Natura Impact Statement

Appropriate Assessment

Dublin Port

Brexit Infrastructure at Dublin Port

Prepared by: Moore Group – Environmental Services

June 2020

On behalf of the Office of Public Works (OPW)

& An Bord Pleanála

Project Proponent	Office of Public Works (OPW)
Project	Brexit Infrastructure at Dublin Port
Title	Natura Impact Statement Appropriate Assessment Brexit Infrastructure at Dublin Port

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Abbreviations

AA	Appropriate Assessment
ABP	An Bord Pleanála
CEMP	Construction Environmental Management Plan
EEC	European Economic Community
EPA	Environmental Protection Agency
EU	European Union
GIS	Geographical Information System
IW	Irish Water
LAP	Local Area Plan
NHA	Natural Heritage Area
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
OSI	Ordnance Survey Ireland
OPW	Office of Public Works
pNHA	proposed Natural Heritage Area
SAC	Special Area of Conservation
SPA	Special Protection Area
SuDS	Sustainable Drainage System

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1. Introduction

1.1. General Introduction

This Natura Impact Statement (NIS) has been prepared by Moore Group – Environmental Services on behalf of the Office of Public Works and An Bord Pleanála. The NIS report contains information to assist An Bord Pleanála in carrying out an Appropriate Assessment (AA) on the effects of the development of Brexit Infrastructure at Dublin Port (hereafter referred to as the proposed Project) on European sites, to ascertain whether or not the Project would adversely affect European site integrity.

This NIS informs the Appropriate Assessment process in the determination of the significance of potential impacts on the conservation objectives of European sites. It is necessary that the Project has regard to Article 6 of the Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (referred to as the Habitats Directive). This is 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 (S.I. 477) (referred to as the Habitats Regulations). The focus of the assessment is on objectively assessing by reference to the evidence as to whether the Project will adversely affect the integrity of the European sites in light of their conservation objectives.

The development will be granted approval by way of a Ministerial Order, which will be issued by reason of the impending withdrawal and/or the withdrawal of the United Kingdom from the European Union. Pursuant to this Order, the provisions of the Planning and Development Act 2000 (as amended) shall not apply to the development being carried out on behalf of the Minister by the Office of Public Works on the site specified in the text of the Order. Similar Orders have already been issued for several other projects undertaken by OPW in Dublin Port in response to Brexit. These projects were subject to an EIA and AA screening as appropriate.

The proposed development is being treated in accordance with the requirements outlined in S.I. No. 418/2019 - European Union (Environmental Impact Assessment and Habitats) (Section 181 of the Planning and Development Act 2000) Regulations 2019. S.I. No. 418/2019 amends as specified the *Planning and Development Act 2000 (as amended)*. Of particular relevance to the proposed development, are the insertions of subsections after subsection (2):

- "(2A)(b) Where development is proposed to be carried out by or on behalf of a Minister concerned pursuant to an order under subsection (2)(a) and the Minister concerned is satisfied, having had regard to Part X and Part XAB, that an environmental impact assessment or an appropriate assessment, or both such assessments of the proposed development is or are required, the Minister concerned shall prepare or cause to be prepared an application for approval, which shall include the documents and information referred to in paragraph (c), in respect of the development and shall apply to the Board for such approval."
- "(2A)(c) An application for approval referred to in paragraph (b) shall include a draft of the order the Minister concerned proposes to make under subsection (2)(a), the

plans, drawings and particulars in relation to the proposed development and, other than where an exemption is granted under subsection (2I), an environmental impact assessment report or Natura impact statement, or both that report and that statement, as the case may be, in respect of the development."

In accordance with these subsections, an Environmental Impact Assessment Report and Natura Impact Statement are being submitted to ABP for approval in respect of the proposed development. The documents submitted to ABP will also be subject to public consultation and will be made available to the public online.

1.2. Legislative Background - The Habitats and Birds Directives

The Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora) is the main legislative instrument for the protection and conservation of biodiversity in the EU. Under the Directive Member States are obliged to designate Special Areas of Conservation (SACs) which contain habitats or species considered important for protection and conservation in a European Union context.

The Birds Directive (Council Directive 79/409/EEC, amended by Council Directive 2009/147/EC on the Conservation of Wild Birds), is concerned with the long-term protection and management of all wild bird species and their habitats in the EU. Among other things, the Directive requires that Special Protection Areas (SPAs) be established to protect migratory species and species which are rare, vulnerable, in danger of extinction, or otherwise require special attention.

Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas, designated under the Birds Directive, form a pan-European network of protected sites known as Natura 2000. The Habitats Directive sets out a unified system for the protection and management of SACs and SPAs.

Articles 6(3) and 6(4) of the Habitats Directive set out the requirement for an assessment of proposed plans and projects likely to affect Natura 2000 sites.

Article 6(3) addresses the requirement to screen plans and projects and to carry out a further assessment if required (Appropriate Assessment (AA)); Article 6(4) establishes requirements in cases of imperative reasons of overriding public interest):

> Article 6(3): *"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 subjected to an appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, 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."

Article 6(4): *"If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of the Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to the beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."*

These obligations in relation to Appropriate Assessment have been implemented in Ireland under Part XAB of the Planning and Development Act 2000, as amended, and in particular Section 177U and Section 177V thereof.

1.3. Methodology

The Commission's methodological guidance (EC, 2002) promotes a four-stage process to complete the AA and outlines the issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

Stages 1-2 deal with the main requirements for assessment under Article 6(3). Stage 3 may be part of Article 6(3) or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step of Article 6(4).

Stage 1 Screening: The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant.

Stage 2 Appropriate Assessment: In this stage, there is a consideration of the impact of the project with a view to ascertain whether there will be any adverse effect on the integrity of the Natura 2000 site either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are predicted impacts, an assessment of the potential mitigation of those impacts is considered.

Stage 3 Assessment of Alternative Solutions: This stage examines alternative ways of implementing the project that, where possible, avoid any adverse impacts on the integrity of the Natura 2000 site.

Stage 4 Assessment where no alternative solutions exist and where adverse impacts remain: Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the sites will be necessary.

1.4. Guidance

The NIS has been compiled in accordance with guidance contained in the following documents:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 rev.).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 & PSSP 2/10.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2002); hereafter referred to as the EC Article Guidance Document.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC (EC Environment Directorate-General, 2000); hereafter referred to as MN2000.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC (EC, 2018).

1.5. Data Sources

Sources of information that were used to collect data on the Natura 2000 network of sites, and the environment within which they are located, are listed below:

- The following mapping and Geographical Information Systems (GIS) data sources, as required:
    - National Parks & Wildlife (NPWS) protected site boundary data;
    - Ordnance Survey of Ireland (OSI) mapping and aerial photography;
    - OSI/Environmental Protection Agency (EPA) rivers and streams, and catchments;
    - Open Street Maps;
    - Digital Elevation Model over Europe (EU-DEM);

  - Google Earth and Bing aerial photography 1995-2020;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie including:
  - Natura 2000 - Standard Data Form;
  - Conservation Objectives;
  - Site Synopses;
- National Biodiversity Data Centre records;
  - Online database of rare, threatened and protected species;
  - Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2019); and
- Relevant Development Plans in neighbouring areas;
  - Dublin City Development Plan 2016 – 2022
  - Dublin Port Masterplan 2012 – 2040

1.6. Statement of Authority

This report was compiled by Ger O'Donohoe (B.Sc. Applied Aquatic Sciences (GMIT, 1993) & M.Sc. Environmental Sciences (TCD, 1999)) who has over 25 years' experience in environmental impact assessment and has completed numerous reports for Appropriate Assessment Screening and Natura Impact Statements in terrestrial and aquatic habitats.

Assessment of birds was provided by Dr. Chris Peppiatt, Consultant Ornithologist & Ecologist.

Engineering and technical data for the Project was supplied by AWN Consulting and Arup.

1.7. Description of the Project

Dublin Port is the main seaport and point of entry for ferry and container traffic into the Republic of Ireland. It is located east of the city centre. It is equipped with a ferry terminal, container terminals and storage facilities, as well as supporting infrastructure, including public roads. The proposed site for the proposed development is on an area of previously developed land within the boundary of Dublin Port.

The proposed development will consist of:

Various Sites along Bond Drive Extension, Dublin Port, Dublin 3
The proposed development of Brexit related facilities is to be provided within the existing boundary of lands of the Dublin Port Company, and will consist of:

Installation of 5 single storey porta-cabin structures totalling 375m^2 (75m^2 each) to provide an import office, a facilities management office and driver welfare facilities;

Resurfacing and amalgamation of 8 existing yards including the modification of existing drainage and lighting infrastructure;

Parking for 175 heavy goods vehicles, 62 cars and 48 bicycles;

Gates, signage and all ancillary site works.

Former Bord na Mona site on Yard 3, Bond Drive Extension, Dublin Port, Dublin 3, D03 F9C1
The proposed development of Brexit related facilities is to be provided within the existing boundary of lands of the Dublin Port Company, and will consist of:

Installation of 2 single storey porta-cabin structures totalling 150m^2 (75m^2 each) to provide an export office and sanitary facilities;

Parking for 30 heavy goods vehicles and 10 cars;

Gates, signage and all ancillary site works.

Former O'Toole Transport site on Yard 4, Promenade Road, Dublin Port, Dublin 3, D03 F9C1
The proposed development of Brexit related facilities is to be provided within the existing boundary of lands of the Dublin Port Company, and will consist of:

Extension (the floor area of which extension is approximately 1760m^2) and refurbishment of an existing industrial building on Promenade Road to provide inspection facilities for customs, sanitary and phytosanitary (SPS) and health checks and controls;

Parking for 3 cars and 28 bicycles;

Gates, signage and all ancillary site works.

The overall planning application site area is approximately 5.4 hectares.

Surface Water Drainage

The proposed surface water drainage system has been designed for a 2-year storm return period, and with no surface flooding at any part of the site for storms up to and including the 1:100 year return period plus 20% for climate change. Run-off from currently developed/hardstanding/roofs sites enters the off site drainage system, therefore there should be a significant future reduction in discharge volumes as a result of increase in attenuation within the proposed development. Oil petrol interceptors will be provided on all discharges from newly developed which will improve the quality of run off entering the sewer. All restricted discharges will have a sump unit which will also reduce the amount of silt

entering the receiving system. Overall, the drainage will discharge through the Dublin Port Drainage outfall which includes additional measures for spill mitigation.

Foul Drainage

Domestic effluent arising from occupation of the proposed development will be collected in the existing foul drainage network within the site and discharged to the existing foul sewer infrastructure within Dublin Port. The wastewater discharged from the site will ultimately discharge to the municipal Wastewater Treatment Plant (WWTP) at Ringsend.

Figure 1 shows the proposed Project location and Figure 2 shows a detailed view of the proposed Project boundary on recent aerial photography. Figure 3 presents a plan of the proposed Project.

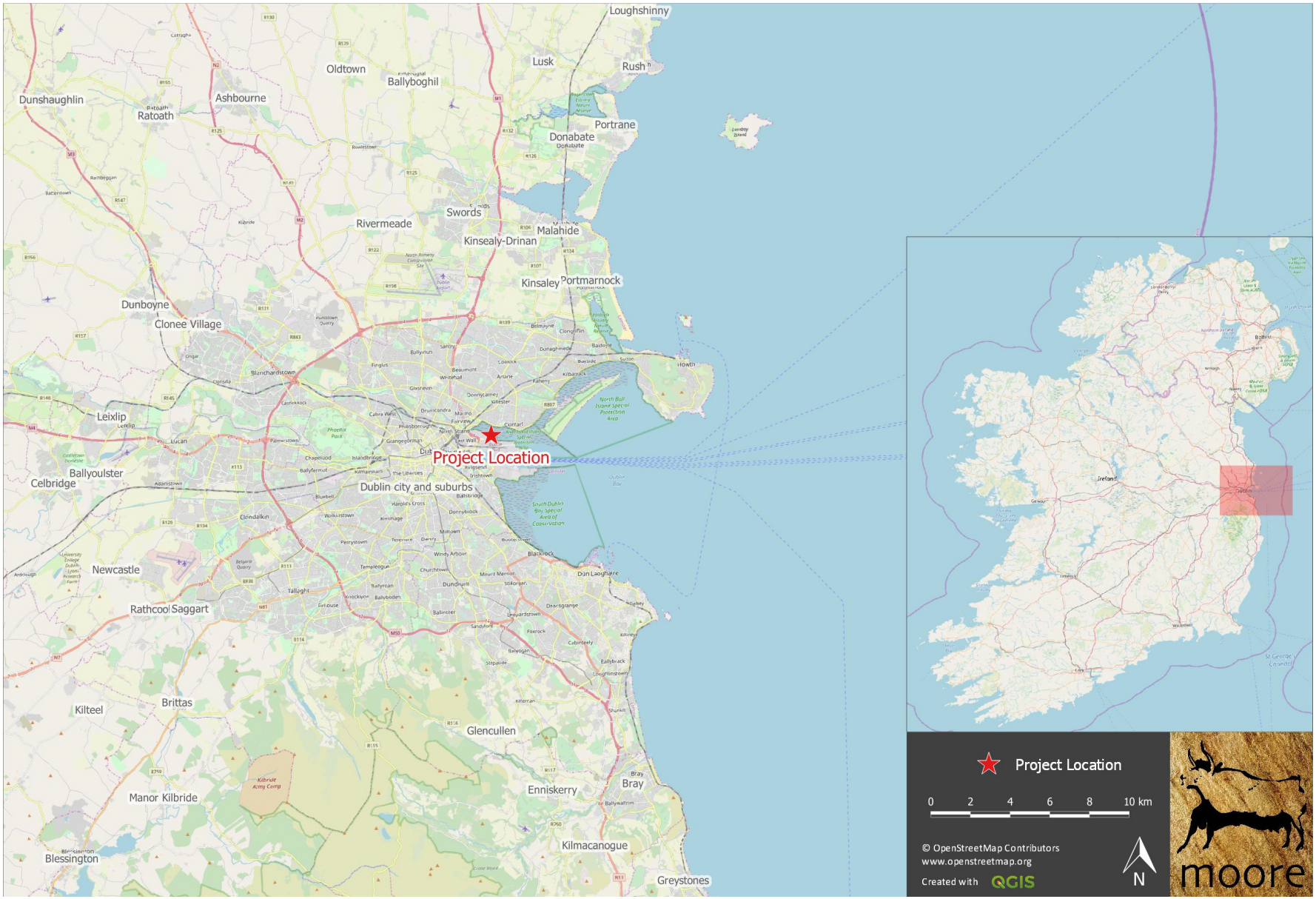

Figure 1. Showing the Project location at Dublin Port.

Figure 2. Showing the Project boundaries on recent aerial photography.

Figure 3. Plan of the proposed Project.

1.8. Construction Environmental Management

A Construction Environmental Management Plan (CEMP) has been prepared to manage the potential local impacts of construction activities associated with the development project.

The construction environmental management plan sets out the principles to be adhered to and outlines measures that will be implemented during the construction of the proposed development to ensure that potential environmental impacts and disturbance will be minimised or eliminated.

It will be the responsibility of the project proponent and contractor employed to update and add (where required) specific control measures relevant to the environmental management plan and procedures. The control measures will be amended by improvement with regards to environmental protection and will take cognisance of additional environmental commitments arising from planning conditions.

The Project Proponent will oversee the process through appointment of the contractor with input from the Project engineer and oversight from the planning and project team.

The main concern with regard to Biodiversity is the water quality of Dublin Bay. Good water quality status will be ensured by avoiding potential impacts during the construction phase and by the employment of appropriate design such as SuDS during the operational phase.

There will be no discharge to sea, and surface water will discharge to the existing Dublin Port drainage system. The drainage plan will utilise attenuation and interceptors on the site and further interceptors located along the extent of the Dublin Port system (see chapter 7 of the EIAR and Engineering report).

Run-off into excavations/earthworks cannot be prevented entirely and is largely a function of prevailing weather conditions. Due to the very low permeability of the Dublin Boulder Clay which underlies the site, infiltration to the underlying aquifer is not anticipated.

Care will be taken to ensure that exposed soil surfaces are stable to minimise erosion. All exposed soil surfaces will be within the main excavation site which limits the potential for any offsite impacts. All run-off will be prevented from directly entering into any water courses as no construction will be undertaken directly adjacent to open water.

No significant dewatering will be required during the construction phase which would result in the localised lowering of the water table. There may be localised pumping of surface run-off from the excavations during and after heavy rainfall events to ensure that the excavation is kept relatively dry.

Management measures will be put in place during the construction phase to ensure protection of surface waterbodies. These measures are in compliance with the relevant CIRIA guidance documents; Control of Water Pollution from construction Sites, Guidance for consultants and contractors (C532); and Environmental Good Practice on Site (3rd edition) (C692).

Detailed mitigation measures are outlined in Section 3.6 of this NIS which will be incorporated into the CEMP.

2. Stage 1 – Screening for Appropriate Assessment

Screening determines whether appropriate assessment is necessary by examining:

1) Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and;

2) The potential effects of a project or plan, either alone or in combination with other projects or plans, on a Natura 2000 site in view of its conservation objectives and considering whether these effects will be significant.

If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process in certain circumstances, becomes overly complicated, then the process must proceed to Stage 2 (AA).

Department of Environment, Heritage and Local Government (2009) Guidance on Appropriate Assessment suggests an assessment of European sites within a zone of impact of 15 km. This distance is a guidance only and the zone of impact has been identified taking consideration of the nature and location of the proposed Project to ensure all European sites with connectivity to it are considered in terms of a catchment-based assessment.

The zone of impact may be determined by connectivity to the proposed Project in terms of:

- Nature, scale, timing and duration of works and possible impacts, nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Sensitivity and location of ecological features.

The guidance provides that, at the screening stage, it is necessary to identify the sites and compile information on their qualifying interests and conservation objectives. In preparation for this, the potential for source pathway receptor connectivity is firstly identified and detailed information is then provided on sites with connectivity. European sites that are located within 15 km of the Project are listed in Table 1 and presented in Figures 4 and 5, below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website (www.npws.ie) on the 14th April 2020.

Table 1 European Sites located within 15km or the potential zone of impact[1] of the Project.

Site Code	Site name	Distance (km)[2]
000199	Baldoyle Bay SAC	7.23

[1] All European sites potentially hydrologically connected irrespective of the nature or scale of the proposed Project.

[2] Distances indicated are the closest geographical distance between the proposed Project and the European site boundary, as made available by the NPWS. Connectivity along hydrological pathways may be significantly greater.

Site Code	Site name	Distance (km)[2]
000202	Howth Head SAC	7.72
000205	Malahide Estuary SAC	10.39
000206	North Dublin Bay SAC	1.97
000210	South Dublin Bay SAC	1.89
001209	Glenasmole Valley SAC	14.58
002122	Wicklow Mountains SAC	13.61
002193	Ireland's Eye SAC	10.88
003000	Rockabill to Dalkey Island SAC	8.07
004006	North Bull Island SPA	1.96
004016	Baldoyle Bay SPA	7.24
004024	South Dublin Bay and River Tolka Estuary SPA	0.02
004025	Malahide Estuary SPA	11.04
004040	Wicklow Mountains SPA	13.89
004113	Howth Head Coast SPA	10.37
004117	Ireland's Eye SPA	10.68
004172	Dalkey Islands SPA	11.48

There are numerous European sites in the potential zone of impact of the proposed development. It has been noted that the site has existing connection to the Municipal Sewer and the Dublin Port Surface Water Drainage system. There are no rivers or streams in the vicinity of the proposed Project, as indicated in Ordnance Survey Ireland (OSI) Geographical Information System (GIS) data available from the Environmental Protection Agency (EPA).

The likelihood of contamination of surface water during the construction or operational phase is very low given the existing surface water drainage system of Dublin Port includes a series of interceptors and that additional interception will be put in place as outlined in Chapter 7 of the EIAR.

The site is located adjacent to the South Dublin Bay and River Tolka Estuary SPA (Site code 004024) and has proximal connectivity with the North Dublin Bay SAC (Site code 000206), the South Dublin Bay SAC (Site code 000210), the North Bull Island SPA (Site code 004006).

There is either no connectivity to the other European sites listed or they are located at too great a distance for significant impacts to occur and so only these latter four sites are brought forward for further consideration. Given the proximity of the proposed Project to Dublin Bay, a Construction Environmental Management Plan will be required and, therefore, Stage 2 NIS is required.

Stage 2 Appropriate Assessment of the Project has been prepared as follows.

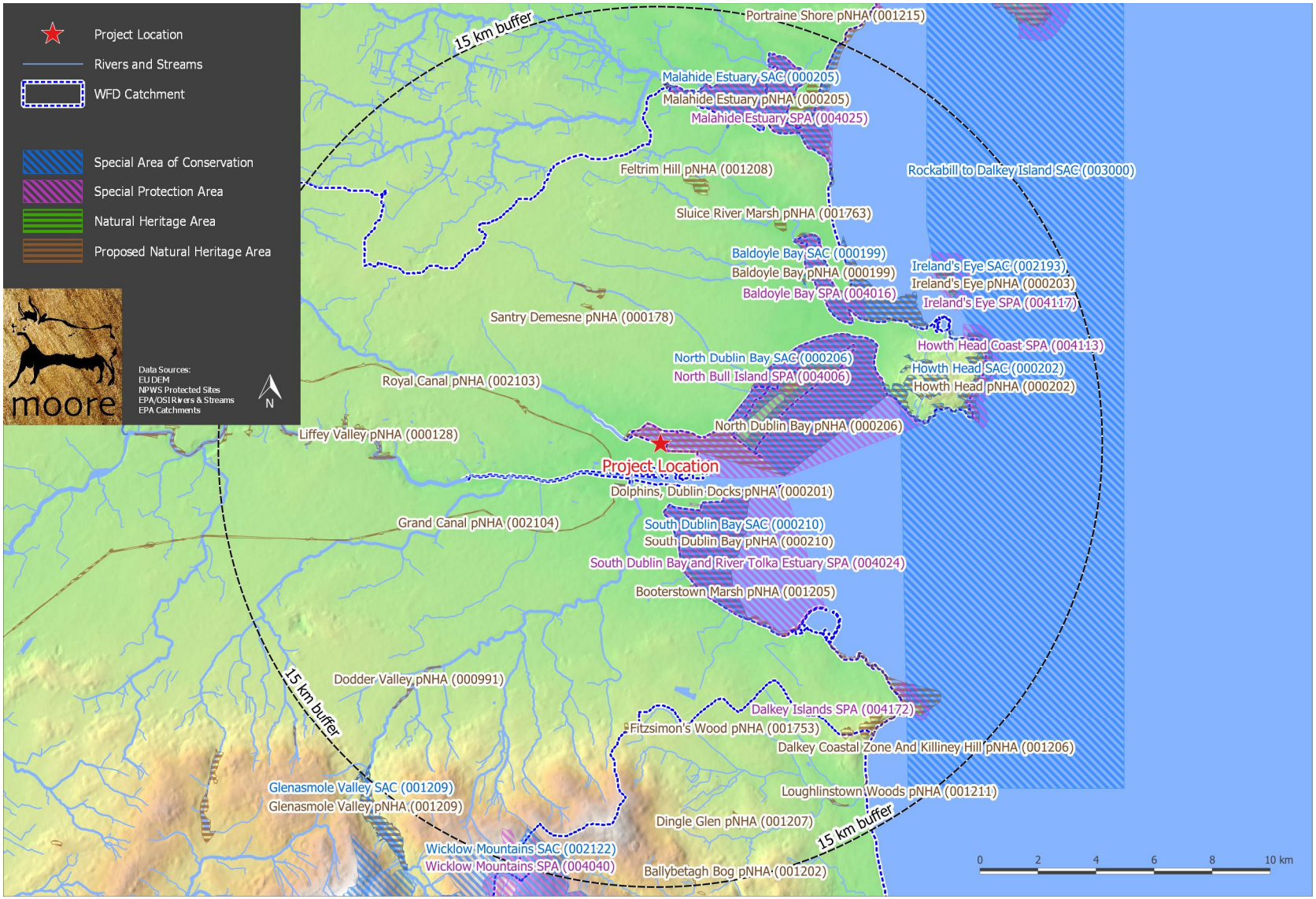

Figure 4. Showing European sites and NHAs/pNHAs within 15 km of the proposed Project.

Figure 5. Detailed view of European sites in the vicinity of the proposed Project.

3. Stage 2 – Appropriate Assessment

This stage considers whether the Project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a European site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects. The Stage 2 Appropriate Assessment comprises a scientific examination of the plan / project and the relevant European site; to identify and characterise any possible implications for the site in view of the site's conservation objectives, structure and function; taking account of in combination effects.

3.1. Description of European Sites Potentially Affected

Potential impacts on the following European sites have been identified and excerpts from the current sites synopses are provided (full site synopses are available from www.npws.ie).

3.1.1. North Dublin Bay SAC [000206]

The NPWS provides the following from Site Synopsis in relation to the North Dublin Bay SAC (Version date 12.08.2013, 000206_Rev13.Doc):

This site covers the inner part of north Dublin Bay, the seaward boundary extending from the Bull Wall lighthouse across to the Martello Tower at Howth Head. The North Bull Island is the focal point of this site.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[1140] Tidal Mudflats and Sandflats

[1210] Annual Vegetation of Drift Lines

[1310] Salicornia Mud

[1330] Atlantic Salt Meadows

[1410] Mediterranean Salt Meadows

[2110] Embryonic Shifting Dunes

[2120] Marram Dunes (White Dunes)

[2130] Fixed Dunes (Grey Dunes)*

[2190] Humid Dune Slacks

[1395] Petalwort (Petalophyllum ralfsii)

This site is an excellent example of a coastal site with all the main habitats represented. The site holds good examples of nine habitats that are listed on Annex I of the E.U. Habitats Directive; one of these is listed with priority status. Several of the wintering bird species have populations of international importance, while some of the invertebrates are of national importance. The site contains a number of rare and scarce plants including some which are legally protected. Its proximity to the capital city makes North Dublin Bay an excellent site for educational studies and research.

3.1.2. **North Dublin Bay SAC [000210]**

The NPWS provides the following from the Site Synopsis in relation to the South Dublin Bay SAC (Version date 10.12.2012, 000210_Rev15.Docx):

This site lies south of the River Liffey in Co. Dublin and extends from the South Wall to the west pier at Dun Laoghaire. It is an intertidal site with extensive areas of sand and mudflats. The sediments are predominantly sands but grade to sandy muds near the shore at Merrion Gates. The main channel which drains the area is Cockle Lake.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[1140] Tidal Mudflats and Sandflats

[1210] Annual vegetation of drift lines

[1310] Salicornia and other annuals colonising mud and sand

[2110] Embryonic shifting dunes

This site is a fine example of a coastal system, with extensive sand and mudflats, and incipient dune formations. South Dublin Bay is also an internationally important bird site.

3.1.3. **North Bull Island SPA [004006]**

The NPWS provides the following from the Site Synopsis in relation to the North Bull Island SPA (Version date 25.03.2014):

This site covers all of the inner part of north Dublin Bay, with the seaward boundary extending from the Bull Wall lighthouse across to Drumleck Point at Howth Head. The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5 km long and 1 km wide and runs parallel to the coast between Clontarf and Sutton. Part of the interior of the island has been converted to golf courses.

The North Bull Island SPA is an excellent example of an estuarine complex and is one of the top sites in Ireland for wintering waterfowl. It is of international importance on account of both the total number of waterfowl and the individual populations of Light-bellied Brent Goose, Black-tailed Godwit and Bar-tailed Godwit that use it. Also of significance is the regular presence of several species that are listed on Annex I of the E.U. Birds Directive, notably Golden Plover and Bar-tailed Godwit, but also Ruff and Short-eared Owl. North Bull Island is a Ramsar Convention site, and part of the North Bull Island SPA is a Statutory Nature Reserve and a Wildfowl Sanctuary.

3.2. Description of the Existing Environment

The site of the proposed development comprises two relatively small areas of open gravelled surfaces (Fossit Code ED2) and artificial surfaces and buildings (Fossit Code BL3). The northern and larger (c. 3.75 hectares) of the two sections of the site of the proposed development, Bond Drive Extension, is a rectangle of land with its long axis running from east to west. This rectangle of land is bordered on its northern and eastern boundaries by a strip of land from 25 to 35 metres in width and on which there is a soil bank or bund 10-15 metres wide and several metres high. A shelter belt of mixed woodland (WD2), mainly comprised of Sycamore, White Poplar and Scots Pine, has been planted on the soil bank and has now reached maturity.

The area to the north and east of this boundary zone is part of the River Tolka estuary and is designated as part of the South Dublin Bay and River Tolka Estuary SPA. The area of estuary adjacent to the northern wooded soil bank (and to the east of the VP used by the bird surveyor) is characterised by rocky shore fucoid reef (LR2; Natura 2000 1170). The channel of the River Tolka runs close to this shore so that here is very little exposed sediment, even at low tide.

There is a smaller (c. 1.65 hectares) site to the south which is referred to as Yard 3&4 comprises a hardstand area and associated warehouses on Promenade Road.

There is a Common Tern nesting pontoon located c. 760m to the northeast of the nearest part of the proposed development site (i.e. the Bond Drive Extension site). The land areas (the pontoon is 100 metres offshore of the docks) between the site of the proposed development and the pontoon are all covered with existing and operating parts of the Dublin docks. The nearest area that is used by post-breeding/passage flocks of Common, Arctic and Roseate terns is at least two kilometres from the site of the proposed development.

Dublin Bay and environs has a wealth of marine mammals including seals, harbour porpoise, dolphins and whales recorded in its waters. Its international importance is recognised through the designation of a number of Special Areas of Conservation. Grey (*Halichoerus grypus*) and harbour (*Phoca vitulina*) seals are regularly observed within the Port and vicinity of the Tolka Estuary. Harbour porpoise (Phocoena phocoena) have been observed as far in as the North Bank Lighthouse in the navigation channel of Dublin Port (pers. comm. IWDG).

There are no rare or protected habitats recorded in the study areas inside the site boundary. The sites may be considered of Low Ecological Value at a Local level.

3.3. Conservation Objectives of European Sites

3.3.1. North Dublin Bay SAC (000206)

The following Conservation Objective is set out for the North Dublin Bay SAC – Version 1, 6th November 2013. Specific attributes, measures and targets are presented in the relevant Conservation Objectives documents and will be addressed in more detail if required after potential impacts have been determined.

1140 Mudflats and sandflats not covered by seawater at low tide

To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes
Community extent	Hectares	Maintain the extent of the *Mytilus edulis* - dominated community, subject to natural processes
Community structure: *Mytilus edulis* density	Individuals/m^2	Conserve the high quality of the *Mytilus edulis*-dominated community, subject to natural processes
Community distribution	Hectares	Conserve the following community types in a natural condition: Fine sand to sandy mud with *Pygospio elegans* and *Crangon crangon* community complex; Fine sand with *Spio martinensis* community complex.

1210 Annual vegetation of drift lines

To restore the favourable conservation condition of Annual vegetation of drift lines in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area increasing, subject to natural processes, including erosion and succession. Total area mapped: South Bull - 0.11ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes

Attribute	Measure	Target
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the presence of species-poor communities with typical species: sea rocket (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex spp*.)
Vegetation structure: negative indicator species	Hectares	Negative indicator species (including non-natives) to represent less than 5% cover

1310 *Salicornia* and other annuals colonising mud and sand

To restore the favourable conservation condition of *Salicornia* and other annuals colonizing mud and sand in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island - 29.10ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes
Physical structure: sediment supply	Presence/ absence of physical barriers	Maintain, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions
Physical structure: creeks and pans	Occurrence	Maintain creek and pan structure, subject to natural processes, including erosion and succession
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward
Vegetation structure: vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated
Vegetation composition: typical species and sub-communities	Percentage cover	Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)
Vegetation structure: negative indicator species - *Spartina anglica*	Hectares	No significant expansion of common cordgrass (*Spartina anglica*). No new sites for this species and an annual spread of less than 1%

1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

To restore the favourable conservation condition of Atlantic salt meadows (*GlaucoPuccinellietalia maritimae*) in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island - 81.84ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes
Physical structure: sediment supply	Presence/ absence of physical barriers	Maintain natural circulation of sediments and organic matter, without any physical obstructions
Physical structure: creeks and pans	Occurrence	Maintain creek and pan structure, subject to natural processes, including erosion and succession
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward
Vegetation structure: vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of subcommunities with typical species listed in SMP (McCorry and Ryle, 2009)
Vegetation structure: negative indicator species - *Spartina anglica*	Hectares	No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%

1410 Mediterranean salt meadows (*Juncetalia maritimi*)

To maintain the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island - 7.98ha.
Habitat distribution	Occurrence	No decline or change in habitat distribution, subject to natural processes.
Physical structure: sediment supply	Presence/ absence of physical barriers	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions

Attribute	Measure	Target
Physical structure: creeks and pans	Occurrence	Maintain creek and pan structure, subject to natural processes, including erosion and succession
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime
Vegetation structure: zonation	Occurrence	Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward
Vegetation structure: vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub-communities with characteristic species listed in SMP (McCorry and Ryle, 2009)
Vegetation structure: negative indicator species - *Spartina anglica*	Hectares	No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%

2110 Embryonic shifting dunes

To restore the favourable conservation condition of Embryonic shifting dunes in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-sites mapped: North Bull - 2.64ha; South Bull - 3.43ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes.
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Vegetation structure: zonation	Occurrence	Maintain range of coastal habitats, including transitional zones, subject to natural processes including erosion and succession
Vegetation composition: plant health of foredune grasses	Percentage cover	More than 95% of sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e. green plant parts above ground and flowering heads present)
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the presence of species-poor communities with typical species: sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*)
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover

2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)

To restore the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes') in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. North Bull - 2.20ha; South Bull - 0.97ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes.
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Vegetation structure: zonation	Occurrence	Maintain range of coastal habitats, including transitional zones, subject to natural processes including erosion and succession
Vegetation composition: plant health of dune grasses	Percentage cover	95% of marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e. green plant parts above ground and flowering heads present)
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the presence of species-poor communities dominated by marram grass (*Ammophila arenaria*) and/or lymegrass (*Leymus arenarius*)
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover

2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)

To restore the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation ('grey dunes') in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. For subsites mapped: North Bull - 40.29ha; South Bull - 64.56ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes

Attribute	Measure	Target
Vegetation structure: sward height	Centimetres	Maintain structural variation within sward
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub-communities with typical species listed in Delaney et al. (2013)
Vegetation composition: negative indicator species (including *Hippophae rhamnoides*)	Percentage Cover	Negative indicator species (including non-natives) to represent less than 5% cover
Vegetation composition: scrub/trees	Percentage Cover	No more than 5% cover or under control

2190 Humid dune slacks

To restore the favourable conservation condition of Humid dune slacks in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area increasing, subject to natural processes including erosion and succession. For sub-sites mapped: North Bull - 2.96ha; South Bull - 9.15ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Physical structure: hydrological and flooding regime	Water table levels; groundwater fluctuations (metres)	Maintain natural hydrological regime
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub-communities with typical species listed in Delaney et al. (2013)
Vegetation composition: cover of *Salix repens*	Percentage cover; centimetres	Maintain less than 40% cover of creeping willow (*Salix repens*)
Vegetation composition: negative indicator species	Percentage Cover	Negative indicator species (including non-natives) to represent less than 5% cover
Vegetation composition: scrub/trees	Percentage Cover	No more than 5% cover or under control

1395 Petalwort *Petalophyllum ralfsii*

To maintain the favourable conservation condition of Petalwort in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Distribution of populations	Number and geographical spread of populations	No decline.
Population size	Number of individuals	No decline. Population at Bull Island estimated at a maximum of 5,824 thalli. Actual population is more likely to be 5% of this, or c. 300 thalli
Area of suitable habitat	Hectares	No decline. Area of suitable habitat at Bull Island is estimated at c. 0.04ha.
Hydrological conditions: soil moisture	Occurrence	Maintain hydrological conditions so that substrate is kept moist and damp throughout the year, but not subject to prolonged inundation by flooding in winter
Vegetation structure: height and cover	Centimetres and percentage	Maintain open, low vegetation with a high percentage of bryophytes (small acrocarps and liverwort turf) and bare ground

3.3.2. South Dublin Bay SAC (000210) - Version 1, 22nd August 2013

The following Conservation Objective is set out for the South Dublin Bay SAC. Specific attributes, measures and targets are presented in the relevant Conservation Objectives documents and will be addressed in more detail if required after potential impacts have been determined.

1140 Mudflats and sandflats not covered by seawater at low tide

To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in South Dublin Bay SAC, which is defined by the following list of attributes and targets.

Attribute	Measure	Target
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes
Community extent	Hectares	Maintain the extent of the *Zostera*-dominated community, subject to natural processes
Community structure: *Mytilus edulis* density	Individuals/m^2	Conserve the high quality of the *Zostera*-dominated community, subject to natural processes
Community distribution	Hectares	Conserve the following community types in a natural condition: Fine sands with *Angulus tenuis* community complex.

3.3.3. North Bull Island SPA (004006)

The following Conservation Objectives are set out for the North Bull Island SPA – Version 1, 9th March 2015. Specific attributes, measures and targets are presented in the relevant Conservation Objectives documents and will be addressed in more detail if required after potential impacts have been determined.

Generic Conservation Objectives

In the absence of specific conservation objectives, the following generic conservation objectives can be applied to each qualifying species listed. Species with specific conservation objectives are listed below.

To maintain the favourable conservation condition of [each qualifying species] in North Bull Island SPA, which is defined by the following list of attributes and targets:

[Qualifying Bird Species]

Attribute	Measure	Target
Population trend	Percentage change	Long term population trend stable or increasing
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by [each qualifying species], other than that occurring from natural patterns of variation

Specific Conservation Objectives

A99 Wetlands

To maintain the favourable conservation condition of the wetland habitat in North Bull Island SPA as a resource for the regularly occurring migratory waterbirds that utilise it. This is defined by the following attribute and target:

Attribute	Measure	Target
Habitat area	Hectares	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713 hectares, other than that occurring from natural patterns of variation.

3.3.4. South Dublin Bay and River Tolka Estuary SPA (004024)

The following Conservation Objectives are set out for the South Dublin Bay and River Tolka Estuary SPA – Version 1, 9th March 2015. Specific attributes, measures and targets are presented in the relevant Conservation Objectives documents and will be addressed in more detail if required after potential impacts have been determined.

Specific Conservation Objectives and Target Notes are set by the NPWS (Vers 1; 9th March 2015) for the South Dublin Bay and River Tolka Estuary SPA (004025) are set out in Table 2 as follows.

Table 2 Conservation objectives of the South Dublin Bay and River Tolka Estuary SPA.

SCI	Conservation Objectives	Attribute	Target

Light-bellied Brent Goose **A046**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Population trend	Long term population trend stable or increasing.
		Distribution	No significant decrease in the range, timing or intensity of use of areas by this species, other than that occurring from natural patterns of variation.
Oystercatcher **A130**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Population trend	Long term population trend stable or increasing.
		Distribution	No significant decrease in the range, timing or intensity of use of areas by this species, other than that occurring from natural patterns of variation.
Ringed Plover **A137**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Population trend	Long term population trend stable or increasing.
		Distribution	No significant decrease in the range, timing or intensity of use of areas by this species, other than that occurring from natural patterns of variation.
Grey Plover **A141**	Grey Plover is proposed for removal from the list of SCIs for the South Dublin Bay and River Tolka Estuary SPA. As a result, site specific conservation objectives have not been set for this species.	None	None
Knot **A143**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Population trend	Long term population trend stable or increasing.
		Distribution	No significant decrease in the range, timing or intensity of use of areas by this species, other than that occurring from natural patterns of variation.
Sanderling **A144**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Population trend	Long term population trend stable or increasing.
		Distribution	No significant decrease in the range, timing or intensity of use of areas by this species, other than that occurring from natural patterns of variation.
Dunlin **A149**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Population trend	Long term population trend stable or increasing.
		Distribution	No significant decrease in the range, timing or intensity of use of areas by this species, other than that occurring from natural patterns of variation.
Bar-tailed Godwit	To maintain the favourable conservation condition of the species	Population trend	Long term population trend stable or increasing.

A157	in the South Dublin Bay and River Tolka Estuary SPA	Distribution	No significant decrease in the range, timing or intensity of use of areas by this species, other than that occurring from natural patterns of variation.
Redshank **A162**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Population trend	Long term population trend stable or increasing.
		Distribution	No significant decrease in the range, timing or intensity of use of areas by this species, other than that occurring from natural patterns of variation.
Black-headed Gull **A179**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Population trend	Long term population trend stable or increasing.
		Distribution	No significant decrease in the range, timing or intensity of use of areas by this species, other than that occurring from natural patterns of variation.
Roseate Tern **A192**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Passage population: individuals	No significant decline
		Distribution: roosting areas	No significant decline
		Prey biomass available	No significant decline
		Barriers to connectivity	No significant decline
		Disturbance at roosting site	Human activities should occur at levels that do not adversely affect the numbers of this species among the post-breeding aggregation of terns
Common Tern **A193**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Breeding population abundance: apparently occupied nests (AONs)	No significant decline
		Productivity rate: fledged young per breeding pair	No significant decline
		Passage population: individuals	No significant decline
		Distribution: breeding colonies	No significant decline
		Distribution: roosting areas	No significant decline

		Prey biomass available	No significant decline
		Barriers to connectivity	No significant decline
		Disturbance at breeding site	Human activities should occur at levels that do not adversely affect the breeding population of this species.
		Disturbance at roosting site	Human activities should occur at levels that do not adversely affect the numbers of this species among the post-breeding aggregation of terns
Arctic Tern **A194**	To maintain the favourable conservation condition of the species in the South Dublin Bay and River Tolka Estuary SPA	Passage population: individuals	No significant decline
		Distribution: roosting areas	No significant decline
		Prey biomass available	No significant decline
		Barriers to connectivity	No significant decline
		Disturbance at roosting site	Human activities should occur at levels that do not adversely affect the numbers of this species among the post-breeding aggregation of terns
Wetlands **A999**	To maintain the favourable conservation condition of the wetland habitat in the South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it.	Habitat area	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,192 hectares, other than that occurring from natural patterns of variation.

3.4. Consideration of Impacts on European Sites

3.4.1. Habitats Directive Annex I Habitats

There are no Annex I habitats located under the footprint or in the vicinity of the proposed development areas. There will be no direct impacts on River Barrow and River Nore SAC and there will be no habitat loss or fragmentation as a result of the proposed development. Having considered direct impacts and ruling them out, indirect impacts are then considered in terms of source pathway vectors.

Potential impacts on the South Dublin Bay and River Tolka Estuary SPA are considered in terms of hydrological connectivity and surface water runoff.

A worst-case scenario may arise were the project to result in a significant detrimental change in water quality in Dublin Bay either alone or in combination with other projects or plans as a result of indirect pollution, the effect would have to be considered in terms of changes in water quality which would significantly affect the habitats or food sources for which the Dublin Bay sites are designated.

This is considered further in terms of indirect impacts in section 3.5. below.

3.4.2. **Habitats Directive Annex II Species**

Cetaceans & Seals

A scoping email was sent to the Irish Whale & Dolphin Group and a response received which is included as an Appendix to the Project EIAR. The core response of the IWDG is included here as follows.

IWDG Consulting believe that the risk of disrupting the life cycle of marine mammals in that area is extremely low. As the works are not occurring underwater, a marine mammal observer will not be required. The works are proposed to resurface hard-standing areas, to put in place addition surface water drainage to additional interception within the Dublin Port Drainage Scheme and to refurbish existing warehouses and erect low scale control points. There will be no blasting, major groundworks or coring and consequently there will be no significant noise or vibration generated during construction.

In summary, it is the expert opinion of the IWDG Consulting, that it is unlikely that these proposed works will have any significant impacts on marine mammals in the vicinity of the works nor have the conservation objectives of the Rockabill to Dalkey Island SAC been compromised.

3.4.3. **Birds Directive Annex I Species**

An Avian Impact Assessment was undertaken by Dr. Chis Peppiatt and the full report is presented as an Appendix to the Project EIAR. The findings of that assessment with regard to Annex I Birds are include as follows.

No species listed in Annex I of the E.U. Birds Directive were recorded within the site of the proposed development. Of the six species of birds actually recorded at the site of the proposed development, only one is a special conservation interest (SCI) of the South Dublin Bay and River Tolka SPA, which has 13 SCI species in all. This species, Black-headed Gull, is listed as a wintering interest of the SPA. A maximum of one bird was recorded within the site of the proposed development. A single Herring Gull was also recorded on one occasion within

the larger northern block of the site of the proposed development and gulls (i.e. both Herring and Black-headed) were also seen in flight over these areas. Both species are listed in the Birds of Conservation Concern in Ireland (BoCCI) 2014-2019 red list in respect of breeding populations only. Four species of terrestrial birds- Magpie, Hooded Crow, Pied Wagtail and Feral Pigeon- were also recorded at the site of the proposed development. None of the four is of particular conservation interest (i.e. none are SCIs of any local SPA, are listed in Annex I of the EU Birds Directive, or in the current BoCCI Red or Amber lists).

Birds recorded in the vicinity of, but not within, the site of the proposed development (i.e. in the wooded shelter belt and in the River Tolka estuary) included six of the thirteen South Dublin Bay and River Tolka Estuary SPA SCI species: Light-bellied Brent Goose, Oystercatcher, Redshank, Dunlin, Bar tailed Godwit and Black-headed Gull. One species listed in Annex I of the E.U. Birds Directive, Bar tailed Godwit, was recorded during the surveys. Three species, Curlew, Redshank and Dunlin are in the Birds of Conservation Concern in Ireland (BoCCI) 2014-2019 red list in respect of breeding and wintering populations, while a further three species, Woodcock, Black-headed Gull and Herring Gull, are in the red list in respect of breeding populations only.

3.4.4. Ecological Network Supporting Natura 2000 Sites

An analysis of the proposed Natural Heritage Areas and designated Natural Heritage Areas in terms of their role in supporting the species using Natura 2000 sites was undertaken. These supporting roles mainly relate to mobile fauna such as mammals and birds which may use pNHAs and NHAs as “stepping stones” between Natura 2000 sites.

Article 10 of the Habitats Directive and the Habitats Regulations 2011 place a high degree of importance on such non-Natura 2000 areas as features that connect the Natura 2000 network. Features such as ponds, woodlands and important hedgerows were taken into account during the AA process.

There are no Natural Heritage Areas or proposed Natural Heritage Areas that will be affected by the proposed Project. Many of the European sites listed within the potential zone of impact also have proposed designation as pNHAs but are first considered under their higher European conservation status.

3.5. Impacts on the Qualifying Interests of European Sites

3.5.1. Direct Impacts on Habitats

There will be no direct impacts on the European sites located in Dublin Bay as a result of the implementation of the proposed Project. Direct impact refers to physical impacts defined in the Departmental Guidance as ‘Loss of habitat area’ and/or ‘Habitat Fragmentation’. There

are no direct impacts identified which may affect the Annexed habitats or species of the SACs. The proposed development will have **no impacts** upon the integrity or the site structure of the adjacent or nearby European sites. Direct Impacts on Birds.

Disturbance

(a) Construction disturbance

Construction activities will cause increased human presence and noise in area approximately 25-35 metres distant from the South Dublin Bay and River Tolka Estuary SPA. Construction itself will entail the redevelopment of an area that is already gravelled and where there are existing buildings to an area with new buildings and structures and with gravelled or possibly concrete standing. Earth works will be relatively minor, including some new foundations and the installation of some new drainage features, but major works (i.e. deep excavations, rock breaking or pile driving) will not be involved.

While the distances from the SPA (25-35 metres for the closest part of the proposed development) are not large it should be remembered that the SPA sheltered from construction disturbance visually largely to completely and acoustically at least to some extent by the soil bank and its woodland cover. The area is currently subject to certain amount of human disturbance, including traffic and in some parts is used by haulage trucks and so is not without potential background disturbance. The net result is that while there will be a short-term moderate disturbance impact within the site of the proposed development (which is not designated land), the impact on the SCI species of the South Dublin Bay and River Tolka Estuary SPA will be unmitigable, short-term and imperceptible.

(b) Disturbance during the operational phase

Disturbance during the operational phase of the development is expected to consist of human traffic and trucking traffic, much as it is today, but probably at a slightly increased intensity.

The same arguments that pertain to disturbance of SCI species within the boundary of the SPA (3a, above) are also relevant for disturbance during the operational phase.

It was noticed during the bird surveys at the site of the proposed development that the SPA shoreline immediately adjacent is characterised by a rocky shoreline (fucoid reef) and that there was little or no exposed fine sediment below these rocks even at low tide. The reason for this is that the channel of the River Tolka runs close to the shoreline in this area, so that the channel remains watered even at low tide. The numbers of waterbirds recorded using this area of shoreline were few (maxima of three Grey Heron, two Curlew, one Greenshank and one Common Gull during eight hours of watches at both high and low tides).

As is the case in 3a (above), the impact on the SPA SCI species will be unmitigable, short-term and imperceptible. This is by reason of the broadly similar current background operating disturbance, the shielding effect of the wooded soil bank, the lack of suitability of the habitats within the site of the proposed development as overspill habitat for the SPA SCI species, the low numbers of waterbirds recorded in the area immediately adjacent to the site of the proposed development (as opposed to areas of marine sediments that are available further away) and the large areas of suitable estuarine habitats that are available for wintering waterbird foraging or roosting in areas of the SPA that are further (i.e. 100 metres or more) from the site of the proposed development. Thus, there will be no significant operating disturbance impacts on the South Dublin Bay and River Tolka Estuary SPA SCI species.

The potential impacts of the proposed development on the special conservation interests (SCIs) of the South Dublin Bay and River Tolka Estuary SPA are shown in Table 3 below.

Table 3 Predicted impacts on the SCIs of the South Dublin Bay and River Tolka Estuary SPA.

SCI	Population	Distribution
Brent Goose (wintering)	During winter the site regularly supports 1% or more of the biogeographic population of Light-bellied Brent Geese (*Branta bernicla hrota*); International Importance. The mean peak number of this species within the SPA during the baseline period (1995/96 – 1999/00) was 525 individuals. A maximum of 554 geese were recorded in the Tolka Estuary during the surveys from the VP adjacent to the site of the proposed development, but these were observed mainly on the Clontarf side of the estuary at distances ranging from 400 to 500 metres from the site.	Due to the distance (approximately 400-500 metres) of the site from the areas that the geese were observed feeding and roosting and the minor disturbance that is envisaged, it is considered that there will be no significant disturbance to this species. Thus, there should be no permanent significant decreases in the range, timing or use of the SPA.
Oystercatcher (wintering)	During winter the site regularly supports 1% or more of the all-Ireland population of Oystercatcher (*Haematopus ostralegus*); National Importance. The mean peak number of this species within the SPA during the baseline period (1995/96 – 1999/00) was 1,263 individuals. A maximum of 15 Oystercatcher were recorded in the Tolka Estuary during the surveys from the VP adjacent to the site of the proposed development, but these were observed mainly on the Clontarf side	Due to the distance (approximately 400-500 metres) of the site from the areas that the Oystercatcher were observed feeding and roosting and the minor disturbance that is envisaged, it is considered that there will be no significant disturbance to this species. Thus, there should be no permanent significant decreases in the range, timing or use of the SPA.

	of the estuary at distances ranging from 400 to 500 metres from the site.	
Ringed Plover (wintering)	During winter the site regularly supports 1% or more of the all-Ireland population of Ringed Plover (*Charadrius hiaticula*); National Importance. The mean peak number of this species within the SPA during the baseline period (1995/96 – 1999/00) was 161 individuals. This species was not recorded in the vicinity of the site of the proposed development during the two survey visits.	Given that there was no indication that this species is regularly present in this part of the SPA and that disturbance impacts on this species are not expected, no significant decrease in the range, timing or use of the SPA are expected.
Grey Plover (wintering)	Not recorded during the surveys in the vicinity of study area.	This species is proposed for removal from the list of SCI species for the SPA and no site-specific conservation interests have been set for it.
Knot (wintering)	During winter the site regularly supports 1% or more of the all-Ireland population of Knot (*Calidris canutus*); National Importance. The mean peak number of this species within the SPA during the baseline period (1995/96 – 1999/00) was 1,151 individuals. This species was not recorded in the vicinity of the site of the proposed development during the two survey visits.	Given that there was no indication that this species is regularly present in this part of the SPA and that disturbance impacts on this species are not expected, no significant decrease in the range, timing or use of the SPA are expected.
Sanderling (wintering)	During winter the site regularly supports 1% or more of the all-Ireland population of Sanderling (*Calidris alba*); National Importance. The mean peak number of this species within the SPA during the baseline period (1995/96 – 1999/00) was 349 individuals. This species was not recorded in the vicinity of the site of the proposed development during the two survey visits.	Given that there was no indication that this species is regularly present in this part of the SPA and that disturbance impacts on this species are not expected, no significant decrease in the range, timing or use of the SPA are expected.
Dunlin (wintering)	During winter the site regularly supports 1% or more of the all-Ireland population of Dunlin (*Calidris alpina*); National Importance. The mean peak number of this species within the SPA during the baseline period (1995/96 – 1999/00) was 2,753 individuals. A maximum of 177 Dunlin were recorded in the Tolka Estuary during the surveys from the VP adjacent to the site of the proposed development, but these were observed mainly on the Clontarf side of the estuary at distances ranging from 400 to 500 metres from the site.	Due to the distance (approximately 400-500 metres) of the site from the areas that the Dunlin were observed feeding and roosting and the minor disturbance that is envisaged, it is considered that there will be no significant disturbance to this species. Thus, there should be no permanent significant decreases in the range, timing or use of the SPA.
Bar-tailed Godwit (wintering)	During winter the site regularly supports 1% or more of the all-Ireland population of Bar-tailed Godwit (*Limosa lapponica*); National Importance. The mean peak number of this Annex I species within the	Due to the distance (approximately 400-500 metres) of the site from the areas that the Bar-tailed Godwit were observed feeding and roosting and the minor disturbance that is envisaged, it is considered that there will be no

	SPA during the baseline period (1995/96 – 1999/00) was 866 individuals. A maximum of 164 Bar-tailed Godwit were recorded in the Tolka Estuary during the surveys from the VP adjacent to the site of the proposed development, but the vast majority of these were observed mainly on the Clontarf side of the estuary at distances ranging from 400 to 500 metres from the site.	significant disturbance to this species. Thus, there should be no permanent significant decreases in the range, timing or use of the SPA.
Redshank (wintering)	During winter the site regularly supports 1% or more of the all-Ireland population of Redshank (*Tringa totanus*); National Importance. The mean peak number of this species within the SPA during the baseline period (1995/96 – 1999/00) was 713 individuals. A maximum of 56 Redshank were recorded in the Tolka Estuary during the surveys from the VP adjacent to the site of the proposed development, but the vast majority of these were observed mainly on the Clontarf side of the estuary at distances ranging from 400 to 500 metres from the site.	Due to the distance (approximately 400-500 metres) of the site from the areas that the Redshank were observed feeding and roosting and the minor disturbance that is envisaged, it is considered that there will be no significant disturbance to this species. Thus, there should be no permanent significant decreases in the range, timing or use of the SPA.
Black-headed Gull (wintering)	The winter mean peak number of Black-headed Gull (*Chroicocephalus ridibundus*) within the site during the baseline period (1995/96 – 1999/00) was 3,040 individuals. This number exceeds the selection threshold set for this species. A maximum of 511 Black-headed Gull were recorded in the Tolka Estuary during the surveys from the VP adjacent to the site of the proposed development (one was recorded visiting the site also), but the vast majority of these were observed mainly on the Clontarf side of the estuary at distances ranging from 400 to 500 metres from the site.	Due to the distance (approximately 400-500 metres) of the site from the areas that most of the Black-headed Gull were observed feeding and roosting and the minor disturbance that is envisaged, it is considered that there will be no significant disturbance to this species. Thus, there should be no permanent significant decreases in the range, timing or use of the SPA.
Roseate Tern (passage)	The SPA is selected as an important passage area for this migratory waterbird species based on significant concentrations recorded, 2,000 individuals recorded in 1999. This species was not recorded during the site survey, as would be expected given that this species is unlikely to be present during the winter.	This species nests on Rockabill Island (30 km NE of the site of the proposed development) and the Dalkey islands (12 SE of the site). During the breeding season the birds can forage widely, but stay as close as they can to their breeding colonies. This species is a constituent of large post-breeding tern aggregations that can be found roosting at Sandymount Strand (2.5 km S of the site), Booterstown (4.5 km S) and, to a lesser extent, Dollymount Strand (3 km E). As such, activities at the site of the proposed development have no potential to impact either breeding colonies, or the autumn roosting sites of this species.

		The feeding areas of this species mostly shallow marine (i.e. potentially in the Tolka Estuary area). Foraging terns show little potential to be disturbed by boats and other human activity. Thus, there should be no permanent significant decreases in the range, timing or use of the SPA.
Common Tern (breeding and passage)	During the breeding season this site supports a colony of Common Tern (*Sterna hirundo*) (52 pairs in 1995). This exceeds the All-Ireland 1% threshold for this Annex I species; National Importance. In 2018, there were 600 Common Tern nests in the SPA and the River Liffey channel. Additionally, there are significant numbers of Common Tern in the SPA in autumn as part of post-breeding tern aggregations in Dublin Bay, Namely, 5,000 individuals were recorded in 1999. This species was not recorded during the site survey, as would be expected given that this species is unlikely to be present during the winter.	Common Tern nest on two mooring dolphins in the River Liffey Channel, the CDL and ESB dolphins (these are approximately 2 km from the site; the ESB dolphin is part of the SPA, as a designated 'island' in the undesignated commercial channel). The terns also breed on two pontoons, one in the Liffey Channel and another that was deployed in the outer Tolka Estuary in 2013. This pontoon is 630 metres east of the site of the proposed development. This species is a constituent of large post-breeding tern aggregations that can be found roosting at Sandymount Strand (2.5 km S of the site), Booterstown (4.5 km S) and, to a lesser extent, Dollymount Strand (3 km E). The distance of the site from the breeding and passage roosting sites for this species are such that activities at the site will not have any potential to disturb the species within the SPA. The feeding areas of this species mostly shallow marine (i.e. potentially in the Tolka Estuary area). Foraging terns show little potential to be disturbed by boats and other human activity. Thus, there should be no permanent significant decreases in the range, timing or use of the SPA.
Arctic Tern (passage, occ. breeding)	The SPA is selected as an important passage area for this migratory waterbird species based on significant concentrations recorded, 20,000 individuals recorded in 1996. This species was not recorded during the site survey, as would be expected given that this species is unlikely to be present during the winter.	This species occasionally nests on the mooring dolphins in the River Liffey channel (approximately 2 km from the site). During the breeding season the birds can forage widely, but stay as close as they can to their breeding colonies. This species is a constituent of large post-breeding tern aggregations that can be found roosting at Sandymount Strand (2.5 km S of the site), Booterstown (4.5 km S) and, to a lesser extent, Dollymount Strand (3 km E). The distance of the site from the breeding and passage roosting sites for this species are such that activities at the site will not have any potential to disturb the species within the SPA. The feeding areas of this species mostly shallow marine (i.e. potentially in the Tolka Estuary area). Foraging terns show little potential to be disturbed by boats and other human activity. Thus, there should be no permanent significant decreases in the range, timing or use of the SPA.

Wetlands	The boundary of the South Dublin Bay and River Tolka Estuary SPA lies approximately 35 metres north and 25 metres east of the site of the proposed development. There will be no direct loss of habitat within this SPA.	No significant impacts on the range, timing or use of the SPA by the SCI species are expected from the minor changes to a small area of adjacent non-SPA land. Disturbance during construction will be short-term and limited to the immediate vicinity of the site. There is some potential for disturbance during the operational phase of the development, but this will be limited spatially (i.e. to the site and its immediate vicinity). The potential for runoff pollution will be mitigated by the new drainage and interception features that form part of the project design.

Having established this, the assessment emphasis is placed on potential indirect and cumulative impacts.

The primary consideration in terms of source-vector-pathways for indirect impacts relates to surface water and potential indirect impacts on hydrologically linked habitats and aquatic linked species.

3.5.2. **Indirect Impacts**

The potential for impact is considered whereby the Project would result in a significant detrimental change in water quality either alone or in combination with other projects or plans as a result of indirect pollution of surface water. The effect would have to be considered in terms of changes in water quality which would affect the habitats or species for which the Dublin Bay European sites are designated.

Consideration of impacts on Surface Water

The likelihood of impacts on hydrologically connected environmental sites is low and will be avoided by best practice construction management and appropriate design features such as interception.

Accidental spillages and contaminated runoff and will be avoided by construction management measures which will be set out in a Construction Environmental Management Plan (CEMP). Management measures will include appropriate site-specific measures in compliance with the relevant CIRIA guidance documents; Control of Water Pollution from construction Sites, Guidance for consultants and contractors (C532); and Environmental Good Practice on Site (3rd edition) (C692).

3.6. Mitigation Measures

The CEMP includes reference to this Appropriate Assessment and NIS for the Project which establishes the potential connectivity of the Project site to the Dublin Bay European sites and the requirement for avoidance in terms of indirect impacts from construction activity.

The contractor will be required to complete the Construction Environmental Management Plan (CEMP) which will include the following construction management as a minimum:

3.6.1. **Site Environmental Training and Awareness Procedure**

An initial site environmental induction and ongoing training will be provided to communicate the main provisions of this environmental plan to all site personnel.

Two-way communication will be encouraged to promote a culture of environmental protection.

The following outlines the information which must be communicated to site staff:

- Environmental procedures of the CEMP.
- Environmental buffers and exclusion zones.
- Housekeeping of materials and waste storage areas.
- Environmental emergency response plan.

Prior to any works, all personnel involved will receive an on-site induction relating to operations adjacent to water courses/bodies and the environmentally sensitive nature of Dublin Bay and re-emphasise the precautions that are required as well as the construction management measures to be implemented.

The project proponent will ensure that the engineer setting out the works is fully aware of the ecological constraints and construction management requirements.

3.6.2. **Environmental Emergency Response Plan**

In the event of an environmental emergency, all personnel will react quickly and adhere to this procedure (to be finalised by contractor). The following outlines the information on the types of emergency which must be communicated to site staff:

- Release of hazardous substance – fuel or oil spill.
- Concrete spill or release of concrete.

- Flood event – extreme rainfall or rising river level event.
- Environmental buffers and exclusion zones breach.
- Housekeeping of materials and waste storage areas breach.
- Stop work orders due to environmental issue or concern (e.g. threat to ecological feature).

3.6.3. **Concrete Control Procedure**

Concrete will be used for wall foundations, wall forming structures and grouting of precast concrete. Wet concrete and cement are very alkaline and corrosive and can cause serious pollution to water courses/bodies. The following measures will be implemented to prevent concrete entering watercourses:

- A hardstand area of the site will be prepared as a temporary storage compound and construction preparation area.
- Batch loads of concrete will be delivered, on an as needed basis, to the pre-prepared hardstand areas or designated site compound.
- Small batch concrete loads will be delivered to specific construction locations by mini dumper or other enclose contained system of transfer.
- Trucks that deliver concrete to site will be washed out at the supplier's facilities and not on site.
- A designated trained operator experienced in working with concrete will be employed during concrete pouring.
- Disposal of raw or uncured waste concrete will be controlled to ensure that Dublin Bay will not be impacted.
- Best practice in bulk-liquid concrete management addressing pouring and handling, secure shuttering / form-work, adequate curing times will be implemented.
- Wash water from cleaning ready mix concrete lorries and mixers may be contaminated with cement and is therefore highly alkaline, therefore, washing will not be permitted on site.

3.6.4. **Fuel and Oil Management Plan**

The appointed contractor will implement a fuel management plan which will incorporate the following elements:

- Chemicals used will be stored in sealed containers.
- Chemicals shall be applied in such a way as to avoid any spillage or leakage.
- All refuelling, oiling and greasing will take place above drip trays or on an impermeable surface which provides protection to underground strata and water courses/bodies and away from drains and water courses as far as reasonably practicable. Vehicles will not be left unattended during refuelling.
- Storage areas, machinery depots and site offices will be located within the site boundary.
- Spill kits will be made available and all staff will be properly trained on correct use.
- All fuels, lubricants and hydraulic fluids required to be stored on site will be kept in secure bunded areas at a minimum of 10m from the sea shore. The bunded area will accommodate 110% of the total capacity of the containers within it.
- Containers will be properly secured to prevent unauthorised access and misuse. An effective spillage procedure will be put in place with all staff properly briefed. Any waste oils or hydraulic fluids will be collected, stored in appropriate containers and disposed of offsite in an appropriate manner.
- All plant shall be well maintained with any fuel or oil drips attended to on an ongoing basis.
- Any minor spillage during this process will be cleaned up immediately.
- Should any incident occur, the situation will be dealt with and coordinated by the nearest supervisor who will be responsible for instructions by the Local Authority.

3.6.5. **Protection of Water Resources**

(A) Silt

- Site boundary markings to safeguard features of interest/value, e.g. drainage connectivity with Dublin Bay will be established.
- Excavations: Water will be prevented from entering local excavations by way of cut-off drains. Personnel and/or plant will not disturb water in a local excavation. The means of dewatering excavations in the event there is ingress will include settlement tanks or a silt buster stream if required to ensure that any de-waterings do not increase background suspended solids levels in the environment.
- Spoil heaps: Small (<100m^3) topsoil/subsoil heaps will be located, protected and stabilised in the temporary compound in a way that will avoid the risk of contamination of drainage systems and local water courses.
- Site roads will be kept free from dust and mud deposits.

(B) Deliveries

- Special care will be taken during deliveries, especially when fuels and hazardous materials are being handled.
- All liquid deliveries will be supervised by a responsible person to ensure that (1) storage tank levels are checked before delivery to prevent overfilling and (2) the product is delivered to the correct tank.
- Contingency plans will be agreed and suitable materials available to deal with any incident.
- All employees will be briefed on the actions required in the event of a spillage.
- Spillages will be recorded and advised to the project manager who will inform local authorities if they deem it significant.

(C) Refuelling

- Mobile plant will be refuelled in the construction compound, on an impermeable surface away from any drains or water courses/bodies. A spill kit will be available at this location.
- Hoses and valves will be checked regularly for signs of wear and turned off and securely locked when not in use.
- Generators, diesel pumps and similar equipment will be placed on drip trays to collect minor spillages. These will be checked regularly, and any accumulated oil removed for disposal.

(D) Storage

- Leaking or empty oil drums will be removed from the site immediately and disposed of via a licensed waste disposal contractor.
- The contents of any tank will be clearly marked on the tank, and a notice displayed requiring that valves and hoses be locked when not in use.
- Any tanks or drums will be stored in a secure container or compound, which is to be kept locked when not in use.

3.6.6. **Management of Excavation and Spoil**

For the management of excavation and spoil, the contractor will:

- Erect all protective fencing.
- Implement a surface water management plan (including the installation of drainage infrastructure) prior to excavation and include areas dedicated to spoil storage with the drainage infrastructure.
- Ensure all spoil and excavated materials will be stored in the construction compound.
- Ensure stockpiles and adjacent features of drainage infrastructure will be monitored and maintained appropriately.

- A Waste Management Plan will identify any material such as dust, sand, rubble, concrete that may be generated during demolition works and address its storage and appropriate removal from the site to avoid pathways identified as having connectivity with Dublin Bay.

3.6.7. Monitoring

Weekly checks will be carried out to ensure surface water drains are not blocked by silt, or other items, and that all storage is located at least 10m from surface water receptors. A regular log of inspections will be maintained, and any significant blockage or spill incidents will be recorded for root cause investigation purposes and updating procedures to ensure incidents do not reoccur.

3.7. Assessment of In-Combination Effects

The Commission services' interpretation document 'Managing Natura 2000 sites', makes clear that the phrase 'in combination with other plans or projects' in Article 3(3) refers to cumulative effects caused by the projects or plans that are currently under consideration together with the effects of any existing or proposed projects or plans. When impacts are assessed in combination in this way, it can be established whether or not there may be, overall, an impact which may have significant effects on a Natura 2000 site or which may adversely affect the integrity of a site.

As part of the Appropriate Assessment, in addition to the proposed works, other relevant projects and plans in the region must also be considered at this stage. This step aims to identify at this early stage any possible significant in-combination or cumulative effects / impacts of the proposed development with other such plans and projects on the Natura 2000 site.

3.7.1. Assessment of Plans

Dublin Port Masterplan 2012 - 2040 (Reviewed 2018)

The Dublin Port Masterplan 2012 - 2040 (DPM) is the core document which guides the development in Dublin Port up to 2040. The DPM was first published in February 2012, by the Dublin Port Company (DPC), with the first review of the DPM completed in 2018. It is envisaged that the second review of the DPM will take place no earlier than 2023, and no later than 2028. The DPM is a non-statutory plan but has been compiled in within the context of prevailing EU, national, regional and local development plan policies. The DPM was developed by DPC with the intention to:

- Plan for future sustainable growth and changes in facilitating seaborne trade in goods and passenger movements to and from Ireland and the Dublin region in particular;

- Provide an overall context for future investment decisions;

- Reflect and provide for current national and regional policies, local guidelines and initiatives; and,

- Ensure there is harmony and synergy between the plans for the Port and those for the Dublin Docklands Area, Dublin City and neighbouring counties within the Dublin Region. Give some certainty to customers about how the Port will develop in the future to meet their requirements.

The DPM suggests options to facilitate Dublin Port handling up to 77 million gross tonnes by 2040.

The DPM outlines a number of strategic objectives to facilitate the effective operation of Dublin Port in the period to 2040. The most relevant of these to the proposed development are outlined below under their respective headings as defined in the DPM.

Port Functions

- Ensure the safe operation and sustainable development of the Port and its approach waters and provide appropriate infrastructure, facilities, services and accommodation for ships, goods, and passengers to meet future demand.

- Optimise the use of Port lands by rationalising the distribution and location of specific areas of activity (including Ro-Ro, Lo-Lo, passenger ferry services, Cruise Ships, Bulk Liquid, Bulk Solid and Break Bulk goods) with necessary reconfigurations of service facilities as required.

- Recover lands that are not being used for core port activities.

- Use new and developing technology to increase throughput to its environmentally sustainable maximum.

- Identify configurations for extending berthage and storage that mitigate impact on adjacent environmentally sensitive / designated areas.

Investment and Growth

- Utilise the Masterplan as a framework for investment and growth based on the Port's projected demand forecasts.

Movement and Access

- Develop a transport plan for the Port estate in conjunction with the NTA and DCC.

Environment and Heritage

- Integrate new development with the built and natural landscapes of the surrounding area.

The DPM shows the proposed Project site zoned as "lands currently used for Non-Core Activity for Future Redevelopment". This zoning aligns the proposed development site with the strategic objectives outlined above.

3.7.2. **Assessment of Projects**

The DCC Planning Department website was consulted in order to generate a list of granted planning permissions from the surrounding areas of the proposed development within the previous five years (since October 2014). The area under consideration for this search included the Dublin Port, East Wall and Ringsend areas.

3.7.3. **Assessment of Projects**

The DCC Planning Department website was consulted in order to generate a list of granted planning permissions from the surrounding areas of the proposed development within the previous five years (since October 2014). The area under consideration for this search included the Dublin Port, East Wall and Ringsend areas. The outcome of this search is presented in Chapter 3 of the Project EIAR.

Brexit related developments

Brexit related facilities that were developed in 2019 at the nearby sites of T7, T9 and T10 were considered. These were granted consent under Ministerial Orders (Ministerial Order S.I. No. 57/2019 for T7, Ministerial Order S.I. No. 57/2019 for T9 and Ministerial Order S.I. No. 285/2019 for T10) and were screened for AA and EIA. Similarly, Brexit related development at Yard 2 (deemed exempt from the requirement of planning permission) was also considered. Yard 2 was screened for AA and EIA. Please refer to Drawing A20001_EIAR-01-002_Port Sites_A1 for full details of these sites.

No further construction works are proposed at the T7 and T9 sites. Minor internal alterations are planned for T10 and a 185m2 extension to cater for animal inspection is planned for Yard 2. No major infrastructural work is required at these sites and the proposed minor works are considered temporary and imperceptible (following EPA Guidelines 2017).

Notable applications granted planning permission, which will be undergoing construction at the same time as the proposed development are described below.

Dublin Port MP2 Project

The Dublin Port MP2 Project is a notable proposed development in Dublin Port, currently under consideration by An Bord Pleanála (ABP Reg. Ref. PL29N.304888), with a decision due by January 20th 2020. The development, applied for by the Dublin Port Company, consists of 15-year permission for development at Oil Berth 3 and Oil Berth 4, Eastern Oil Jetty and at Berths 50A, 50N, 50S, 51, 51A, 49, 52, 53 and associated terminal yards to provide for various elements including new Ro-Ro jetty and consolidation of passenger terminal buildings. Pending grant of planning permission, construction of this development, which will consist of both land and marine works across a number of phases, will commence in Q2 2022, and finish in Q1 2032.

Dublin Port Alexandra Basin Redevelopment

The Alexandra Basin Redevelopment consists of:

- the redevelopment of Alexandra Basin West including demolition of part of North Wall Quay Extension and its reconfiguration, new quay walls, dredging as well as excavation of contaminated materials, infilling of Graving Dock No2, provision for new berths and conservation measures including the excavation of Graving Dock No.1 and the construction of an interpretive centre on North Wall Quay Extension;
- The infilling of Berths Nos. 52 and 53 at the eastern end of the Port and the provision of new landside and berthing facilities, and;
- Dredging of the approach channel and provision of a marina protection structure to the north of the Poolbeg Yacht, Boat Club and Marina

Permission for these works was granted by An Bord Pleanála on 8th July 2015 (ABP Reg. Ref PL29N.PA0034). Works began in November 2016 and will continue within the 10-year planning permission timeframe.

Dublin Port Greenway

Comprising works to the Port's private internal road network and includes works on public roads at East Wall Road, Bond Road and Alfie Byrne Road, the Dublin Port Greenway development was granted permission by Dublin City Council in July 2016 (DCC Reg. Ref. 3084/16). The scheme is due to commence construction in early 2020, with the complete programme of works anticipated to be 24 – 42 months. The duration of works on the external road network is expected to be 6 – 12 months.

There are no predicted in-combination effects with other developments given that they have been assessed for potential significant effects on European sites and granted permission with conditions to planning.

3.7.4. Conclusion of In-combination Effects

Given the inclusion of strict Best Practice Construction Measures to be included and enforced through a Construction Environmental Management Plan, the proposed development will have no predicted impacts on local ecology and biodiversity or on hydrologically linked European sites, therefore in-combination impacts can be ruled out.

The Dublin City Development Plan in complying with the requirements of the Habitats Directive requires that all Projects and Plans that could affect the Natura 2000 sites in the same zone of impact of the Project site would be initially screened for Appropriate Assessment and if requiring Stage 2 AA, that appropriate employable mitigation measures would be put in place to avoid, reduce or ameliorate negative impacts. In this way any, in-combination impacts with Plans or Projects for the development area and surrounding townlands in which the development site is located, would be avoided.

Any new applications for the Project area will be initially assessed on a case by case basis initially by Dublin City Council which will determine the requirement for AA Screening as per the requirements of Article 6(3) of the Habitats Directive.

4. Natura Impact Statement & Conclusion

This NIS has reviewed the predicted impacts arising from the Project and found that with the implementation of appropriate mitigation measures specifically with regard to surface water, significant effects on the integrity of the European sites identified in the receiving environment of Dublin Bay can be ruled out.

It is the conclusion of this NIS, on the basis of the best scientific knowledge available, and subject to the implementation of the mitigation measures set out under Section 3.6, that the possibility of any adverse effects on the integrity of the European Sites considered in this NIS, or on the integrity of any other European Site (having regard to their conservation objectives), arising from the proposed development, either alone or in combination with other plans or projects, can be excluded beyond a reasonable scientific doubt.

5. References

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