

# APPROPRIATE ASSESSMENT SCREENING AND NATURA IMPACT STATEMENT

**Huntstown South Quarry Restoration and Backfill  
Waste Licence Review Application  
North Road, Finglas, Dublin 11**

**Prepared for: Roadstone Ltd.**

*roadstone*

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## BASIS OF REPORT

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# 1 INTRODUCTION

## 1.1 Background

SLR Consulting Ireland (SLR) was commissioned by Roadstone Ltd to prepare an Appropriate Assessment screening report and Natura Impact Statement to support an application to the Environmental Protection Agency (EPA) for a review of its existing waste licence (Ref. W0277-03) to facilitate the intake and recovery of soil and stone waste on the western side of Huntstown South Quarry, Finglas, Dublin 11, in line with the approved quarry restoration and backfilling scheme.

Planning permission for the backfilling and restoration of all existing and planned future quarries at the Huntstown quarry complex was obtained in August 2014 (Fingal County Council Ref. No FW12A-0022, An Bord Pleanála Ref. No. 06F.241693). This permission provides for the importation and recovery of inert naturally occurring waste, principally excess soil, stones and/or broken rock from construction and development sites, to completely backfill and restore the voids created by the previous extraction of overburden soils and limestone bedrock. The maximum rate of soil waste importation and recovery at the Huntstown quarry complex under this permission is 750,000 tonnes per annum.

## 1.2 General Description of the Site

The proposed waste licence extension area (“the Site”) is centred at approximate Irish Transverse Mercator (ITM) grid coordinates 710700, 740600 and straddles the townlands of Huntstown, Cappoge and Grange, Co. Dublin.

The Site is located approximately 2.5 km north-west of Finglas and 1km west of the interchange between the N2 Dual Carriageway and the M50 Motorway. The Huntstown quarry complex forms the lands immediately north of the Site. The lands immediately south and east of the Site remain in use as agricultural grassland, while those to the west and north-west of the Site comprise neighbouring light industry and science and technology parks along the Cappagh Road (including Stadium Business Park, Huntstown Business Park and Millennium Business Park).

## 1.3 Purpose of the Report

The purpose of this report is to provide supporting information to assist the Competent Authority, in this case the Environmental Protection Agency, to carry out Appropriate Assessment screening for likely significant effects and, if it is concluded one is required, a Stage 2 Appropriate Assessment of the planned waste activities at Huntstown South Quarry, so as to inform its decision on the waste licence review application (Ref. W0277-04).

## 1.4 Evidence of Technical Competence and Experience

This AA Screening and Natura Impact Statement was prepared by SLR Associate Ecologist Michael Bailey MICEEM. Richard Arnold MCIEEM CEnv. carried out the technical review.

Michael Bailey holds a BSc (Hons) in Biology and Ecology from the University of Ulster, and an MSc in Quantitative Conservation Biology from the University of the Witwatersrand, Johannesburg, South Africa. Michael is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Michael is an experienced consultant ecologist with field and research experience with mammal, bird, bat and invasive species surveys in Ireland, the UK and Africa. He has prepared Appropriate Assessments and Ecological Impact Assessments for a wide range of infrastructure, mining and extractive industry, and renewable energy projects.

Richard Arnold has 24 years of experience as a consultant ecologist, which has included preparing and overseeing assessments under the Habitats Regulations/Directive for multiple projects, including small and large infrastructure projects. He has supported An Bord Pleanála's Inspector on three major infrastructure projects in Ireland.

## 1.5 Relevant Legislation

### 1.5.1 European Nature Directives (Habitats and Birds)

The Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) forms the basis for the designation of Special Areas of Conservation (SAC). Similarly, Special Protection Areas (SPA) are classified under the Birds Directive (Council Directive 2009/147/EEC on the Conservation of Wild Birds). Collectively, SACs and SPAs are referred to as the Natura 2000 network. The Natura 2000 Network is considered to be the minimum protected land area required to conserve certain habitats and species listed in the Directives.

Under Article 6(3) of the Habitats Directive, an Appropriate Assessment (AA) must be undertaken for any plan or project that is not directly connected with or necessary to the management of a Natura 2000 site but is likely to have a significant effect thereon, either individually or in combination with other plans or projects. An AA is an evaluation of the potential impacts of a plan or project on the conservation objectives of a Natura 2000 site, and the identification, where necessary, of mitigation or avoidance measures to preclude adverse effects on the integrity of the site.

Article 6, paragraph 3 of the European Commission Habitats Directive 92/43/EEC ("the Habitats Directive") states that:

*"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, 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".*

### 1.5.2 European Communities (Birds and Natural Habitats) Regulations 2011

Pursuant to the Habitats Directive, Part 5 of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, similarly sets out the requirements for screening assessments and the circumstances under which an AA is required.

Regulation 42(1) requires that *'a screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.'* Regulation 42(2) expands on this, stipulating that a public authority must carry out a screening for AA before consent for a plan or project is given, or a decision to undertake or adopt a plan or project is taken.

Regulation 42(6) requires that *'the public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site'.*

Regulation 42(3)(a) gives the public authority the power to direct a third party to provide a Natura Impact Statement (NIS) and Regulation 42(3)(b) allows it to request any additional information that it needs to complete the screening assessment or AA. Regulation 42(5) goes on to make clear that the NIS should include such information as the public authority considers necessary to enable it to undertake the AA and to ascertain if a project or plan will affect the integrity of a Natura 2000 site.

In addition to the information, Regulation 2(1) provides a definition of a Natura Impact Statement as *'a report comprising the scientific examination of a plan or project and the relevant European Site or European Sites, to identify and characterise any possible implications of the plan or project individually or in combination with other plans or projects in view of the conservation objectives of the site or sites, and any further information including, but not limited to, any plans, maps or drawings, scientific information or data required to enable the carrying out of an Appropriate Assessment'*.

Regulation 42(11) makes clear that the AA must be carried out by the public authority and that it must include its conclusion as to whether the project or plan would adversely affect the integrity of a Natura 2000 site, and that this must be done prior to consenting the project.

### **1.5.3 Planning and Development Act 2000 (as amended)**

These processes have been further enshrined in the Planning and Development Act 2000 (as amended), in Sections 177T, 177U and 177V, which are reproduced below:

177T (1)(b) A Natura Impact Statement means a statement for the purposes of Article 6 of the Habitats Directive, of the implications of a proposed development, on its own or in combination with other plans or projects, for one or more than one European site, in view of the conservation objectives of the site or sites.

(2) Without prejudice to the generality of subsection (1), a Natura impact report or a Natura impact statement, as the case may be, shall include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for one or more than one European site in view of the conservation objectives of the site or sites.

177U. (1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

(4) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is required if it cannot be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

177V (1) An appropriate assessment carried out under this Part shall include a determination by the competent authority under Article 6.3 of the Habitats Directive as to whether or not a draft Land use plan or proposed development would adversely affect the integrity of a European site and an appropriate assessment shall be carried out by the competent authority, in each case where it has made a determination under section 177U(4) that an appropriate assessment is required, before —  
... ( b ) consent is given for the proposed development.

## 2 METHODOLOGY

### 2.1 General Approach

The methodology used in this report is based on guidance provided by the National Parks and Wildlife Service (NPWS, 2010), the Office of the Planning Regulator (OPR, 2021) and EC Guidance (EC, 2018) (EC, 2020) (EC, 2021) on the application of Article 6 of the Habitats Directive.

The 2021 EC guidance describes a series of stages and steps which should be completed when carrying out the assessment and these are followed here with minor modifications. The assessment applies only to Natura 2000 sites (SPAs and SACs). More specifically, it only applies to the qualifying interest features of such sites i.e. the features which are the reason that the site was designated.

### 2.2 Stage One: Screening

Stage One is a screening assessment, the purpose of which is to determine whether a plan or project requires more detailed assessment. There are two principal tests. The first considers whether the plan or project is needed for the management of a European site for the purpose of maintaining or restoring its conservation interest. Any such plans or projects can usually be screened out of further assessment. The second test considers whether the plan or project, without specific mitigation measures, would be likely to have a significant effect on any European Site. This requires consideration of the project on its own and in combination with other plans or projects.

A project can only be screened out of further assessment if it is certain (beyond reasonable scientific doubt and on the basis of the best scientific knowledge) that there would be no significant effects on any Natura 2000 site without mitigation designed specifically to address potential impacts on the qualifying interest of such sites. Significant effects in this assessment are those which could undermine the conservation objectives of a qualifying interest feature. The process is used to determine which Natura 2000 Sites should be included in the later stages of the assessment. It can also be used to determine which qualifying interest features require further assessment.

### 2.3 Stage Two: Appropriate Assessment

Stage Two is a more detailed assessment, known as an “Appropriate Assessment” following the terminology in the legislation. This essentially repeats the second test of the screening assessment but in more detail and considering mitigation measures before reaching a conclusion. At this stage, the test is whether the project or plan will have an adverse effect on the integrity of any European site. This must be done in the light of the conservation objectives for each of the sites and qualifying interest features that have been ‘screened in’ by the earlier stage of assessment. Any effect which could undermine the conservation objectives is considered an adverse effect on the integrity of the site, and vice versa. If the project is predicted to lead to adverse effects upon the integrity of the site, further stages of assessment are required before the project can be authorised.

### 2.4 Sources of Information

Sources of information for the assessment of the Project ‘alone’ include:

- Article 17 and Article 12 reports completed by the National Parks and Wildlife Service<sup>1</sup>;
- Site Synopses, Conservation Objectives and Standard Data Forms for the Natura 2000 sites<sup>2</sup>;
- Environmental Protection Agency (EPA) Maps<sup>3</sup>.

<sup>1</sup> <https://www.npws.ie/publications/article-17-reports?msclkid=0c19d260b00a11ecaf5a935da63f219b> (last accessed 20 July 2022)

<sup>2</sup> <https://www.npws.ie/protected-sites> (last accessed 20 July 2022)

<sup>3</sup> <http://gis.epa.ie/> (last accessed 20 July 2022)



- Relevant chapters of the EIAR written for the quarry restoration and backfilling scheme planning application for the Huntstown South Quarry, in particular Chapter 7 – Hydrology and Hydrogeology, were also reviewed.

Sources of information for the plans and projects for the 'in combination' assessment were as above and also include:

- Fingal County Development Plan 2017 - 2023
- Fingal County Council planning portal<sup>4</sup> and myplan.ie<sup>5</sup> were accessed for information on other projects and plans.

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<sup>4</sup> <http://www.fingal.ie/view-or-search-planning-application> (last accessed 20 July 2022)

<sup>5</sup> <https://myplan.ie/> (last accessed 20 July 2022)



## 3 STAGE 1: SCREENING

### 3.1 Step 1 - Part 1: Management of Natura 2000 Sites

The proposed project consists of the importation of soil and stone waste for the restoration, backfilling and recovery at the western side of Huntstown South Quarry at a maximum rate of 750,000 tonnes per annum. Therefore, it is not connected with, or necessary for, the management of a Natura 2000 site.

### 3.2 Step 2 - Part 1: Project Description

The existing waste licence at Huntstown (Ref. W0277-01) provides for the ongoing importation of inert soil and stone and for restoration, backfilling and recovery at the North Quarry and West Quarry. At the present time, the backfilling of the West Quarry is complete and grass cover has been established across the former quarry footprint. Backfilling of the North Quarry is continuing to progress rapidly, and it is expected that the quarry will be substantially backfilled by the end of 2022, with final restoration works (levelling, contouring and seeding) progressing shortly thereafter.

In light of the current, consistent and sustained high level of demand for soil waste recovery capacity at Huntstown and the imminent cessation of rock extraction activity at the South Quarry, Roadstone is planning to commence restoration, backfilling and soil recovery activities on the western side of the South Quarry at the approved intake rate of 750,000 tonnes per annum early in 2023, following the cessation of waste recovery activities at the North Quarry.

To facilitate the transfer and re-location of soil backfilling and waste recovery activities from the North Quarry (where they are currently ongoing) to the South Quarry, a waste licence review application (Ref. W0277-04) has been submitted to the EPA to provide for the following:

- importation of soil and stone waste to the western side of Huntstown South Quarry at a maximum rate of 750,000 tonnes per annum (as permitted for the West and North Quarries by Planning Ref. FW12A/0012);
- extension of the licensed site boundary to incorporate the proposed waste recovery area on the western side of the South Quarry and the haul roads leading to / from it;
- an increase in the total permitted (lifetime) soil and stone waste intake to the (extended) waste facility to 18.76 million tonnes;
- continued use of pre-existing site infrastructure to support recovery activities; and
- re-routing of traffic flows via existing internal haul roads (i.e. within the quarry complex) to access the backfilling / recovery area at the South Quarry.

At the present time, it is intended that the South Quarry at Huntstown will be restored by backfilling with waste soils on its western side and by backfilling with non-waste ('by-product') soils on its eastern side. The two areas will be separated by a berm constructed of natural soils and/or crushed rock which will be raised (in stages) as the levels of imported soil and stone placed in the quarry rise over time.

As previously noted, backfilling and recovery activity at the South Quarry already has the benefit of planning permission. No new infrastructure is required to facilitate transfer and re-location of established soil waste recovery operations to the western side of the South Quarry or the extension of the licensed site area to include this area.

All pre-existing site infrastructure including weighbridges, wheelwash, site offices, welfare facilities, quarantine shed, and workshop / maintenance shed will remain in service as quarry backfilling and soil recovery activities progress at the South Quarry. The only notable change arising as a result will be the re-routing of HGV lorries and articulated trucks across the Huntstown quarry complex to the new recovery area at the South Quarry.

### 3.3 Step 2 - Part 1: Potential Impact Factors

The proposed the intake and recovery of soil and stone waste has the potential to result in the following impacts:

- loss of habitat
- water discharge resulting in pollution
- dust resulting in pollution or smothering of vegetation
- noise and vibration resulting in disturbance of wildlife

The habitats and species listed as features of interest of any Natura 2000 sites of the project must therefore be assessed for affects from loss of habitat, water discharge, dust, and noise and vibration from the proposed development project, and these effects are considered further below.

### 3.4 Step 3: Identification of relevant Natura 2000 Sites

The first step in identification of relevant Natura 2000 sites for further assessment is to identify those that will be at risk from likely significant effects where a Source-Pathway-Receptor links exists between the proposed development and the Natura 2000 site.

The relevant Natura 2000 sites are identified through a review of the nature and scale of the project, the project location relative to Natura 2000 sites, presence of ecological (including mobile and migratory species) and landscape connectivity, such as along waterways, hedgerows and treelines between the Site and the Natura 2000 sites, known impacts and effects likely to arise as a result of this type of project, distance from Natura 2000 sites and the qualifying interests of the Natura 2000 sites.

Table 2.1 below provides a list of Natura 2000 sites which were selected for initial consideration of Source-Pathway-Receptor links and which will be assessed as part of the screening process (Figure 1). Table 2.2 provides a description of each site and lists their conservation objects and any Source-Pathway-Receptor link.

**Table 2.1: Natura 2000 Sites**

Natura 2000 Site [Code]	Site Code	Distance from Project Site <sup>6</sup>
<b>SAC sites</b>		
Malahide Estuary SAC	000205	10.9 km north-east
South Dublin Bay SAC	000210	11.0 km south-east
North Dublin Bay SAC	000206	11.4 km south-east
Rye Water Valley/Carton SAC	001398	11.2 km south-west
Baldoyle Bay SAC	000199	12.8 km due east
Rogerstown Estuary SAC	000208	14.2 km north-east
<b>SPA sites</b>		
South Dublin Bay and River Tolka Estuary SPA	004024	8.8 km south-east
Malahide Estuary SPA	004025	11.2 km north-east
North Bull Island SPA	004006	11.6 km south-east
Baldoyle Bay SPA	004016	12.8 km due east
Rogerstown Estuary SPA	004015	14.5 km north-east

<sup>6</sup> When measured in a straight line over the shortest distance between the quarry site and Natura 2000 site.

**Table 2.2: Designated Sites within 15km of the Project Site**

Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
<b>SAC Sites</b>					
Malahide Estuary SAC [000205]	10.9 km	<ul style="list-style-type: none"> <li>Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>Salicornia and other annuals colonising mud and sand [1310]</li> <li>Mediterranean salt meadows (<i>Juncetalia maritima</i>) [1410]</li> </ul>	To maintain the favourable conservation condition of all the habitats listed as qualifying interests for the Malahide Estuary SAC	<p><i>“Malahide Estuary is situated immediately north of Malahide and east of Swords in Co. Dublin. It is the estuary of the River Broadmeadow. The outer part of the estuary is mostly cut off from the sea by a large sand spit, known as ‘the island’. The outer estuary drains almost completely at low tide, exposing sand and mud flats. There is a large bed of Eelgrass (Dwarf Eelgrass, <i>Zostera noltii</i>, and Narrow-leaved Eelgrass, <i>Z. angustifolia</i>) in the north section of the outer estuary, along with Beaked Tasselweed (<i>Ruppia maritima</i>) and extensive mats of green algae (<i>Enteromorpha</i> spp., <i>Ulva lactuca</i>). Common Cordgrass (<i>Spartina anglica</i>) is also widespread in this sheltered part of the estuary. The estuary is an important wintering bird site and holds an internationally important population of Brent Goose and nationally important populations of a further 15 species. The estuary also attracts migrant species such as Ruff, Curlew Sandpiper, Spotted Redshank and Little Stint. Breeding birds of the site include Ringed Plover, Shelduck and Mallard. The inner part of the estuary is heavily used for water sports. A section of the outer estuary has recently been infilled for a marina and housing development. This site is a fine example of an estuarine system with all the main habitats represented. The site is important ornithologically, with a population of Brent Goose of international significance.”</i></p>	Loss of habitat (construction phase), no pathway as habitat loss is on site and the SAC habitat will not be affected.
		<ul style="list-style-type: none"> <li>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> <li>Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</li> <li>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</li> </ul>	To restore the favourable conservation condition of all the habitats listed as qualifying interests for the Malahide Estuary SAC		Water discharge resulting in pollution (construction and operation phases), there is no hydrological (groundwater or surface water) pathway to any of the habitats within this SAC.
					Dust resulting in pollution or smothering of vegetation (construction and operation phases), the pathway via air transport to the SAC is very weak due to distance and the habitats will not be affected.
					Noise and vibration arising from the construction and operation phases, will not have any effect on the habitats as the SAC is sufficiently distant from project site to be affected by noise or vibration.
					<b>SCREENED OUT</b>

<sup>7</sup> When measured in a straight line over the shortest distance between the quarry site and Natura 2000 site.

<sup>8</sup> For SPAs, the bird species that are the reason for the site’s designation are Species of Conservation Interest (SCIs) and for SACs the habitats and species that are the reasons for its designation are the Qualifying Interests (QIs) - for convenience, the term qualifying interest or QI is used here for both SPAs and SACs.

Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
South Dublin Bay SAC [000210]	11.0 km	<ul style="list-style-type: none"> <li>Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>Annual vegetation of drift lines [1210]</li> <li>Salicornia and other annuals colonising mud and sand [1310]</li> <li>Embryonic shifting dunes [2110]</li> </ul>	To maintain the favourable conservation condition of all the habitats listed as qualifying interests for the South Dublin Bay SAC	<i>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. Several small, sandy beaches with incipient dune formation occur in the northern and western sectors of the site, notably at Poolbeg, Irishtown and Merrion/ Booterstown. The bed of Dward Eelgrass (Zostera noltii) found below Merrion Gates is the largest stand on the east coast. Green algae (Enteromorpha spp. and Ulva lactuca) are distributed throughout the area at a low density. Furoid algae occur on the rocky shore in the Maretimo to Dún Laoghaire area. South Dublin Bay is also an internationally important bird site, with waterfowl spending large amounts of time at the site. Principal species found there are Oystercatcher, Ringed Plover, Sanderling, Dunlin, Bar-tailed Godwit and Redshank. Turnstones are also present during winter. Brent Goose regularly occur in numbers of international importance. Large numbers of gull's roost in South Dublin Bay, it is also an important tern roost in autumn."</i>	As above.  <b>SCREENED OUT</b>
North Dublin Bay SAC [000206]	11.4 km	<ul style="list-style-type: none"> <li>Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330]</li> <li>Petalophyllum ralfsii (Petalwort) [1395]</li> </ul>	To maintain the favourable conservation condition of all the habitats listed as qualifying interests for the North Dublin Bay SAC	<i>"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. A well-developed and dynamic dune system stretches along the seaward side of the island. Various types of dunes occur, from fixed dune grassland to pioneer communities on foredunes. Marram Grass (Ammophila arenaria) is dominant on the outer dune ridges, with Lyme-grass (Leymus arenarius) and Sand Couch (Elymus farctus) on the foredunes. Three rare plant species which are legally protected under the Flora (Protection) Order, 1999 have been recorded on the North Bull Island. These are Lesser Centaury (Centaureum pulchellum), Red Hemp-nettle (Galeopsis angustifolia) and Meadow Saxifrage (Saxifraga granulata).</i>	As above.  <b>SCREENED OUT</b>
		<ul style="list-style-type: none"> <li>Annual vegetation of drift lines [1210]</li> <li>Salicornia and other annuals colonising mud and sand [1310]</li> <li>Mediterranean salt meadows (Juncetalia maritimi) [1410]</li> <li>Embryonic shifting dunes [2110]</li> <li>Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]</li> </ul>	To restore the favourable conservation condition of all the habitats listed as qualifying interests for the North Dublin Bay SAC		

Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
		<ul style="list-style-type: none"> <li>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</li> <li>Humid dune slacks [2190]</li> </ul>		<p>Two further species listed as threatened in the Red Data Book, Wild Clary/Sage (<i>Salvia verbenaca</i>) and Spring Vetch (<i>Vicia lathyroides</i>), have also been recorded. A rare liverwort, <i>Petalophyllum ralfsii</i> has recently been confirmed as still present. North Dublin Bay is of international importance for waterfowl. Brent Goose, Knot and Bar-tailed Godwit occurred in internationally important numbers. Shelduck, Wigeon, Teal, Pintail, Shoveler, Oystercatcher, Ringed Plover, Grey Plover, Sanderling, Dunlin, Black-tailed Godwit, Curlew, Turnstone and Redshank occurred in nationally important numbers. A well-known population of Irish Hare is resident on the island. North Bull Island has been designated a Special Protection Area under the E.U. Birds Directive and it is also a statutory Wildfowl Sanctuary, a Ramsar Convention site, a Biogenetic Reserve, a Biosphere Reserve and a Special Area Amenity Order site.”</p>	
Rye Water Valley/Carton SAC [001398]	11.2 km	<ul style="list-style-type: none"> <li>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</li> <li>Petrifying springs with tufa formation (Cratoneurion) [7220]</li> <li>Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]</li> </ul>	<p>To maintain the favourable conservation condition of all the habitats and species listed as qualifying interests for the Rye Water Valley/Carton SAC</p> <p>To restore the favourable conservation condition of all the habitats and species listed as qualifying interests for the Rye Water Valley/Carton SAC</p>	<p>“Rye Water Valley/Carton SAC is located between Leixlip and Maynooth, in Counties Meath and Kildare, and extends along the Rye Water, a tributary of the River Liffey. The Rye Water in Carton Estate is dammed at intervals, creating a series of lakes. Reed Sweet-grass (<i>Glyceria maxima</i>) is frequent around the lakes, along with Yellow Iris (<i>Iris pseudacorus</i>), Reed Canary-grass (<i>Phalaris arundinacea</i>), Bulrush (<i>Typha latifolia</i>), Water Forget-me-not (<i>Myosotis scorpioides</i>), Marsh-marigold (<i>Caltha palustris</i>) and starworts (<i>Callitriche</i> spp.). Along the remainder of the site the river has been dredged and much of the reed fringe removed. The woods on Carton Estate are mostly old demesne woods with both deciduous and coniferous species. Hairy St. Johnswort (legally protected under Flora Protection Order 1999) occurs in Carton Estate, old records of Hairy Violet but has not been recorded in recent years. Green Figwort (<i>Scrophularia umbrosa</i>) (listed in Red Data Book) occurs on the site in several locations by the Rye Water. The Rye Water is also a spawning ground for Trout and Salmon, and the rare, White-clawed Crayfish (<i>Austropotamobius pallipes</i>) has been recorded at Leixlip.</p>	<p>As above.</p> <p><b>SCREENED OUT</b></p>

Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
				<p><i>The rare Narrow-mouthed Whorl Snail and Desmoulin’s Whorl Snail occur in marsh vegetation near Louisa Bridge. The scarce dragonfly, Orthetrum coerulescens, has also been recorded at Louisa Bridge. The marsh, mineral spring and seepage area found at Louisa Bridge supports a good diversity of plant species, including stoneworts, Marsh Arrowgrass (Triglochin palustris), Purple Moor-grass (Molinea caerulea), sedges (Carex spp.) and many more. The mineral spring found at the site is considered rare in Europe. Blue Fleabane (Erigeron acer) (Red Book Data) is found growing at Louisa Bridge. The woods found on Carton Estate and their birdlife are of additional interest, these species include Blackcap, Woodcock and Long-eared Owl have been recorded. Little Grebe, Coot, Moorhen, Tufted Duck, Teal and Kingfisher.”</i></p>	
Baldoye Bay SAC [000199]	12.8 km	<ul style="list-style-type: none"> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Salicornia and other annuals colonising mud and sand [1310]</li> <li>• Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]</li> <li>• Mediterranean salt meadows (Juncetalia maritimi) [1410]</li> </ul>	To maintain the favourable conservation condition of all the habitats listed as qualifying interests for the Baldoye Bay SAC	<p><i>“Baldoye Bay SAC extends from just below Portmarnock village to the west pier at Howth in Co. Dublin. It is a tidal estuarine bay protected from the open sea by a large sand-dune system. Two small rivers, the Mayne and the Sluice, flow into the bay. Large areas of intertidal flats are exposed at low tide at this site. These are mostly sands but grade to muds in the inner sheltered parts of the estuary. Extensive areas of Common Cord-grass (Spartina anglica) occur in the inner estuary. Both the Narrow-leaved Eelgrass (Zostera angustifolia) and the Dwarf Eelgrass (Z. noltii) are also found here. During summer, the sandflats of the sheltered areas are covered by mats of green algae (Enteromorpha spp. and Ulva lactuca). The site includes a brackish marsh along the Mayne River. Soils here have a high organic content and are poorly drained, and some pools occur. Rushes (Juncus spp.) and salt tolerant species such as Common Scurvygrass (Cochleria officinalis) and Version date: 12.08.2013 2 of 2 000199_Rev13.Doc Greater Sea-spurrey (Spergularia media) are typical of this area. Knotted Hedgeparsley (Torilis nodosa), a scarce plant in eastern Ireland, has been recorded here, along with Brackish Water-crowfoot (Ranunculus baudotti), a species of brackish pools and ditches which has declined in most places due to habitat loss.</i></p>	As above.  <b>SCREENED OUT</b>



Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
				Two plant species, legally protected under the Flora (Protection) Order, 1999, occur in the Mayne marsh, Borrer's Saltmarsh-grass ( <i>Puccinellia fasciculata</i> ) and Meadow Barley ( <i>Hordeum secalinum</i> ). Baldoyle Bay is an important bird site for wintering waterfowl and the inner part of the estuary is a Special Protection Area under the E.U. Birds Directive as well as being a Statutory Nature Reserve. Internationally important numbers of Pale-bellied Brent Goose and nationally important numbers of two Annex I Birds Directive species - Golden Plover and Bar-tailed Godwit have been recorded. Nationally important numbers of Shelduck, Pintail, Grey Plover and Ringed Plover species."	
Rogerstown Estuary SAC {000208}	14.2 km	<ul style="list-style-type: none"> <li>• Estuaries [1130]</li> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Salicornia and other annuals colonising mud and sand [1310]</li> <li>• Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330]</li> <li>• Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</li> <li>•</li> </ul>	To maintain the favourable conservation condition of all the habitats listed as qualifying interests for the Rogerstown Estuary SAC	Rogerstown Estuary is situated about 2 km north of Donabate in Co. Dublin. It is a relatively small, narrow estuary separated from the sea by a sand and shingle bar. The estuary is divided by a causeway and narrow bridge, built in the 1840s to carry the Dublin-Belfast railway line. The estuary drains almost completely at low tide. The intertidal flats of the outer estuary are mainly of sands, with soft muds in the north-west sector and along the southern shore. Associated with these muds are stands of Common Cordgrass ( <i>Spartina anglica</i> ). Green algae (mainly <i>Enteromorpha</i> spp. and <i>Ulva lactuca</i> ) are widespread and form dense mats in the more sheltered areas. The intertidal angiosperm Beaked Tasselweed ( <i>Ruppia maritima</i> ) grows profusely in places beneath the algal mats. The Lugworm ( <i>Arenicola marina</i> ) is common in the outer estuary and large Mussel beds ( <i>Mytilus edulis</i> ) occur at the outlet to the sea. Common Codgrass is widespread in intertidal flats. Salicornia mud habitats occur in both outer and inner estuaries. Saltmarsh fringes parts of the estuary, especially the southern shores and parts of the outer sand spit. Common plant species of the saltmarsh include Sea Rush, Sea-purslane ( <i>Halimione portulacoides</i> ) and Common Saltmarsh-grass ( <i>Puccinellia maritima</i> ). Salt meadows and wet brackish fields occur along the tidal river. Low sand hills occur on the outer spit, including some small areas of fixed dunes and Marram Grass ( <i>Ammophila arenaria</i> ) dunes.	As above.  <b>SCREENED OUT</b>
		<ul style="list-style-type: none"> <li>• Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330]</li> <li>• Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</li> <li>• Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</li> </ul>	To restore the favourable conservation condition of all the habitats listed as qualifying interests for the Rogerstown Estuary SAC		



Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
				<p><i>Fine sandy beaches and intertidal sandflats occur at the outer part of the estuary. Rogerstown Estuary is an important waterfowl site, with Brent Goose having a population of international importance. A further 16 species have populations of national importance: Greylag Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Lapwing, Knot, Dunlin, Sanderling, Black-tailed Godwit, Curlew, Redshank and Greenshank. Also a significant population of Golden Plover. The outer part of the estuary has been designated a Statutory Nature Reserve and a Special Protection Area under the E.U. Birds Directive. Two plant species which are legally protected under the Flora (Protection) Order, 1999, occur within the site: Hairy Violet (<i>Viola hirta</i>) occurs on the sand spit and Meadow Barley (<i>Hordeum secalinum</i>) occurs in the saline fields of the inner estuary. Another rare species, Green-winged Orchid (<i>Orchis morio</i>), occurs in the sandy areas of the outer estuary.</i></p>	
<b>SPA Sites</b>					
South Dublin Bay and River Tolka Estuary SPA [004024]	8.8 km	<ul style="list-style-type: none"> <li>• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</li> <li>• Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</li> <li>• Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</li> <li>• Knot (<i>Calidris canutus</i>) [A143]</li> <li>• Sanderling (<i>Calidris alba</i>) [A144]</li> <li>• Dunlin (<i>Calidris alpina</i>) [A149]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Redshank (<i>Tringa totanus</i>) [A162]</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</li> <li>• Roseate Tern (<i>Sterna dougallii</i>) [A192]</li> <li>• Common Tern (<i>Sterna hirundo</i>) [A193]</li> </ul>	<p>To maintain the favourable conservation condition of all the bird species listed as Special Conservation Interests within South Dublin Bay and River Tolka Estuary SPA,</p> <p>and,</p> <p>To maintain the favourable conservation condition of the wetland habitat in South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it.</p>	<p><i>The South Dublin Bay and River Tolka Estuary SPA comprises a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dun Laoghaire, and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. The site is designated for the following species: Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull, Roseate Tern, Common Tern and Arctic Tern. Particular attention is also drawn to the wetlands, and as these form part of the SPA, the site and its associated waterbirds are of special conservation interest for Wetland &amp; Waterbirds. The site is an important site for wintering waterfowl and is a significant site for wintering gulls, with a nationally important population of Black-headed Gull, but also Common Gull and Herring Gull. Mediterranean Gull is also recorded from here, occurring through much of the year, but especially in late winter/spring and again in late summer into winter.</i></p>	<p>Loss of habitat (construction phase), no pathway as habitat loss is on site and the habitat is not suitable for any of the SPA SCI birds.</p> <p>Water discharge resulting in pollution (construction &amp; operation phases), there is a hydrological pathway (groundwater and surface water) between the project site and the habitats upon which the SPA birds are dependant via Fingal stream which flows into the Tolka River. There <u>is</u> a potential for likely significant effects from water pollution.</p>

Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
		<ul style="list-style-type: none"> <li>Arctic Tern (<i>Sterna paradisaea</i>) [A194]</li> <li>Wetland and Waterbirds [A999]</li> </ul>		<p><i>Both Common Tern and Arctic Tern breed in Dublin Docks, on a man-made mooring structure known as the E.S.B. dolphin, which is also an important staging/passage site for a number of tern species (late July to September). The origin of many of the birds is likely to be the Dublin breeding sites (Rockabill and the Dublin Docks) though numbers suggest that the site is also used by birds from other sites. This site is selected for designation for its autumn tern populations: Roseate Tern, Common Tern and Arctic Tern. Furthermore, the site supports a nationally important colony of breeding Common Tern. Four of the species that regularly occur at this site are listed on Annex I of the E.U. Birds Directive, i.e. Bar-tailed Godwit, Common Tern, Arctic Tern and Roseate Tern."</i></p>	<p>Dust resulting in pollution or smothering of vegetation (construction and operation phases), pathway via air transport and receptor is bird habitat, the pathway is very weak due to distance and the habitats important to birds are not sensitive.</p> <p>Noise and vibration resulting in disturbance of wildlife (construction &amp; operation phases), no pathway as SPA is too distant from project site.</p> <p><b>SCREENED IN</b></p>
<p>North Bull Island SPA [004066]</p>		<ul style="list-style-type: none"> <li>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</li> <li>Shelduck (<i>Tadorna tadorna</i>) [A048]</li> <li>Teal (<i>Anas crecca</i>) [A052]</li> <li>Pintail (<i>Anas acuta</i>) [A054]</li> <li>Shoveler (<i>Anas clypeata</i>) [A056]</li> <li>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</li> <li>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>Knot (<i>Calidris canutus</i>) [A143]</li> <li>Sanderling (<i>Calidris alba</i>) [A144]</li> <li>Dunlin (<i>Calidris alpina</i>) [A149]</li> <li>Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> </ul>	<p>To maintain the favourable conservation condition of all the bird species listed as Special Conservation Interests within North Bull Island SPA,</p> <p>and,</p> <p>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.</p>	<p><i>"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. 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. Saltmarsh extends along the length of the landward side of the island and provides the main roost site for wintering birds in Dublin Bay. The island shelters two intertidal lagoons which are divided by a solid causeway. These lagoons provide the main feeding grounds for the wintering waterfowl. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. Green algal mats (<i>Ulva spp.</i>) are a feature of the flats during summer. These sediments have a rich macro-invertebrate fauna, with high densities of Lugworm (<i>Arenicola marina</i>) and Ragworm (<i>Hediste diversicolor</i>). 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.</i></p>	<p>Loss of habitat (construction phase), no pathway as habitat loss is on site and the habitat is not suitable for any of the SPA SCI birds.</p> <p>Water discharge resulting in pollution (construction and operation phases), there is no direct hydrological (groundwater or surface water) pathway between the project site and the habitats upon which the SPA birds are dependant. The Tolka River flows into the sea and is not connected to this SPA. There is no potential for likely significant effects on the SPA</p>

Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
		<ul style="list-style-type: none"> <li>• Curlew (Numenius arquata) [A160]</li> <li>• Redshank (Tringa totanus) [A162]</li> <li>• Turnstone (Arenaria interpres) [A169]</li> <li>• Black-headed Gull (Chroicocephalus ridibundus) [A179]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>		<p><i>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. The North Bull Island SPA is a regular site for passage waders, especially Ruff, Curlew Sandpiper and Spotted Redshank. 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."</i></p>	<p>SCI birds from water pollution.</p> <p>Dust resulting in pollution or smothering of vegetation (construction and operation phases), pathway via air transport and receptor is bird habitat, although the pathway is very weak due to distance and the habitats important to birds are not sensitive.</p> <p>Noise and vibration resulting in disturbance of wildlife (construction and operation phases), no pathway as SPA is too distant from project site.</p> <p><b>SCREENED OUT</b></p>
Baldoyle Bay SPA [004016]		<ul style="list-style-type: none"> <li>• Light-bellied Brent Goose (Branta bernicla hrota) [A046]</li> <li>• Shelduck (Tadorna tadorna) [A048]</li> <li>• Ringed Plover (Charadrius hiaticula) [A137]</li> <li>• Golden Plover (Pluvialis apricaria) [A140]</li> <li>• Grey Plover (Pluvialis squatarola) [A141]</li> <li>• Bar-tailed Godwit (Limosa lapponica) [A157]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<p>To maintain the favourable conservation condition of all the bird species listed as Special Conservation Interests within Baldoyle Bay SPA,</p> <p>and,</p> <p>To maintain the favourable conservation condition of the wetland habitat in Baldoyle Bay SPA as a resource for the regularly occurring migratory waterbirds that utilise it.</p>	<p><i>"Baldoyle Bay, located to the north and east of Baldoyle and to the south of Portmarnock, Co. Dublin, is a relatively small, narrow estuary separated from the open sea by a large sand dune system. Two small rivers, the Mayne River and the Sluice River, flow into the inner part of the estuary. Large areas of intertidal flats are exposed at low tide. These are mostly sands but grade to muds in the inner sheltered parts of the estuary. Extensive areas of Common Cord-grass (Spartina anglica) occur in the inner estuary. Both the Narrow-leaved Eelgrass (Zostera angustifolia) and the Dwarf Eelgrass (Z. noltii) are also found here. During summer, the sandflats of the sheltered areas are covered by mats of green algae (Ulva spp.). The sediments have a typical macrofauna, with Lugworm (Arenicola marina) dominating the sandy flats. Areas of saltmarsh occur near Portmarnock Bridge and at Portmarnock Point, with narrow strips found along other parts of the estuary. Species such as Glasswort (Salicornia spp.), Sea-purslane (Halimione portulacoides), Sea Plantain (Plantago maritima) and Sea Rush (Juncus maritimus) are found here.</i></p>	<p>As above.</p> <p><b>SCREENED OUT</b></p>

Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
				<p><i>Baldoyle Bay SPA is of high conservation importance, for supporting internationally important numbers of Light-bellied Brent Goose as well as nationally important populations of a further five species, including Golden Plover and Bar-tailed Godwit, both species that are listed on Annex I of the E.U. Birds Directive. The inner part of the site is a Statutory Nature Reserve and also designated as a wetland of international importance under the Ramsar Convention."</i></p>	
<p>Rogerstown Estuary SPA [004015]</p>		<ul style="list-style-type: none"> <li>• Greylag Goose (Anser anser) [A043]</li> <li>• Light-bellied Brent Goose (Branta bernicla hrota) [A046]</li> <li>• Shelduck (Tadorna tadorna) [A048]</li> <li>• Shoveler (Anas clypeata) [A056]</li> <li>• Oystercatcher (Haematopus ostralegus) [A130]</li> <li>• Ringed Plover (Charadrius hiaticula) [A137]</li> <li>• Grey Plover (Pluvialis squatarola) [A141]</li> <li>• Knot (Calidris canutus) [A143]</li> <li>• Dunlin (Calidris alpina) [A149]</li> <li>• Black-tailed Godwit (Limosa limosa) [A156]</li> <li>• Redshank (Tringa totanus) [A162]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<p>To maintain the favourable conservation condition of all the bird species listed as Special Conservation Interests within Rogerstown Estuary SPA, and,</p> <p>To maintain the favourable conservation condition of the wetland habitat in Rogerstown Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it.</p>	<p>"Rogerstown Estuary is situated about 2 km north of Donabate in north County Dublin. It is a relatively small, funnel shaped estuary separated from the sea by a sand and shingle peninsula; the site extends eastwards to include an area of shallow marine water. The estuary receives the waters of the Ballyboghil and Ballough rivers and has a wide salinity range, from near full seawater to near full freshwater. At low tide extensive intertidal sand and mud flats are exposed and these provide the main food resource for the wintering waterfowl that use the site. Rogerstown Estuary supports an internationally important population of Light-bellied Brent Goose and nationally important populations of a further 10 species. The presence of Little Egret and Golden Plover is of note as these species are listed on Annex I of the E.U. Birds Directive. Rogerstown Estuary is also a Ramsar Convention site, and part of Rogerstown Estuary SPA is designated as a Statutory Nature Reserve and a Wildfowl Sanctuary."</p>	<p>As above.  <b>SCREENED OUT</b></p>

Natura 2000 Site	Distance <sup>7</sup>	Qualifying Interests <sup>8</sup>	Conservation Objective	Brief Description	Connections (Source-Pathway-Receptor)
Malahide Estuary SPA [004025]		<ul style="list-style-type: none"> <li>• Great Crested Grebe (<i>Podiceps cristatus</i>) [A005]</li> <li>• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</li> <li>• Shelduck (<i>Tadorna tadorna</i>) [A048]</li> <li>• Pintail (<i>Anas acuta</i>) [A054]</li> <li>• Goldeneye (<i>Bucephala clangula</i>) [A067]</li> <li>• Red-breasted Merganser (<i>Mergus serrator</i>) [A069]</li> <li>• Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>• Knot (<i>Calidris canutus</i>) [A143]</li> <li>• Dunlin (<i>Calidris alpina</i>) [A149]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Redshank (<i>Tringa totanus</i>) [A162]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<p>To maintain the favourable conservation condition of all the bird species listed as Special Conservation Interests within Malahide Estuary SPA,</p> <p>and,</p> <p>To maintain the favourable conservation condition of the wetland habitat in Malahide Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it.</p>	<p>“Malahide Estuary is situated in north Co. Dublin, between the towns of Malahide and Swords. The site encompasses the estuary, saltmarsh habitats and shallow subtidal areas at the mouth of the estuary. Much of the outer part of the estuary is well-sheltered from the sea by a large sand spit, known as “The Island”. This spit is now mostly converted to golf-course. The outer part empties almost completely at low tide and there are extensive intertidal flats exposed.</p> <p>Substantial stands of eelgrass (both <i>Zostera noltii</i> and <i>Z. angustifolia</i>) occur in the sheltered part of the outer estuary, along with Tasselweed (<i>Ruppia maritima</i>). Green algae, mostly <i>Ulva</i> spp., are frequent on the sheltered flats. Common Cord-grass (<i>Spartina anglica</i>) is well established in the outer estuary and also in the innermost part of the site. The intertidal flats support a typical macroinvertebrate fauna, with polychaete worms (<i>Arenicola marina</i> and <i>Hediste diversicolor</i>), bivalves such as <i>Cerastoderma edule</i>, <i>Macoma balthica</i> and <i>Scrobicularia plana</i>, the small gastropod <i>Hydrobia ulvae</i> and the crustacean <i>Corophium volutator</i>. Salt marshes, which provide important roosts during high tide, occur in parts of the outer estuary and in the extreme inner part of the inner estuary. These are characterised by such species as Sea Purslane (<i>Halimione portulacoides</i>), Sea Aster (<i>Aster tripolium</i>), Thrift (<i>Armeria maritima</i>), Sea Arrowgrass (<i>Triglochin maritima</i>) and Common Saltmarsh-grass (<i>Puccinellia maritima</i>). Malahide Estuary SPA is an estuarine system which provides feeding and roosting areas for a range of wintering waterfowl, and it hosts internationally important populations of Light-bellied Brent Goose and Black-tailed Godwit, and nationally important populations of a further 12 species listed as Qualifying Interests for the site. It is also a Ramsar Convention site.”</p>	<p>As above.  <b>SCREENED OUT</b></p>

### 3.5 Step 4 - Part 1: Assessment of Likely Significant Effects for Project Alone

There is only one Natura 2000 site for which a connection (source-pathway-receptor link) with the Huntstown quarry site / waste recovery facility has been identified; South Dublin Bay and River Tolka Estuary SPA. It has been identified that, for this Natura 2000 site, the discharge of water from the quarry / recovery facility may result in likely significant effects. There are no other pathways and therefore, likely significant effects can be excluded from all other sources.

The potential for likely significant effects on this Natura 2000 site from the discharge of water from the quarry / recovery facility is considered further below.

#### **South Dublin Bay and River Tolka Estuary SPA (004024)**

The South Dublin Bay and River Tolka Estuary SPA (004024) lies 8.8km from the project site. The features of interest for the site, mainly wintering waterbirds, are reliant on important local habitats such shallow marine waters and intertidal flats in the south of Dublin Bay where the flats can extend for almost 3km at their widest, enclosed areas of saltmarsh and muds, small sandy beaches, soft thixotropic muds with a high organic content and well-aerated sands. These habitats make the site a European important site for wintering waterfowl.

The main threats and pressures with notable effects on, or potential to cause disturbance of, the waterbird populations within the SPA have been listed as habitat loss and modification, water quality, fisheries and aquaculture and recreational activities. However, it has been shown from recent disturbance studies that recreational activities including walkers, joggers and dogs accounted for the greatest majority of disturbance events on waterbirds and these recreational activities at this site occur to such a level that are likely to effect waterbird survival (Phalan & Nairn 2007 and NPWS 2014). Recent water quality improvements such as the cessation of WWTP discharge from Ringsend have brought about beneficial changes to the estuarine system.

#### **Emissions to Water (Groundwater and Surface Water)**

The South Quarry is located within the Tolka River Catchment and Dublin Groundwater Body is indirectly linked with the South Dublin Bay and River Tolka Estuary SPA via a hydrological pathway as a result of the off-site discharge of treated surface water run-off to the Finglas Stream, a tributary of the River Tolka that eventually outflows into the South Dublin Bay and River Tolka Estuary SPA.

Water from the South Quarry is discharged off-site to the headwaters of the Finglas Stream immediately east of the quarry and Roadstone property holding, at the discharge point designated 'W3' by existing Local Authority discharge licence. At the discharge point, almost the entire flow in the stream comprises discharge from the South Quarry. With no other significant inputs of flow, the Finglas Stream is reliant on discharge of water from the quarry to provide baseflow at the top of its catchment. In the absence of any discharge, it is likely that this watercourse would periodically run dry, except during periods of heavy or prolonged rainfall.

As there is hydrological link between the quarry and the South Dublin Bay and River Tolka Estuary SPA any impact on water quality any accidental and uncontrolled pollution has the potential to affect the features of interest of the SPA.

During the operation, and without appropriate mitigation, backfilling and recovery of inert soil and stone activities have the potential for accidental spills or leaks of fuels and other petroleum-based products (lubricating oils, greases etc.) from plant and machinery, the storage of such materials, or the importation of non-inert material or a rogue load with contaminated soils, could all lead to contaminated runoff entering surface water and/or groundwater which could reach South Dublin Bay and River Tolka Estuary SPA.

Therefore, this aspect of emissions to surface and ground water should be carried forward into the Stage 2 Assessment as it could affect the integrity of the qualifying features of South Dublin Bay and River Tolka Estuary SPA.



### 3.6 Step 4 - Part 2: Assessment of Likely Significant 'In Combination' Effects

In combination, or cumulative, effects can result from individually insignificant but collectively significant actions taking place over a period of time or concentrated in a location. Cumulative effects can occur where a proposed development results in individually insignificant impacts that, when considered in-combination with impacts of other proposed or permitted plans and projects, can result in significant effects.

Other plans and projects that should be considered when establishing cumulative effects are:

- proposals for which consent has been applied but which are awaiting determination;
- projects which have been granted consent, but which have not yet been started or which have been started but are not yet completed (i.e. under construction);
- proposals which have been refused permission, but which are subject to appeal, and the appeal is undetermined;
- constructed developments whose full environmental effects are not yet felt and therefore cannot be accounted for in the baseline; or
- developments specifically referenced in a National Policy Statement, a National Plan or a Local Plan.

Potential direct and indirect impacts on ground water and surface water quality respectively, because of the waste recovery activities at Huntstown, have been identified and other plans and projects (as described above) were considered in – combination with the proposed intake and recovery of soil and stone waste at the western side of Huntstown South Quarry for cumulative effects.

A search of the Fingal County Council online planning search facilities indicates that there are no other major planned developments in the vicinity of the application site in Huntstown or in the surrounding townlands that have been granted planning permission in the last five years and have the potential to give rise to any significant adverse cumulative impacts on the local environment (and specifically, any cumulative impacts in respect of surface water and groundwater).

There are no policies or objectives within the Fingal County Development Plan 2017 – 2023 that when considered with the proposed waste recovery facility could give rise to cumulative effects on Natura 2000 sites.

### 3.7 Conclusions

It is considered that there is one Natura 2000 site, South Dublin Bay and River Tolka Estuary SPA, of being at risk from likely significant effects where a Source-Pathway-Receptor links exists due to the activities at the proposed intake and recovery of soil and stone waste at the western side of Huntstown South Quarry, Finglas, Dublin 11. Therefore, in the absence of consideration of suitable mitigation, likely significant effects on this Natura 2000 site either alone or in-combination with other plans and projects cannot be excluded.



## 4 NATURA IMPACT STATEMENT

This Natura Impact Statement (NIS) was prepared as part of a waste licence application to the EPA under Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations, for the proposed intake and recovery of soil and stone waste at the western side of Huntstown South Quarry, Finglas, Dublin 11

The Competent Authority, in this case the EPA, will therefore be required to carry out an appropriate assessment to determine whether the proposed intake and recovery of soil and stone waste would adversely affect the integrity of South Dublin Bay and River Tolka Estuary SPA. (004042). The *'integrity of the site'* can be defined as 'the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and / or populations of species for which the site is or will be classified'<sup>9</sup>.

### 4.1 Assessment of Effects of Project or Plan on the Integrity of SPA

The headings within the appropriate assessment report template provided in the European Commission guidance document on the assessment of plans and projects significantly affecting Natura 2000 sites have been used to provide a framework to examine the potential impacts of the proposed waste recovery facility on the South Dublin Bay and River Tolka Estuary SPA.

This section of the report sets out the potential implications of the plan or project (both alone or in combination with other projects or plans) on the integrity of the Natura 2000 site with respect to the conservation objectives of the site and to its structure and function. The precautionary principle should be applied when considering the potential implications and the focus should be on demonstrating, with supporting evidence, that there will be no adverse effects on the integrity of South Dublin Bay and River Tolka Estuary SPA. Where this is not the case, adverse effects must be assumed.

#### 4.1.1 Describe the elements of the project or plan (alone or in combination with other projects or plans) that are likely to give rise to significant effects on the environment.

The element of the project identified as having potential to affect South Dublin Bay and River Tolka SPA are as follows:

- Adverse effects on surface and groundwater quality from accidental spills or leaks of fuels and other petroleum-based products (lubricating oils, greases etc.) from plant and machinery, or the storage of such materials, leading to indirect effects on surface water.
- Unintentional importation of non-inert material or a rogue load with contaminated soils has the potential to impact surface water and the groundwater quality of the underlying poor bedrock aquifer.

In summary, there is a hydrological link between the quarry / recovery facility and the South Dublin Bay and River Tolka Estuary SPA via the Fingal Stream and the Tolka River and any impact on water quality arising from any accidental and/or uncontrolled pollution has the potential to affect the water quality in the South Dublin Bay and River Tolka SPA further down-stream.

#### 4.1.2 Set out the conservation objectives of the site

The conservation objectives (COs) for South Dublin Bay and River Tolka Estuary SPA are as follows:

*To maintain the favourable conservation condition of all the bird species listed as Special Conservation Interests (SCIs) within South Dublin Bay and River Tolka Estuary SPA, and to maintain the favourable conservation condition of the wetland habitat within South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it.*

<sup>9</sup> [http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision\\_of\\_art6\\_en.pdf](http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision_of_art6_en.pdf)

- *Light-bellied Brent Goose (Branta bernicla hrota) [A046]*
- *Oystercatcher (Haematopus ostralegus) [A130]*
- *Ringed Plover (Charadrius hiaticula) [A137]*
- *Knot (Calidris canutus) [A143]*
- *Sanderling (Calidris alba) [A144]*
- *Dunlin (Calidris alpina) [A149]*
- *Bar-tailed Godwit (Limosa lapponica) [A157]*
- *Redshank (Tringa totanus) [A162]*
- *Black-headed Gull (Chroicocephalus ridibundus) [A179]*
- *Roseate Tern (Sterna dougallii) [A192]*
- *Common Tern (Sterna hirundo) [A193]*
- *Arctic Tern (Sterna paradisaea) [A194]*
- *Wetland and Waterbirds [A999]*

A full description of the conservation objectives (COs) are available in the NPWS (2015) Conservation Objectives Series for South Dublin Bay and River Tolka Estuary SPA [004024]<sup>10</sup>. There are no specific water quality targets set for the SCIs of this SPA, but rather there is a link between water quality, food sources and populations of birds, and for any water quality effects to undermine the COs they would have to cause a decline prey biomass (the three *Sterna* spp.) or the populations of birds (all SCI species).

The conservation objectives document also states that since all bird populations are currently in favourable condition, it is inferred that the existing water quality is adequate to maintain favourable condition. This is despite the fact that the Finglas Stream and Tolka River have generally poor water quality, from source to sea, and have had so for decades including the period before the SPA was ever designated (Source : EPA monitoring for Area 9 Liffey and Dublin Bay Catchment.).

#### **4.1.3 Describe how the project or plan will affect key species and key habitats. Acknowledge uncertainties and gaps in information**

There is the potential for direct or indirect effects on the wetland habitats and the prey species upon which many of the migratory waterbirds depend due to the potential degradation of water quality in the Tolka River or groundwater sources from contaminants from accidental and/or uncontrolled water pollution from the proposed soil waste recovery operations at Huntstown South Quarry.

#### **4.1.4 Describe how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project or plan (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes and geological changes, etc.). Acknowledge also uncertainties and any gaps in information.**

A reduction in surface water and/or groundwater quality from accidental spills or leaks of fuels and other petroleum-based products (lubricating oils, greases etc.) from plant and machinery, or the unintentional importation of non-inert material or a rogue load with contaminated soils has the potential to impact the water quality of the wetland habitat within the Tolka River estuary which contains important prey species for the three *Sterna* spp.

<sup>10</sup> [https://www.npws.ie/sites/default/files/protected-sites/conservation\\_objectives/CO004024.pdf](https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004024.pdf)

#### **4.1.5 Describe what mitigation measures are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of the site. Acknowledge uncertainties and any gaps in information.**

The following water / environmental control measures are well-established pollution / contamination control measures which are already in operation at the existing Huntstown quarry / waste recovery facility.

These measures will also be implemented at the planned extended soil waste recovery facility to avoid any adverse effects on the integrity of South Dublin Bay and River Tolka Estuary SPA as a result of the proposal to backfill and restore Huntstown South Quarry by way of soil waste recovery activities:

- Any dewatered groundwater and surface water will continue to be collected in sumps (and/or at low points) and pumped to existing settlement / attenuation ponds. The treated surface water is then passed through a silt trap and hydrocarbon interceptor prior to its discharge off-site. The water treatment system reduces the concentration of suspended solids and removes any hydrocarbon contamination in water discharged off-site;
- The existing traffic management system will continue to evolve and will be further developed to reduce potential conflicts between vehicles travelling to and from the South Quarry and those travelling to other areas within the quarry complex. By minimising / avoiding interaction between vehicles transiting to different areas, the risk of accidental vehicle collisions and associated fuel spills or oil leaks will be reduced;
- All plant is regularly maintained and inspected daily for leaks of fuels, lubricating oil or other contaminating liquids / liquors;
- Fuel for plant and equipment used for quarry backfilling and recovery operations will continue to be stored in existing fuel storage tanks at the central infrastructure and production area within the Huntstown quarry complex;
- These tanks are constructed on sealed concrete surfaces and bunded to provide a storage volume equivalent to 110% of the tank storage volume;
- The plant and equipment undertaking the backfilling works at the South Quarry will be refuelled over concrete surfaced areas around existing bunded fuel storage tanks, from mobile, double skin fuel bowzers or fuel lorries on the quarry floor or hardstanding areas. Any refuelling of mobile plant undertaken within the quarry void is only to be undertaken using drip trays to contain any spillages. When refuelling directly from fuel trucks, drivers will be required to carry spill kits, to cut off delivery when fuel tanks are full and limit deliveries to a maximum of 200 litres;
- Oil and lubricant changes and servicing of wheeled or tracked plant employed at the South Quarry will continue to be undertaken at the existing maintenance sheds;
- A small bunded area for waste oils is provided within the maintenance shed. Oil collected in tanks is emptied at intervals by a licensed waste contractor and disposed off-site at an authorised waste facility;
- Numerous spill kits are available and plant operators are briefed during 'toolbox' talks and site induction on where the spill kits are kept and how and when they are deployed;
- Regular visual inspection and testing is undertaken of the integrity of tanks, drums, bunded pallets and double skinned containers;
- Existing monitoring measures being implemented at and around the South Quarry will continue in service to monitor any potential impact arising from the backfilling and recovery operations on groundwater or surface water;
- Ongoing surface water discharge from the South Quarry (W3) is currently tested for a range of physical and chemical parameters, in line with the existing discharge licence requirements, and this

monitoring has been shown to be in compliance with the requirements of the existing discharge licence for the South Quarry (Ref. No. WPW/F/075);

- The extensive suite of parameters (outlined previously for the quarterly monitoring being undertaken at the South Quarry) will continue to be tested annually (i.e., inorganics, metals, TPHs, PAHs, PCBs and pesticides/herbicides with cyanide, phenols, VOCs and SVOCs), in line with the existing waste licence requirements (or any amendment thereto). All surface water discharges will comply with the emission limits set by the discharge licence (or those which may supersede them in any amended waste licence issued by the EPA);
- The upper surface of the backfilled soil will be graded so as to ensure that surface water run-off falling over the quarry footprint falls to sumps at temporary low points within the quarry floor or within the backfilled materials. These temporary sumps will effectively function as primary settlement ponds.

#### **4.1.6 Additional Mitigation Measures**

The following additional measures are to be applied specifically in respect of soil waste recovery / acceptance procedures to prevent any risk of contaminated soil waste intake to the proposed facility:

- Only soil and stone waste and C&D material carried by authorised waste collectors will be accepted at the waste recovery facility at Huntstown South Quarry. All waste intake and acceptance will be subject to regulation and control by way of the amended EPA Waste Licence;
- Any waste consignment observed to have other non-approved wastes intermixed with it on the basis of a CCTV / visual inspection at the weighbridge will not be accepted for intake and will be immediately rejected and re-directed off-site;
- As with the existing / established soil recovery operations at the North Quarry, a comprehensive system of in-situ compliance monitoring and testing of imported waste materials will be implemented, and detailed records will be kept of all testing;
- All soil and stone unloaded (end-tipped) from trucks at the backfill areas will be further inspected by site-based personnel to ensure that there is no non-hazardous or hazardous waste intermixed with it. Should any intermixed, non-inert waste be identified at this point, the entire consignment will be rejected, reloaded back onto the HGV and the haulier directed to remove it off-site to another authorised facility;
- Any soil and stone waste which is accepted for intake to the facility but is subsequently suspected to be non-compliant with agreed waste acceptance criteria will be transferred to the waste inspection and quarantine facility for closer examination and/or testing. The shed is roofed, closed on three sides and has a concrete floor, protecting quarantine material from rainfall and avoiding potential to generate (suspect) contaminated surface water run-off;
- All surface water discharges will comply with the emission limits set by the discharge licence (or those which may supersede them in any amended waste licence issued by the EPA);
- The upper surface of the backfilled soil will be graded so as to ensure that surface water run-off falling over the quarry footprint falls to sumps at temporary low points within the quarry floor or within the backfilled materials. These temporary sumps will effectively function as primary settlement ponds; and
- It is envisaged that an additional monitoring location, designated DP2, will be established at a location adjoining W3 downstream of the hydrocarbon interceptor and that this will be adopted as the compliance point for off-site discharges of treated water associated with future backfilling and recovery activities at the South Quarry.

## 4.2 Consideration of Findings

The above-listed mitigation measures include standard “*designed in*” surface water and groundwater protection measures and additional mitigation measures typical of waste recovery facility developments. Together they will ensure that the conservation objectives for SPA will not be undermined by the proposed waste recovery facility at Huntstown. No additional specific mitigation measures are deemed necessary.

On this basis, this screening report for Appropriate Assessment, based on the best available scientific information, shows that, considering the project with mitigation measures, the proposed restoration, backfilling and recovery at the western side of Huntstown South Quarry, is not likely to undermine the conservation objectives for the South Dublin Bay and River Tolka Estuary SPA, either alone or in-combination with other projects or plans.

Based on the information set out in this report we submit that the competent authority has sufficient information to allow it to determine that the proposed waste recovery activities at Huntstown South Quarry, individually or in combination with other plans or projects, will not have an adverse effect on the integrity or pose a risk of likely significant effects on the Natura 2000 site: South Dublin Bay and River Tolka Estuary SPA.

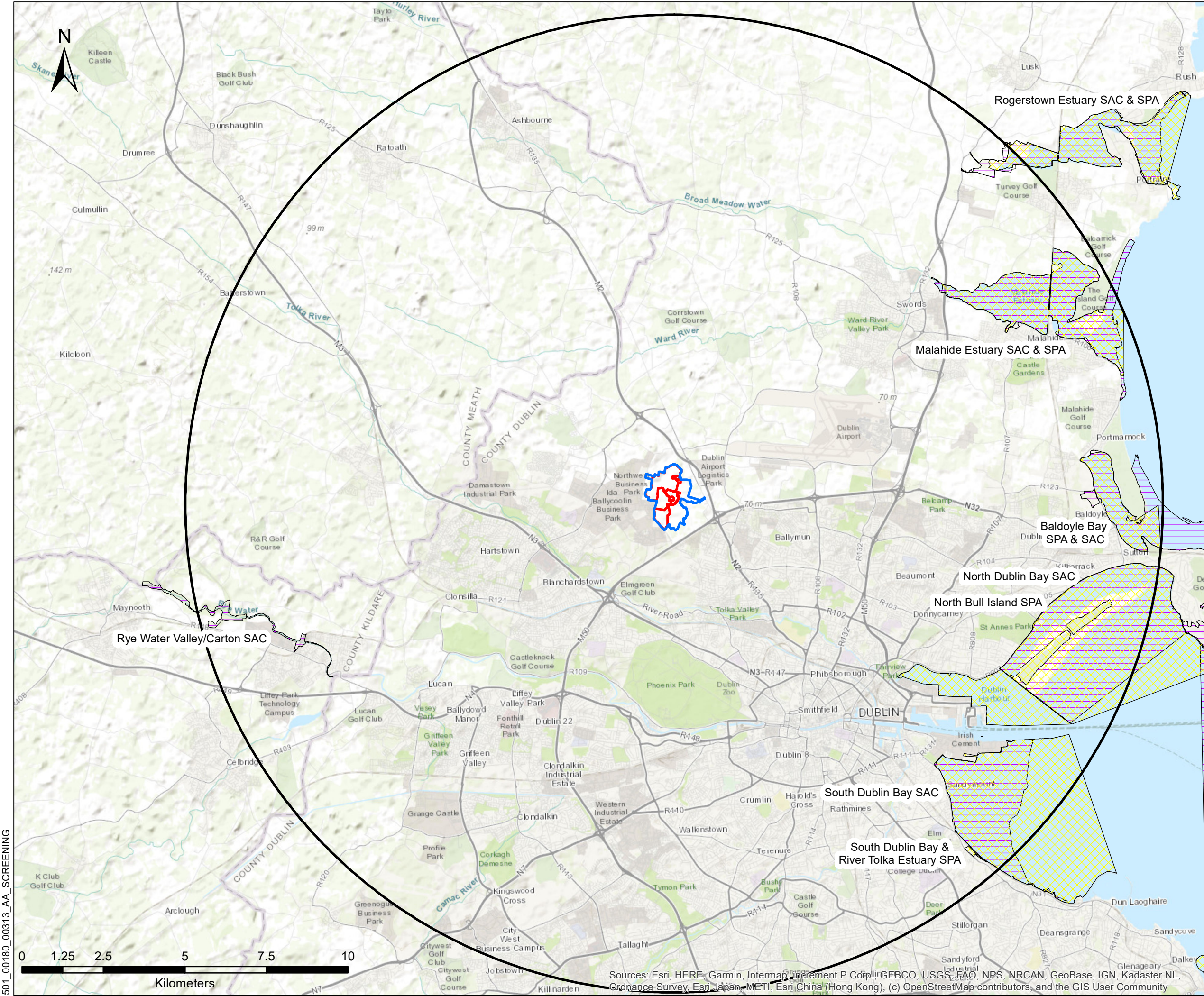
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## FIGURES

**Figure 1**  
**Location of Project Site Relative to Natura 2000 Sites**

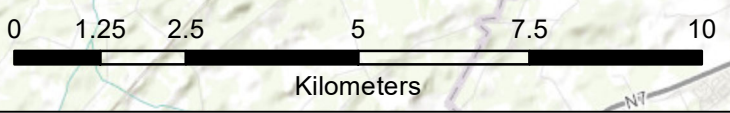




**LEGEND**

- Applicants Land Interest Boundary
- Application Area
- 15km Boundary
- Special Protection Areas (SPA)
- Special Areas of Conservation (SAC)

501\_00180\_00313\_AA\_SCREENING



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan (METI), Esri (China) (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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**NATURA 2000 SITES**

**FIGURE 1**

Scale 1:110,000 @ A3 Date AUGUST 2022



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