

Of these other projects and plans only two were identified where the potential for incombination effects with the MP2 Project could not be excluded:

#### **Dublin Port Internal Road Network**

DPC was granted planning permission in December 2017 (Reg. Ref. 3084/16 and 2684/17) for works to the port's private internal road network, consisting of:

- Construction of new roads and enhancements to existing roads within the Dublin Port Estate north of River Liffey;
- Construction of enhanced landscaping and a shared pedestrian and cycle amenity route of approximately 4km in length along the northern boundary of the Port Estate (the Greenway);
- Construction of new pedestrian and cycle overbridge at Promenade Road;
- Construction of access ramps to pedestrian and cycle overbridge at Promenade Road;
- Construction of new pedestrian and cycle underpass at Promenade Road;
- Construction of 11 no. new signage gantries;
- Ancillary construction works, including site clearance, demolitions, earthworks, pavement construction, construction of verges, modifications to accesses, construction of new and amended drainage services, diversion and installation of utility services, installation of road markings and signs and accommodation works;
- Works to existing boundaries and construction of new boundaries; and
- Construction of minor works to the junctions of East Wall Road with Tolka Quay Road and East Wall Road with Alexandra Road.

This approval is now being implemented by DPC. The applicant indicates that the wintering waterbirds using that part of the Tolka estuary north of Berth 53 are likely to be disturbed at both construction and operational phases of MP2 Project when that area becomes available at very low tides (on approximately 40 occasions per year). Also, disturbance at operational phase of the Greenway development could also occur. Measures have been applied to reduce the disturbance effects as part of the Greenway development, to ensure that disturbance is avoided or at worst, remains at the lower end of the scale and does not result in dispersive behaviour. When considered in combination, effects could occur at operational stage of both projects due to the cumulative effect of visual disturbance stimuli of both users of the greenway, the heritage zone as a destination for amenity users and operation of Berth 53 resulting in a dispersive behaviour effect which could decrease the range, timing or intensity of use of this part of the South Dublin Bay & River Tolka Estuary SPA. Therefore the possibility of likely significant effects either cumulatively or in-combination with the Dublin Port Internal Road Network project could not be excluded beyond scientific doubt.

Given that Section 3.3 above and Section 4.3.4 of the applicant's AA Screening and NIS report indicated that the overwintering SCIs of both South Dublin Bay & River Tolka Estuary SPA and North Bull Island SPA forage in the Tolka Estuary adjacent to aspects of the MP2 Project, the possibility of likely significant effects either cumulatively or in-combination with the Dublin Port Internal Road Network project cannot be excluded for North Bull Island SPA.

#### **Howth Yacht Club Marina Extension**

The applicant indicates that only Howth Yacht Club (HYC) and DPC currently hold Dumping at Sea Permits for use of the Dublin Bay disposal site. HYC has the benefit of a Dumping at Sea Permit (Ref. No. S0010-01) to load and dispose of a maximum of 120,000 tonnes of dredged material from Howth Marina over a one year period. In its application documents, HYC estimated a maximum daily quantity for disposal of 1,200 tonnes and 800 tonnes in each load. It also suggested a spring or winter commencement and campaign duration of six months. This volume of material is equivalent to approximately 6% of the annual permitted quantity of material that may be disposed at this site by DPC under Dumping at Sea Permit S0024-01.

While disposal by DPC is restricted to the winter months (October to March), no such restriction applies to HYC activities. If or when it does occur, disposal will be subject to the approval of the Dublin Port Harbourmaster and disposal activity will not be permitted by the Harbourmaster for DPC and HYC operations simultaneously. The rates of disposal of dredge

material at sea as a result of both projects will not exceed the rate of disposal of the MP2 Project alone for this reason. As indicated in Section 3.3 above, the possibility of likely significant effects on the qualifying Reef habitat of Rockabill to Dalkey Island SAC cannot be excluded as a result of disposal at sea activities alone. As such, the possibility of likely significant effects either cumulatively or in combination with the Howth Yacht Club Marina Extension project could not be excluded beyond scientific doubt.

# 3.6 Transboundary effects

No transboundary effects were identified.

# 3.7 Screening conclusion

### Finding of no significant effects statement:

The applicant has used a Source-Pathway-Receptor approach to identify sources of possible effects associated with the proposed project which have the potential to interact with qualifying interests of relevant Natura 2000 sites. Given the nature and scale of the proposed works; the possible effects, SPA/SAC site selection and feature screening is deemed appropriate, and an adequate level of information has been provided to justify the screening conclusions.

#### **SACs**

LSE was discounted for all sites considered relevant to the proposed works with respect to habitat loss effects.

LSE was discounted for the following sites (and all qualifying interests) with respect to water quality and habitat deterioration effects from the proposed works:

- Lambay Island SAC
- Rogerstown Estuary SAC
- Malahide Estuary SAC
- Baldoyle Bay SAC
- Ireland's Eye SAC
- Howth Head SAC
- Codling Fault Zone SAC

LSE was also discounted for the following qualifying interests of sites with respect to water quality and habitat deterioration effects from the proposed works:

- North Dublin Bay SAC (Annual vegetation of drift lines, Salicornia and other annuals colonising mud and sand, Atlantic salt meadows (Glauco-Puccinellietalia maritimae), Mediterranean salt meadows (Juncetalia maritimi), Embryonic shifting dunes, Shifting dunes along the shoreline with Ammophila arenaria (white dunes), Fixed coastal dunes with herbaceous vegetation (grey dunes), Humid dune slacks, Petalwort)
- South Dublin Bay SAC (Annual vegetation of drift lines, Salicornia and other annuals colonising mud and sand, Embryonic shifting dunes)
- Rockabill to Dalkey Island SAC (harbour porpoise)

LSE was discounted for the following sites (and all qualifying interests) with respect to underwater noise and disturbance effects from the proposed works:

- Rogerstown Estuary SAC
- Malahide Estuary SAC
- Baldoyle Bay SAC
- Ireland's Eye SAC
- Howth Head SAC
- North Dublin Bay SAC
- South Dublin Bay SAC
- Codling Fault Zone SAC

LSE was also discounted for the following qualifying interests of sites with respect to underwater noise and disturbance effects from the proposed works:

- Lambay Island SAC (Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts)
- Rockabill to Dalkey Island SAC (Reefs)

LSE was discounted for all SACs considered relevant to the proposed works with respect to aerial noise and visual disturbance effects.

LSE was discounted for the following sites (and all qualifying interests) with respect to incombination effects:

- Lambay Island SAC
- Rogerstown Estuary SAC
- Malahide Estuary SAC
- Baldovle Bay SAC
- Ireland's Eye SAC
- Howth Head SAC
- North Dublin Bay SAC
- South Dublin Bay SAC
- Codling Fault Zone SAC

LSE was also discounted for the following qualifying interests of sites with respect to incombination effects:

Rockabill to Dalkey Island SAC (harbour porpoise)

It is accepted that likely significant effects can be discounted for these SAC sites and their qualifying interests.

#### **SPAs**

LSE was discounted for all sites considered relevant to the proposed works with respect to habitat loss.

LSE was discounted for the following sites with respect to water quality and habitat deterioration and aerial noise and visual disturbance effects from the proposed works:

- Baldoyle Bay SPA
- Howth Head Coast SPA

- Ireland's Eye SPA
- Dalkey Islands SPA
- Malahide Estuary SPA
- Rogerstown Estuary SPA
- Lambay Island SPA

LSE was discounted for all SPAs considered relevant to the proposed works with respect to underwater noise and disturbance.

LSE was discounted for the following sites (and all SCIs) with respect to in-combination effects:

- Baldoyle Bay SPA
- Howth Head Coast SPA
- Ireland's Eye SPA
- Dalkey Islands SPA
- Malahide Estuary SPA
- Rogerstown Estuary SPA
- Lambay Island SPA

LSE was also discounted for the following SCIs of sites with respect to in-combination effects:

South Dublin Bay & River Tolka Estuary SPA (Roseate tern, Common tern, Arctic tern)

It is accepted that likely significant effects can be discounted for these SPA sites and their SCIs.

#### Consultation with conservation authorities

The consultation feedback from prescribed bodies is provided in Table 1.1. Comments relating to Natura 2000 aspects of the application were received from the EPA, NPWS and Bird Watch Ireland.

#### **Screening determination**

#### **SACs**

LSE on the following qualifying interests and sites could not be ruled out with respect to water quality and habitat deterioration effects from the proposed works:

- North Dublin Bay SAC (Mudflats and sandflats not covered by seawater at low tide)
- South Dublin Bay SAC (Mudflats and sandflats not covered by seawater at low tide)
- Rockabill to Dalkey Island SAC (Reefs)

LSE on the following qualifying interests and sites could not be ruled out with respect to underwater noise and disturbance effects from the proposed works:

- Lambay Island SAC (Grey seal, Harbour seal)
- Rockabill to Dalkey Island SAC (Harbour porpoise)

LSE on the following qualifying interest could not be ruled out with respect to in-combination water quality and habitat deterioration effects with the Howth Yacht Club Marina Extension project:

Rockabill to Dalkey Island SAC (Reefs)

It is accepted that likely significant effects cannot be discounted for these sites and qualifying interests and that Stage 2 Appropriate Assessment is required.

#### **SPAs**

LSE on the following SCIs and sites could not be ruled out with respect to water quality and habitat deterioration and aerial noise and visual disturbance effects from the proposed works:

- South Dublin Bay & River Tolka Estuary SPA (Light-bellied brent goose, Oystercatcher, Ringed plover, Grey plover, Knot, Sanderling, Dunlin, Bar-tailed godwit, Redshank, Black-headed gull, Roseate tern, Common tern, Arctic tern, Wetland and waterbirds)
- North Bull Island SPA (Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Black-headed Gull, Wetland and Waterbirds)

LSE on the following SCIs and sites could not be ruled out with respect to in-combination aerial noise and visual disturbance effects with the Dublin Port Internal Road Network project:

- South Dublin Bay & River Tolka Estuary SPA (Light-bellied brent goose, Oystercatcher, Ringed plover, Grey plover, Knot, Sanderling, Dunlin, Bar-tailed godwit, Redshank, Black-headed gull)
- North Bull Island SPA Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Black-headed Gull)

It is accepted that likely significant effects cannot be discounted for these sites and SCIs and that Stage 2 Appropriate Assessment is required.

#### Screening for AA carried out by An Bord Pleanála

ABP undertook an AA screening as part of the Strategic Infrastructure consenting process for the works, as detailed in the Inspector's Report<sup>3</sup>. ABP concluded that sufficient information had been provided to undertake an appropriate assessment of the project. ABP's screening confirmed the conclusions of the applicant's report as to both the sites to be taken forward for appropriate assessment, and the features for which a likely significant effect was identified.

This AA screening, which was an independent consideration of the likely significant effects of the MP2 Project on the Natura 2000 sites within the relevant zones of influence, has come to the equivalent conclusion as An Bord Pleanála.

<sup>&</sup>lt;sup>3</sup> https://www.gov.ie/en/foreshore-notice/c4b86-dublin-port-company-mp2-project/

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