

Royal Canal Greenway Cycle and Pedestrian Route Phase 4 – Phibsborough to Ashtown Appropriate Assessment Screening Report

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Client:
Dublin City Council
Civic Offices
Wood Quay
Dublin 8
D08 RF3F

Royal Canal Greenway Cycle and Pedestrian Route Phase 4 – Phibsborough to Ashtown

Appropriate Assessment Screening Report

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1. INTRODUCTION

1.1 Background

Roughan & O'Donovan – AECOM Alliance (ROD-AECOM) was appointed by Dublin City Council to provide engineering and environmental consultancy services in relation to the Royal Canal Greenway Cycle and Pedestrian Route Phase 4 – Phibsborough to Ashtown (“the Project”).

This Appropriate Assessment (AA) Screening Report is intended to determine whether or not the Project, either individually or in combination with other plans or projects, in view of best scientific knowledge, is likely to have a significant effect on areas designated as being of European importance for nature conservation (“European sites”), thereby enabling Dublin City Council, as the Competent Authority in this case, to fulfil its obligations under Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (“the Habitats Directive”).

This document comprises the AA Screening Report in respect of the Project and was prepared by ROD-AECOM on behalf of Dublin City Council and in accordance with the requirements of the Habitats Directive as defined in Part XAB of the Planning and Development Act, 2000 (as amended) (“the Planning and Development Acts”). The aim of this AA Screening Report is to inform and assist the Competent Authority in carrying out its AA Screening by determining whether or not the Project, either individually or in combination with other plans and projects, has the potential to significantly affect one or more European sites in view of their Conservation Objectives.

It is the considered opinion of ROD-AECOM, as the author of this AA Screening Report, that the Project, either individually or in combination with other plans or projects, in view of best scientific knowledge, is not likely to have a significant effect on any European site.

The reporting for this AA Screening was carried out by Kate Moore GradCIEEM. Kate is Ecologist with over five years' experience in ecological consultancy. She holds a BSc (Hons) degree in Environmental Biology from the University College Dublin and is a Graduate member of CIEEM. A technical review of this AA screening report was undertaken by Patrick O'Shea MCIEEM. Patrick is an Ecologist with over nine years' experience in consultancy and research. He holds a B.A. (Mod) Hons. in Botany from Trinity College Dublin and a MSc. in Ecological Management & Conservation Biology from Queen's University Belfast. Patrick is a Full member of the Chartered Institute of Ecological and Environmental Management (CIEEM).

1.2 Legislative Context

The Habitats Directive and Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (“the Birds Directive”) list habitats and species which are, in a European context, important for conservation and in need of protection. This protection is afforded in part through the designation of sites that, in a European context, support significant examples of habitats or populations of species. These sites are generally referred to as “European sites”. Specifically, sites designated for wild birds are termed “Special Protection Areas” (SPAs) and sites designated for natural habitat types or other species are termed “Special Areas of Conservation” (SACs). The complete network of European sites is referred to as “Natura 2000”.

In order to ensure the protection of European sites in the context of land use planning and development, Article 6(3) of the Habitats Directive requires 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.”

The Court of Justice of the European Union (CJEU) has interpreted this requirement as follows¹:

“Any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects.”

In accordance with the Precautionary Principle, the CJEU interpreted the word “likely” as meaning that as long as it cannot be conclusively demonstrated that a given effect will not occur, that effect is considered “likely” to occur. A likely effect considered to be “significant” only if it interrupts or causes delays in progress towards achieving the Conservation Objectives² of the relevant European site(s).

In its judgment in *People Over Wind*³, the CJEU concluded that the determination of whether or not AA is required in respect of a project must be completed without consideration of “measures that are intended to avoid or reduce the harmful effects of the envisaged project on the site concerned”.

Further clarification on the use of mitigation measures was provided in *Eco Advocacy*⁴, where the CJEU ruled that where constituent elements are incorporated into the design of a project as standard features required for all projects of that nature and not with the aim of reducing negative effects of a project on European sites, those features cannot be regarded as indicative of likely significant effects on European sites concerned and should not be interpreted as mitigation measures intended to avoid or reduce harmful effects of a plan or project on those European sites. The judgment stated that:

“In the light of the foregoing considerations, the answer to the fourth question is that Article 6(3) of the Directive 92/43 must be interpreted as meaning that, in order to determine whether it is necessary to carry out an appropriate assessment of the implications of a plan or project for a site, account may be taken of the features of that plan or project which involve the removal of contaminants and which therefore may have the effect of reducing harmful effects of the plan or project on that site, where those features have been incorporated into that plan or project as standard features, inherent in such a plan or project, irrespective of any effect on the site.”

¹ Landelijke Vereniging tot Behoud van de Waddenzee, Nederlandse vereniging tot Bescherming van Vogels v. Staatssecretaris van Landbouw, Natuurbeheer en Visserij (Waddenzee) [2004] C-127/02 ECR I-7405.

² Conservation Objectives are referred to, but not defined, in the Habitats Directive. In Ireland, Conservation Objectives are set for Qualifying Interests (the birds, habitats or other species for which a given European site is selected) and represent the overall target that must be met for that Qualifying Interest to reach or maintain favourable conservation condition in that site and contribute to its favourable conservation status nationally.

³ People Over Wind and Peter Sweetman v. Coillte Teoranta (People Over Wind) [2018] C-323/17.

⁴ Eco Advocacy v. An Bord Pleanála [2023] C-721/21.

In Ireland, this requirement for AA is transposed into national law by Part 5 of the Habitats Regulations and Part XAB of the Planning and Development Acts, and the process is termed “Appropriate Assessment” (AA). Where no Environmental Impact Assessment Report is required, such as the case for this Project, only Part XAB applies. Stage 1 of the process, i.e. determining whether or not a plan or project meets the above criteria for requiring AA, is referred to as “AA Screening”.

Article 6(3) of the Habitats Directive goes on to specify that AA must be carried out by the “competent national authorities”. In Ireland, the “competent authority” is the relevant planning authority for each plan or project, e.g. the local authority or An Bord Pleanála. Consequently, the responsibility for carrying out AA Screening lies solely with the competent authority. In that respect, the AA Screening Report is not in itself an AA Screening, but provides the competent authority with the information it needs in order to carry out its AA Screening.

1.3 Screening Methodology

At this stage of the process, the AA Screening Report assesses the potential impacts from the plan or project on the European sites within the likely zone of impact and evaluates them in view of the sites’ Conservation Objectives.

Best practice in undertaking AA Screening involves five steps as follows:

1. The first step involves gathering the information and data necessary to carry out a screening assessment. These include, but are not limited to, the details of all phases of the plan or project, environmental data pertaining to the area in which the plan or project is located, e.g. rare or protected habitats and species present or likely to be present, and the details of the European sites within the likely zone of impact.
2. The second step involves examining the information gathered in the first step and a scientific analysis of the potential impacts of the Project on the receiving environment, particularly the European sites in the likely zone of impact.
3. The third step evaluates the impacts analysed in the second step against the Conservation Objectives of the relevant European sites, thereby determining whether or not those impacts constitute “likely significant effects”, within the meaning of Article 6(3) of the Habitats Directive.
4. The fourth step involves considering the potential for likely significant effects to arise from the combination of the impacts of the plan or project with those of other plans or projects. If it is determined in the third step that Stage 2 (AA) is required, consideration of potential cumulative impacts may be deferred to that stage.
5. The last step involves the issuing of a statement of the determination of the AA Screening. Notwithstanding the recommendation made in the AA Screening Report, the responsibility for completing this step lies solely with the competent authority.

The following guidance documents informed the assessment methodology:

- DEHLG (2010) *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities*. Department of the Environment, Heritage and Local Government, Dublin.
- NPWS (2010a) *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular Letter NPWS 1/10 & PSSP 2/10. National Parks & Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin.

- EC (2021) *Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC*. Environment Directorate-General of the European Commission.
- EC (2018) *Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*. European Commission, Brussels.
- OPR (2021) Practice Note 01: PN01 Appropriate Assessment Screening for Development Management Office of the Planning Regulator, Dublin 7, D07 EWW4.

1.4 Ecological Assessment

In order to fully inform this AA Screening Report in respect of the Project, it was necessary to establish the baseline ecological conditions in the receiving environment, particularly with regard to European sites.

1.4.1 Desk Study

During preparation of the AA Screening Report, a desk study was undertaken. The statutory consultee, the National Parks & Wildlife Service (NPWS), provided data on designations of sites, habitats and species (including birds) of conservation interest. This included reports pursuant to Article 17 of the Habitats Directive⁶ (NPWS, 2019a,b) and the Site Synopses, Natura 2000 Standard Data Forms and Conservation Objectives (including supporting documents) for the relevant European sites.

A review was also undertaken of bird data collected to inform the Appropriate Assessment for a proposed development at St. Paul's College, Sybil Hill, Raheny, Dublin 5 (Scott Cawley Ltd., 2016).

Other ecological reports produced to inform this Project were also examined including the Royal Canal Greenway Longford Bridge (Ashtown) to Cross Guns Bridge (Phibsborough) Appropriate Assessment Screening Report (Atkins, 2013) and the Ecological Assessment: Survey of the Royal Canal from Spencer Dock to Blanchardstown, Co Dublin (McCarthy Keville O'Sullivan, 2019).

Light-Bellied Brent Geese feed on grassland sites throughout Dublin City, including Martin Savage Park and Glasnevin/ St. Vincent's Park, which are within the zone of impact for this Project. For the purposes of this AA Screening Report, all grassland sites within the zone of impact are all considered to be Light-Bellied Brent Geese feeding areas.

1.4.2 Assessment

Once established, the ecological baseline in the receiving environment was used to inform the assessment of the ecological effects likely to arise from the Project, particularly with regard to European sites. Any assumptions that were made in view of gaps in the ecological data were made in accordance with the Precautionary Principle.

⁶ Under Article 17, to report to the European Commission every six years on their status and on the implementation of the measures taken under the Directive.

2. DESCRIPTION OF THE PROJECT

2.1 Project Background and Context

Dublin City Council proposes to develop a high-quality cycle and pedestrian route along the banks of the Royal Canal from Sheriff Street in the City Centre to Ashtown. This will form part of the 165km Royal Canal Greenway Cycle and Pedestrian Route between Mullingar and Dublin.

Planning approval has previously been granted for the premium cycle and pedestrian route along the full 7.5km length of the Royal Canal within the Dublin City Council area. This is being developed in four phases of which this phase (Phase 4) comprises the final 4.2km between Phibsborough and Ashtown.

The Project involves the development of a Greenway Improvement Scheme to increase the capacity and level of service of the existing greenway route that is in poor condition and too narrow in places through various means such as widening the towpath by realigning the north bank of the canal channel at discreet sections and setting back boundaries.

The Project will extend from Phibsborough to Ashtown along the northern bank of the Royal Canal. The Project commences at Cross Guns Bridge, tying into the proposed Toucan crossing, to be constructed across the Phibsborough Road, as part of Phase 3 of the overall route. The route will continue along the northern bank of the Royal Canal to The Tallow, just east of the village centre at Ashtown. The scheme is approximately 4.2km in length, and will incorporate new pavement, bat friendly public lighting, CCTV for security, and will seek to remove existing kissing gate barrier restrictions at access points which are restrictive to cyclists, buggies and wheelchair users. The existing towpath is a shared cycleway and pedestrian path, which is also used for both vehicular access, for maintenance access by Waterways Ireland and Iarnród Éireann, and by the residents of Coke Oven Cottages, and for amenity purposes. It is the objective of the scheme to provide a premium cycle and pedestrian facility with environmental enhancements sensitive to the pNHA designation of the site.

An amending Part VIII submission proposes to widen the canal towpath route by between 1.7m and up to 2.6m at its widest at the Coke Oven Cottages, to overcome land constraints and ensure quality of service and safety considerations.

2.2 Project Description

Site Location

The Project will involve the construction of a premium cycle and pedestrian route on the north bank of the Royal Canal between Cross Guns Bridge in Phibsborough and Ashtown.

General Layout

- The Project involves the construction of a 4.2 km premium cycle and pedestrian route up to a maximum width of 4.5m generally (5.5m locally at the Coke Overn Cottages).
- It is proposed to widen the towpath by realigning the north bank of the canal at the following three locations to overcome the need for third party land acquisition:
 - West of Lock 6 for approximately 600m, realigning by up to 2.15m
 - West of Broombridge for approximately 345m, realigning by up to 1.4m
 - West of Lock 8 for approximately 85m, realigning by up to 1.75m

- All surface water will drain over edge into a grass verge.
- Public lighting to be installed along the Project.
- Complementary landscaping and planting works.

Lighting

As of March 2023, Dublin City Council is funding trials to survey the impact of public lighting on bat behaviour on the Royal Canal. Public lighting poles and ducting will be installed as part of the Project; however, the final lighting regime including timing, colour and lux levels, will be informed by the results of lighting trials and concurrent surveys of bat activity to be undertaken in Summer 2023. The preferred lighting regime will be agreed with DCC public lighting in consultation with the National Parks and Wildlife Service prior to being commissioned.

2.3 Construction Methodology

The construction phase will last for approximately 12 months and is likely to be phased over approximately 2 years.

The proposed reconstruction of the northern canal embankment, to facilitate the widening of the towpath at the above-described locations, will be carried out separately to the general towpath construction works. The proposed method of embankment reconstruction has been agreed with Waterways Ireland and will be as follows:

- Carefully remove existing planting and sod on the northern bank, and set aside to a designated wet bed area for re-use.
- Surplus silt material will be dredged from canal down to original lining (puddle clay in most instances) using tracked machines. This will most likely be done by dewatering the canal and dredging in the dry particularly where there is a potential or known risk of dredging contaminated materials.
- Dewatering shall be achieved through the construction of temporary watertight dams or by opening the locks at the downstream end where possible. Where the dewatered section is not bounded by a downstream lock (for example where a bund is established) the canal will need to be dewatered by pumping.
- Electro fishing will be carried out prior to dewatering.
- Prepare ground for installation of additional fill material.
- Fill in northern side of canal with boulders and crushed stone to create the new embankment structure.
- Install new puddle clay and HDPE lining over this crushed stone.
- Install topsoil layer to the new embankment and reinstate planting from wet bed to integrate the Project into the area.

The remaining works to the canal towpath will use standard construction methods as follows:

- Site clearance clearing debris and scrub from the route in accordance with the landscaping plan.
- Careful removal of existing planting and sod affected by the works on the northern bank, and set aside for re-use.
- Excavate the existing pavement and base layers as required and remove to tip or set aside for re-use.

- Excavate the adjacent topsoil areas and set aside for re-use.
- Install ducting and other infrastructural elements for public lighting, CCTV and Waterways Ireland comms.
- The construction of ducting and associated chambers to ESB standard between Cross Gun's Bridge and Broom Bridge, comprising HDPE ducting and concrete chambers to increase the resilience of the ESB network, as well as accommodating the ever-increasing demand to accommodate new renewable energy sources and to serve new development. The future installation and energisation of high voltage cables will be a separate matter for the ESB subject to its own planning processes.
- Deposit and compact fill layers where required using paving machines. Such fill will be used to construct the path to the desired level.
- Proposed kerbs laid and an asphalt layer laid to finish.
- Install public lighting and CCTV columns.
- Reinstate sod / planting in new topsoil / embankment areas.
- Suitably sized (5-8Tn) Mini Diggers and Dumpers, with low ground pressure tyres/tracks will be used to reduce the space required for the works.
- Construction materials will be transported along the proposed cycleway/ footway as it is being constructed.
- No stockpiling of material will occur along the canal towpath.

2.4 Receiving Natural Environment

The Project is located within the bounds of the Royal Canal proposed Natural Heritage Area. Habitats within the immediate vicinity of the project include canal (FW3), buildings and artificial surfaces (BL3), amenity grassland (GA2), flowerbeds and borders (BC4), stonewalls and other stonework (BL1), hedgerow (WL1), treelines (WL2) and improved agricultural grassland (GA1). The Royal Canal flows in an easterly direction where it eventually discharges into the River Liffey at North Wall quay, which in turn flows into Dublin Bay. Dublin Bay supports a number of sites designated for nature conservation.

2.5 Likely Effects on the Natural Environment

A number of elements of the Project are considered likely to give rise to environmental and ecological impacts.

Construction Phase Impacts

Vegetation removal will be required in order to facilitate construction of the cycleway. Vegetation clearance could result in the loss of nesting bird habitat and habitat degradation. Canal bank vegetation will regrow and recover over time.

Habitat fragmentation and barrier effect may occur if Bats, Otter and other aquatic species are not able to migrate between the Royal Canal and the River Liffey.

During construction works there is potential for pollutants and sediment to discharge to the Royal Canal, continue downstream into Dublin Bay and its associated Natura 2000 sites, and negatively affect water quality. Likewise, the proposed dredging works have the potential to disturb sediment from the base of the canal and impact water quality. Water levels will be lowered to prevent any disturbed silt being transported downstream to designated sites in Dublin Bay.

Excessive artificial lighting of the construction area also presents the risk of light disturbance for both aquatic and terrestrial species. Prolonged or repetitive disturbances have the potential to cause barriers to connectivity for species moving upstream and downstream past the construction area. Lighting will be restricted to the minimum extent and timeframe necessary.

Operational Phase Impacts

Aspects of the operation of the Project with the potential to cause environmental and ecological effects include the presence of artificial lighting and increased human presence. As of March 2023, Dublin City Council is funding trials to survey the impact of public lighting on bat behaviour on the Royal Canal. Public lighting poles and ducting will be installed as part of the Project; however, the final lighting regime including timing, colour and lux levels, will be informed by the results of lighting trials and concurrent surveys of bat activity to be undertaken in Summer 2023. The preferred lighting regime will be agreed with DCC public lighting in consultation with the National Parks and Wildlife Service prior to being commissioned.

A small amount of habitat will be lost or damaged as a result of the Project. The habitats which will be affected include buildings and artificial surfaces, treelines, hedgerow and scrub and canal habitat, both aquatic and riparian. The Project will include the planting of native species and restoration of the canal bank habitat following construction. These habitats do not represent rare or protected vegetative communities/associations and do not support important populations of rare or protected species at the local level or higher. Therefore, the loss or damage of these habitats is not considered to be significant.

3. IDENTIFICATION OF LIKELY SIGNIFICANT EFFECTS

3.1 Establishing the Likely Zone of Impact

Section 3.2.3 of DEHLG (2010) outlines the procedure for selecting the European sites to be considered in AA. It states that European sites potentially affected should be identified and listed, bearing in mind the potential for direct, indirect and cumulative effects. It also states that the specific approach in each case is likely to differ depending on the scale and likely effects of the plan or project. However, it advises that the following sites should generally be included:

- All European sites within or immediately adjacent to the plan or project area;
- All European sites within the likely zone of impact of the plan or project; and,
- In accordance with the Precautionary Principle, all European sites for which there is doubt as to whether or not they might be significantly affected.

The “likely zone of impact” of a plan or project is the geographic extent over which significant ecological effects are likely to occur. In the case of plans, this zone should extend to a distance of 15 km in all directions from the boundary of the plan area. In the case of projects, however, the guidance recognises that the likely zone of impact must be established on a case-by-case basis, with reference to the following key variables:

- The nature, size and location of the project;
- The sensitivities of the ecological receptors; and,
- The potential for cumulative effects.

For example, in the case of a project that could affect a watercourse, it may be necessary to include the entire upstream and/or downstream catchment in order to capture all European sites with water-dependent features of interest.

Having regard to the aforementioned key variables, the likely zone of impact of the Project was defined as:

- The entire area within 550 m of the Project boundary;
- The Royal Canal east of the Cross Guns Bridge as far as the River Liffey; and
- The transitional waters of Dublin Bay, from the Talbot Memorial Bridge downstream.

The buffer was defined as 550m around the Project which is the precautionary flushing distance for waterbirds informed by the sensitivity of different species, the potential for visual and noise disturbance, and the ambient disturbance levels (Cutts et al., 2009; Cutts et al., 2013). The 550m buffer includes all potential Light-Bellied Brent Goose feeding areas along the route of the Project. Any potential Light-Bellied Brent Goose feeding areas outside this buffer are screened by buildings, walls and natural boundaries which will act as effective barriers to noise and visual disturbance.

The Royal Canal east of the Cross Guns Bridge is the extent to which hydrological impacts could potentially occur downstream of the project in the canal. The ‘transitional waters of Dublin Bay’ are the extent to which hydrological impacts could potentially occur upstream and downstream of the Project in the River Liffey and Dublin Bay⁷.

⁷ As defined in Directive 2000/60/EC of 23 October 2000 establishing a framework for Community action in the field of water policy (the “Water Framework Directive”).

A geographical representation of the zone of impact was generated in ArcGIS 10.5 using the Project boundary, publicly available basemaps (OpenStreetMap) and Environmental Protection Agency (EPA) shapefiles. This was used in combination with NPWS shapefiles to identify the boundaries of European sites in relation to the likely zone of impact (Figure 3.1).

It was determined that four European sites, namely the South Dublin Bay & River Tolka Estuary SPA, the North Bull Island SPA, the North Dublin Bay SAC and the North-West Irish Sea SPA occur within the zone of impact for the project and that the South Dublin Bay SAC occurs adjacent to the zone of impact. The South Dublin Bay SAC is not considered to be in any way connected to the Project as the Great South Wall forms an effective barrier against any impacts from the Project to the QIs of this site.

Table 3.1 below lists all of the European sites which are connected to the Project and describes how those sites are connected to the Project. There are no connections between the Project and any European sites other than those listed in Table 3.1. Detailed descriptions of those sites are given in Section 3.2. The locations of these sites in relation to the project are illustrated in Appendix A of this report.

Table 3.1 European sites located within and adjacent to the likely zone of impact.

European site [site code]	Are there potential pathways for impacts from the Project to this site? Explain.
South Dublin Bay and River Tolka Estuary SPA [004024]	Yes. The shortest absolute distances from the Project to this site are c. 2.8 km east to the Tolka Estuary and c. 5.1 km south-east to Sandymount Strand. These distances are over land and neither of those locations are within the likely zone of impact, i.e. there is no connection along these distances. The shortest distance from the Project to the site via a hydrological connection is 6.6km east (through the Royal Canal and the River Liffey) to Dublin Port which is within the likely zone of impact. Therefore, the effective distance to the site is considered to be 6.6 km.
North Bull Island SPA [004006]	Yes. The shortest absolute distance from the Project to this site is c. 5.9 km east. This distance is over land, i.e. there is no connection along this distance. The shortest distance from the Project to the site via a hydrological connection is 8.3 km east (through the Royal Canal and the River Liffey and across the River Tolka Estuary) to the North Bull Wall, which is within the likely zone of impact. Therefore, the effective distance to the site is considered to be 8.3 km.
North Dublin Bay SAC [000206]	Yes. The shortest absolute distance from the Project to this site is 5.9km east. This distance is over land. The shortest distance from the Project to the site via a hydrological connection is 8.3 km east (through the Royal Canal and the River Liffey and across the River Tolka Estuary) to the North Bull Wall, which is within the likely zone of impact. Therefore, the effective distance to the site is 8.3km.
North-West Irish Sea SPA	Yes. The shortest absolute distance from the Project to this site is 8.4km east. This distance is over land. The shortest distance from the Project to the site via a hydrological connection is 9.2 km east (through the Royal Canal and the River Liffey). Therefore, the effective distance to the site is 9.2km.

3.2 Site Descriptions

3.2.1 South Dublin Bay and River Tolka Estuary SPA

The description of the South Dublin Bay and River Tolka Estuary SPA provided here is based on the Site Synopsis (NPWS, 2015b), Conservation Objectives (NPWS, 2015a) and Natura 2000 Standard Data Form (NPWS, 2015c) for the site, as well as the Conservation Objectives Supporting Document (NPWS, 2014).

Site Overview

This site comprises a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dún Laoghaire and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included.

The site is of ornithological importance as it supports an internationally important population of Light-bellied Brent Goose and nationally important populations of a further nine wintering species. Furthermore, the site supports a nationally important colony of breeding Common Tern and is an internationally important passage/staging site for three tern species. Notably, four of the species that regularly occur at this site are listed on Annex I of the Birds Directive, namely Bar-tailed Godwit, Common Tern, Arctic Tern and Roseate Tern. Parts of the site are also designated as the Ramsar Convention site “Sandymount Strand/Tolka Estuary”.

Qualifying Interests of the Site

- [A046] Light-bellied Brent Goose (*Branta bernicla hrota*)
- [A130] Oystercatcher (*Haematopus ostralegus*)
- [A137] Ringed Plover (*Charadrius hiaticula*)
- [A141] Grey Plover (*Pluvialis squatarola*)
- [A143] Knot (*Calidris canutus*)
- [A144] Sanderling (*Calidris alba*)
- [A149] Dunlin (*Calidris alpina*)
- [A157] Bar-tailed Godwit (*Limosa lapponica*)
- [A162] Redshank (*Tringa totanus*)
- [A179] Black-headed Gull (*Chroicocephalus ridibundus*)
- [A192] Roseate Tern (*Sterna dougallii*)
- [A193] Common Tern (*Sterna hirundo*)
- [A194] Arctic Tern (*Sterna paradisaea*)
- [A999] Wetlands

Being an integral part of the internationally important Dublin Bay complex, the site is important for wintering waterfowl – all counts for wintering waterbirds are five-year mean peaks for the period 1995/96 to 1999/2000. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there.

An internationally important population of Light-bellied Brent Goose (368) occurs regularly and newly arrived birds in the autumn feed on the Eelgrass bed at the Merrion Gates. At the time of designation, the site supported nationally important numbers of a further nine species: Oystercatcher (1,145), Ringed Plover (161), Grey Plover (45), Knot (548), Sanderling (321), Dunlin (1,923), Bar-tailed Godwit (766), Redshank (260) and Black-headed Gull (3,040). Other species occurring in smaller numbers include Great Crested Grebe (21), Curlew (127) and Turnstone (52). Little Egret, a species which has recently colonised Ireland, also occurs at this site.

South Dublin Bay is a significant site for wintering gulls, with a nationally important population of Black-headed Gull, but also Common Gull (330) and Herring Gull (348). 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.

Both Common Tern and Arctic Tern breed in Dublin Docks, on a man-made mooring structure known as the ESB Dolphin – this is included within the site. Small numbers of Common Tern and Arctic Tern were recorded nesting on this dolphin in the 1980s. A survey in 1995 recorded nationally important numbers of Common Tern nesting here (52 pairs). The breeding population of Common Tern at this site has increased, with 216 pairs recorded in 2000. This increase was largely due to the ongoing management of the site for breeding terns. More recent data highlights this site as one of the most important Common Tern sites in the country with over 400 pairs recorded here in 2007.

South Dublin Bay is an important staging/passage site for a number of tern species in the autumn (mostly 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, perhaps outside the state. This site is selected for designation for its autumn tern populations: Roseate Tern (2,000 in 1999), Common Tern (5,000 in 1999) and Arctic Tern (20,000 in 1996).

Sensitivities of the Site and its Qualifying Interests

As this site is mostly comprised of coastal wetlands and is located directly adjacent to a major city and port, expansion of the city and port poses the greatest threat to its integrity. Reclamation of land from the sea, estuary or marsh represents a direct loss of key Qualifying Interests of the site. Roads, urbanisation, human habitation, industrial and commercial activities and discharges present pressures on the site in terms of disturbance and pollution.

Watersports, walkers, horse riding and non-motorised vehicles also cause persistent disturbance to the birds within the site. Angling, particularly bait collection, causes both disturbance to birds and reduces food availability. The site is also subject to some natural eutrophication pressures.

Conservation Objectives for the Qualifying Interests

All of the Qualifying Interests of the site are currently considered to be in a favourable conservation condition. Therefore, all Qualifying Interests, with the exception of Grey Plover, which is proposed for removal as a Qualifying Interest, have been assigned Conservation Objectives requiring the maintenance of this condition. These Conservation Objectives predominantly focus on the Attributes of "*Population trend*" and "*Distribution*", but those for the three tern species cover a broader range of Attributes, e.g. "*Breeding population abundance: apparently occupied nests (AONs)*" and "*Productivity rate: fledged young per breeding pair*", and that for Wetlands focuses exclusively on the Attribute of "*Habitat area*".

Grey Plover is proposed for removal from the list of Qualifying Interests⁸ of the site. Therefore, there is currently no site-specific Conservation Objective for Grey Plover in the South Dublin Bay and River Tolka Estuary SPA.

3.2.2 North Bull Island SPA

The description of the North Bull Island SPA provided here is based on the Site Synopsis (NPWS, 2014a), Conservation Objectives (NPWS, 2015b) and Natura 2000 Standard Data Form (NPWS, 2017) for the site, as well as the Conservation Objectives Supporting Document (NPWS, 2014b).

Site Overview

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 c. 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 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.

Qualifying Interests of the Site

- [A046] Light-bellied Brent Goose (*Branta bernicla hrota*)
- [A048] Shelduck (*Tadorna tadorna*)
- [A052] Teal (*Anas crecca*)
- [A054] Pintail (*Anas acuta*)
- [A056] Shoveler (*Anas clypeata*)
- [A130] Oystercatcher (*Haematopus ostralegus*)
- [A140] Golden Plover (*Pluvialis apricaria*)
- [A141] Grey Plover (*Pluvialis squatarola*)
- [A143] Knot (*Calidris canutus*)
- [A144] Sanderling (*Calidris alba*)
- [A149] Dunlin (*Calidris alpina*)
- [A156] Black-tailed Godwit (*Limosa limosa*)
- [A157] Bar-tailed Godwit (*Limosa lapponica*)
- [A160] Curlew (*Numenius arquata*)
- [A162] Redshank (*Tringa totanus*)
- [A169] Turnstone (*Arenaria interpres*)

⁸ In NPWS (2015a), Grey Plover is referred to as a “Special Conservation Interest” of the site. This term is sometimes used in place of “Qualifying Interest”, but has the same meaning.

[A179] Black-headed Gull (*Chroicocephalus ridibundus*)

[A999] Wetlands

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 (*Ulva* spp.) are a feature of the flats during summer. These sediments have a rich macro-invertebrate fauna, with high densities of Lugworm (*Arenicola marina*) and Ragworm (*Hediste diversicolor*).

This site is of international importance for waterfowl on the basis that it regularly supports in excess of 20,000 waterfowl. The site supports internationally important populations of three species, Light-bellied Brent Goose (1,548), Black-tailed Godwit (367) and Bar-tailed Godwit (1,529) - all figures are mean peaks for the five winters between 1995/96 and 1999/2000. The site is one of the most important in the country for Light-bellied Brent Goose. A further 14 species have populations of national importance: Shelduck (1,259), Teal (953), Pintail (233), Shoveler (141), Oystercatcher (1,784), Grey Plover (517), Golden Plover (2,033), Knot (2,837), Sanderling (141), Dunlin (4,146), Curlew (937), Redshank (1,431), Turnstone (157) and Black-headed Gull (2,196). The populations of Pintail and Knot are of particular note as they comprise 14% and 10% respectively of the all-Ireland population totals. Other species that occur regularly in winter include Grey Heron, Little Egret, Cormorant, Wigeon, Goldeneye, Red-breasted Merganser, Ringed Plover and Greenshank. Gulls are a feature of the site during winter and, along with the nationally important population of Black-headed Gull (2,196), other species that occur include Common Gull (332) and Herring Gull (331). While some of the birds also frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes, the majority remain within the site for much of the winter. The wintering bird populations have been monitored more or less continuously since the late 1960s and the site is now surveyed each winter as part of the larger Dublin Bay complex.

The North Bull Island SPA is a regular site for passage waders, especially Ruff, Curlew Sandpiper and Spotted Redshank. These are mostly observed in single figures in autumn but occasionally in spring or winter. The site formerly had an important colony of Little Tern but breeding has not occurred in recent years. Several pairs of Ringed Plover breed, along with Shelduck in some years. Breeding passerines include Skylark, Meadow Pipit, Stonechat and Reed Bunting. The island is a regular wintering site for Short-eared Owl, with up to 5 present in some winters.

Sensitivities of the Site and its Qualifying Interests

The greatest pressures/threats to the integrity of the North Bull SPA come from the bridge/viaduct located within the site (and the potential for other structures to be built within the site) and from walking, horse riding and non-motorised vehicles within the site. Bait digging/collection, nautical sports and the golf course (all inside the site) and roads, motorways, shipping lanes, continuous urbanisation and industrial or commercial areas (all outside the site) also represent significant pressures/threats to the integrity of this site. Other patterns of habitation within the site represent a lower-level pressure/threat.

Conservation Objectives for the Qualifying Interests

All of the Qualifying Interests of the site are currently considered to be in a favourable conservation condition. Therefore, all Qualifying Interests have been assigned Conservation Objectives requiring maintenance of this condition. These Conservation Objectives focus on the Attributes of “*Population trend*” and “*Distribution*”, but that for Wetlands focuses exclusively on the Attribute of “*Habitat area*”.

3.2.3 North Dublin Bay SAC

The description of the North Dublin Bay SAC provided here is based on the Site Synopsis (NPWS, 2013a), Conservation Objectives (NPWS, 2013b) and Natura 2000 Standard Data Form (NPWS, 2018b) for the site, as well as the Conservation Objectives Supporting Documents (NPWS, 2013c,d).

Qualifying Interests of the Site

- [1140] Tidal mudflats and sandflats not covered by seawater at low tide
- [1210] Annual vegetation of drift lines
- [1310] Salicornia and other annuals colonising mud and sand
- [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- [1410] Mediterranean salt meadows (*Juncetalia maritimi*)
- [2110] Embryonic shifting dunes
- [2120] Shifting dunes along the shoreline with *Ammophila Arenaria* (white dunes)
- [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes)
- [2190] Humid dune slacks
- [1395] Petalwort (*Petalophyllum ralfsii*)

Site Overview

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.

North Bull Island is a sandy spit which formed after the building of the South Wall and Bull Wall in the 18th and 19th centuries. It now extends for about 5km in length and is up to 1km wide in places. 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.

About 1km from the tip of the island, a large dune slack with a rich flora occurs, usually referred to as the 'Alder Marsh' because of the presence of Alder trees (*Alnus glutinosa*). The water table is very near the surface and is only slightly brackish.

Saltmarsh extends along the length of the landward side of the island. The edge of the marsh is marked by an eroding edge which varies from 20cm to 60cm high. The marsh can be zoned into different levels according to the vegetation types present. Towards the tip of the island, the saltmarsh grades naturally into fixed dune vegetation.

The habitat 'annual vegetation of drift lines' is found in places, along the length of Dollymount Strand, with species such as Sea Rocket (*Cakile maritima*), Oraches (*Atriplex* spp.) and Prickly Saltwort (*Salsola kali*).

The island shelters two intertidal lagoons which are divided by a solid causeway. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and

clay. The north lagoon has an area known as the "*Salicornia* flat", which is dominated by *Salicornia dolichostachya*, a pioneer glasswort species, and covers about 25 ha. The sediments on the seaward side of North Bull Island are mostly sands. The site extends below the low spring tide mark to include an area of the sublittoral zone.

Three rare plant species which are legally protected under the Flora (Protection) Order, 2015 have been recorded on the North Bull Island. These are Lesser Centaury (*Centaureum pulchellum*), Red Hemp-nettle (*Galeopsis angustifolia*) and Meadow Saxifrage (*Saxifraga granulata*). Two further species listed as threatened in the Red Data Book, Wild Clary/Sage (*Salvia verbenaca*) and Spring Vetch (*Vicia lathyroides*), have also been recorded. A rare liverwort, *Petalophyllum ralfsii*, was first recorded from the North Bull Island in 1874 and has recently been confirmed as still present. This species is of high conservation value as it is listed on Annex II of the E.U. Habitats Directive. The North Bull is the only known extant site for the species in Ireland away from the western seaboard.

North Dublin Bay is of international importance for waterfowl. Some of these species frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes (mostly Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Sanderling and Dunlin). The tip of the North Bull Island is a traditional nesting site for Little Tern. A high total of 88 pairs nested in 1987. However, nesting attempts have not been successful since the early 1990s. A well-known population of Irish Hare is resident on the island.

The invertebrates of the North Bull Island have been studied and the island has been shown to contain at least seven species of regional or national importance in Ireland. The main land uses of this site are amenity activities and nature conservation. The North Bull Island is the main recreational beach in Co. Dublin and is used throughout the year. Much of the land surface of the island is taken up by two golf courses. Two separate Statutory Nature Reserves cover much of the island east of the Bull Wall and the surrounding intertidal flats. The site is used regularly for educational purposes. 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.

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.

Sensitivities of the Site and its Qualifying Interests

As this site is located directly adjacent to a major city and port, expansion of the city and port poses the greatest threat to its integrity. Reclamation of land from the sea, estuary or marsh represents a direct loss of key QIs of the site. Roads, urbanisation, human habitation, industrial and commercial activities and accumulation of organic material present pressures on the site in terms of disturbance and pollution. Walkers, horse riding and non-motorised vehicles also cause persistent disturbance to the birds within the site.

3.2.4 North-West Irish Sea SPA

The description of the North-West Irish Sea SPA is based on the Site Synopsis (NPWS, 2023) for the site.

Qualifying Interests of the Site

- [A065] Common Scoter (*Melanitta nigra*)
- [A001] Red-throated Diver (*Gavia stellata*)
- [A003] Great Northern Diver (*Gavia immer*)
- [A009] Fulmar (*Fulmarus glacialis*)
- [A013] Manx Shearwater (*Puffinus puffinus*)
- [A018] Shag (*Phalacrocorax aristotelis*)
- [A017] Cormorant (*Phalacrocorax carbo*)
- [A117] Little Gull (*Larus minutus*)
- [A188] Kittiwake (*Rissa tridactyla*)
- [A179] Black-headed Gull (*Chroicocephalus ridibundus*)
- [A183] Common Gull (*Larus fuscus*)
- [A183] Lesser Black-backed Gull (*Larus marinus*)
- [A184] Herring Gull (*Larus argentatus*)
- [A187] Great Black-backed Gull (*Larus marinus*)
- [A195] Little Tern (*Sterna albifrons*)
- [A192] Roseate Tern (*Sterna dougalii*)
- [A193] Common Tern (*Sterna hirundo*)
- [A194] Artic Tern (*Sterna paradisaea*)
- [A204] Puffin (*Fratercula arctica*)
- [A200] Razorbill (*Alca torda*)
- [A199] Guillemot (*Uria aalge*)

Site Overview

The North-west Irish Sea SPA constitutes an important resource for marine birds. The estuaries and bays that open into it along with connecting coastal stretches of intertidal and shallow subtidal habitats, provide safe feeding and roosting habitats for waterbirds throughout the winter and migration periods.

These areas, along with more pelagic marine waters further offshore, provide additional supporting habitats (for foraging and other maintenance behaviours) for those seabirds that breed at colonies on the north-west Irish Sea's islands and coastal headlands. These marine areas are also important for seabirds outside the breeding period.

This SPA extends offshore along the coasts of counties Louth, Meath and Dublin, and is approximately 2,333km² in area. This SPA is ecologically connected to several existing SPAs in this area.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Common Scoter, Red-throated Diver, Great Northern Diver, Fulmar, Manx Shearwater, Shag, Cormorant, Little Gull, Kittiwake, Black-headed Gull, Common Gull, Lesser Black-backed Gull, Herring Gull, Great Black-backed Gull, Little Tern, Roseate Tern, Common Tern, Arctic Tern, Puffin, Razorbill and Guillemot.

The breeding seabird species listed for those SPAs, which abut the North-West Irish Sea SPA are: Fulmar (Lambay Island SPA); Cormorant (Skerries Island SPA; Ireland's Eye SPA; Lambay Island SPA); Shag (Skerries Island SPA; Lambay Island SPA); Lesser Black-backed Gull (Lambay Island SPA); Herring Gull (Skerries Island SPA; Ireland's Eye SPA; Lambay Island SPA); Kittiwake (Lambay Island SPA; Ireland's Eye SPA; Howth Head SPA); Roseate Tern (Rockabill SPA); Common Tern (Rockabill SPA); Arctic Tern (Rockabill SPA); Little Tern (Boyne Estuary SPA); Guillemot (Lambay Island SPA, Ireland's Eye SPA); Razorbill (Lambay Island SPA, Ireland's Eye SPA); and Puffin (Lambay Island SPA). The Common Tern population that is listed for the nearby South Dublin Bay and River Tolka Estuary SPA is also likely to use this SPA as a foraging resource.

Informed by two surveys of the western Irish Sea region in 2016 an estimated 120,232 and 34,626 individual marine birds occurred in this SPA during autumn and winter respectively. Those marine bird species whose estimated abundances equalled or exceeded 1% of the total estimated size of the winter assemblage are: Red-throated Diver (538), Fulmar (506), Little Gull (391), Kittiwake (944), Black-headed Gull (508), Common Gull (2,866), Herring Gull (6,893), Great Black-backed Gull (2,096), Razorbill (4,638) and Guillemot (13,914).

The estimated 2016 summer abundance of Manx Shearwater in the North West Irish Sea SPA is 13,010 and is of international importance. The estimated 2016 autumn and winter abundances of Great Northern Diver in the North West Irish Sea SPA is 248 and 230 respectively and are of international importance. The estimated abundances of Common Scoter over parts of this SPA can reach significant numbers (e.g. 14,567 in December 2018) which is also of international importance.

3.3 Evaluation against Conservation Objectives

Tables 3.2, 3.3, 3.4 and 3.5 below detail the evaluation of the likely effects of the Project in view of the Conservation Objectives of the sites identified in Section 3.1 and described in Section 3.2. As explained in Sections 1.2 and 1.3, AA Screening is carried out in view of the Conservation Objectives of the relevant European sites, which are in turn defined by detailed Attributes and corresponding Targets. Therefore, the evaluation of whether or not a likely effect is significant (in view of the Conservation Objective in question) is made with regard to these Attributes and Targets.

Site-specific Conservation Objectives for the the North-West Irish Sea SPA have not to date been developed. However, generic Conservation Objectives apply. For the purposes of the assessment, Conservation Objectives for the Qualifying Interests present in the North-West Irish Sea SPA have been applied from respective Qualifying Interests in similar conditions in other SPAs, (as recommended by the NPWS). Where no site-specific Conservation Objective has been prepared for a particular Qualifying Interest, Attributes and Targets from a similar species have been used.

Table 3.2 Evaluation of the likely effects of the Project in view of the Conservation Objectives of the South Dublin Bay and River Tolka Estuary SPA.

Qualifying Interest	Conservation Objective as per NPWS (2015a)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
<p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</p>	<p><i>“To maintain the favourable conservation condition of Light-bellied Brent Goose in South Dublin Bay and River Tolka Estuary SPA”</i></p>	<p>Areas of amenity grassland within the zone of impact for the Project including Martin Savage Park (c. 35m south of the Project) Ashington Park (c. 56m south of the Project) and Glasnevin/St. Vincent’s Park (c.50m north of the Project) are considered to be feeding sites for Light-bellied Brent Goose.</p> <p>The Project will not lead to any impacts on Light-bellied Brent Goose for the following reasons:</p> <ul style="list-style-type: none"> • The Project involves upgrading existing public paths. • Light-bellied Brent Geese are grazers and are known for their preference for foraging in intertidal areas on beds of Eelgrass (<i>Zostera</i> spp.) (Robinson et al., 2004). Where this food source is absent or becomes depleted, the birds feed upon green algae species (<i>Enteromorpha</i> and <i>Ulva</i> spp) and saltmarsh plants. Light-bellied Brent Geese are also known to undertake terrestrial grazing on recreational grasslands from mid-winter onwards (Inger et al., 2006). Recent surveys have shown that terrestrial inland feeding sites around Dublin city support an internationally important number of Light-bellied Brent Geese in Dublin (Scott Cawley, 2017). There will be no direct or indirect loss of suitable foraging habitat at any feeding site used by this species as a result of the Project and therefore the construction and operation of the Project will not lead to a change in distribution of Light-bellied Brent Geese. • The areas habitually used by Light-bellied Brent Geese along the route of the Project are separated by the Royal Canal, hedgerows, treelines, fences and buildings. These natural and artificial features will screen the adjacent feeding sites from both the works and the upgraded cycleway therefore the construction and operation of the Project will not lead to visual disturbance. • At certain times during the construction phase the Project will create elevated levels of noise and / or vibration. However, the proposed works are of a small scale and relatively unobtrusive nature. There will be some demolition of minor structures, but no blasting or piling is proposed. The resultant impacts will be brief to temporary and localised. The operational phase of the project does not provide for a significant increase in noise, visual disturbance, or vibration within the study area. • The current level of habituation will determine a bird’s response to disturbance. Currently, there is a high level of visual disturbance from pedestrians and cyclists within the parks, and passing cars and trains outside the parks, therefore, Light-bellied Brent Geese which currently use the inland feeding sites are habituated to the presence of people, noise and visual disturbance. • The Project is hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. This provides a pathway for contaminants such as construction materials and sediments that may be spilled during construction to be transported to the site. However, the quantities of construction 	<p>No</p>

Qualifying Interest	Conservation Objective as per NPWS (2015a)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
		<p>materials and sediment that will be used and produced during construction will be small and the level of impact these spillages may have on water quality within the site will be negligible considering the volume of water and the dilution capacity of the Royal Canal, the River Liffey and Dublin Bay. There are no water quality impacts associated with the operational phase of the Project.</p> <p>Considering the temporary nature and scale of the works, as well as the assimilative capacity of the Royal Canal, the River Liffey and Dublin Bay in an urban environment and industrial port, it can be concluded beyond reasonable scientific doubt that the Project will not significantly affect Light-bellied Brent Goose.</p>	
Ringed Plover (<i>Charadrius hiaticula</i>) [A137]	<i>“To maintain the favourable conservation condition of Ringed Plover in South Dublin Bay and River Tolka Estuary SPA”</i>	<p>The closest suitable habitat for these Qualifying Interests is 6.6 km downstream of the project in Dublin Bay. Given the distance between such habitat and the Project there is no potential for these species to be disturbed by the Project. Considering the location, temporary nature and scale of the works, as well as the assimilative capacity of the Royal Canal, the River Liffey and Dublin Bay in an urban environment and industrial port, it can be concluded beyond reasonable scientific doubt that the Project will not significantly affect these Qualifying Interests.</p>	No
Grey Plover (<i>Pluvialis squatarola</i>) [A141]	<i>“Grey Plover is proposed for removal from the list of Special Conservation Interests for South Dublin Bay and River Tolka Estuary SPA. As a result, a site-specific conservation objective has not been set for this species.”</i>		No
Oystercatcher (<i>Haematopus ostralegus</i>) [A130]	<i>“To maintain the favourable conservation condition of Oystercatcher in South Dublin Bay and River Tolka Estuary SPA”</i>		No
Knot (<i>Calidris canutus</i>) [A143]	<i>“To maintain the favourable conservation condition of Knot in South Dublin Bay and River Tolka Estuary SPA”</i>		No
Sanderling (<i>Calidris alba</i>) [A144]	<i>“To maintain the favourable conservation condition of Sanderling in South Dublin Bay and River Tolka Estuary SPA”</i>		No

Qualifying Interest	Conservation Objective as per NPWS (2015a)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
Dunlin (<i>Calidris alpina alpina</i>) [A149]	<i>“To maintain the favourable conservation condition of Dunlin in South Dublin Bay and River Tolka Estuary SPA”</i>		No
Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]	<i>“To maintain the favourable conservation condition of Bar-tailed Godwit in South Dublin Bay and River Tolka Estuary SPA”</i>		No
Redshank (<i>Tringa totanus</i>) [A162]	<i>“To maintain the favourable conservation condition of Redshank in South Dublin Bay and River Tolka Estuary SPA”</i>		No
Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]	<i>“To maintain the favourable conservation condition of Black-headed Gull in South Dublin Bay and River Tolka Estuary SPA”</i>	Black-headed Gull is found in a wide variety of habitats including in urban areas and has a very varied diet. Therefore, it can be concluded that the grassland areas in the likely zone of impact are not important for this species, and the disturbance of these areas from the construction and operation of the Project will not constitute likely significant effects.	
Roseate Tern (<i>Sterna dougallii</i>) [A192]	<i>“To maintain the favourable conservation condition of Roseate Tern in South Dublin Bay and River Tolka Estuary SPA”</i>	The closest known breeding site for these Qualifying Interests is at the Electricity Supply Board dolphin on the River Liffey between Poolbeg power station and the Pigeon House (c.5.8km southeast of the Project). Roosting is known to occur between Martello towers at Sandymount and Williamstown (c. 12km southeast of the Project). Occurrence of breeding and roosting sites are of sufficient distance from the Project to ensure that the Project does not provide for any effect on the passage population, number of nests, productivity rate, distribution of roosting and breeding sites, prey biomass available, barriers to connectivity or disturbance of Roseate Tern, Common Tern or Arctic Tern within the site. Considering the location, temporary nature and scale of the works, as well as the assimilative capacity of the Royal Canal, the River Liffey and Dublin Bay in an urban environment and industrial port, it can be concluded beyond reasonable scientific doubt that the Project will not significantly affect these Qualifying Interests.	No
Common Tern (<i>Sterna hirundo</i>) [A193]	<i>“To maintain the favourable conservation condition of Common Tern in South Dublin Bay and River Tolka Estuary SPA”</i>		No
Arctic Tern (<i>Sterna paradisaea</i>) [A194]	<i>“To maintain the favourable conservation condition of Arctic Tern in South Dublin Bay and River Tolka Estuary SPA”</i>		No
Wetlands [A999]	<i>“To maintain the favourable conservation condition of the wetland habitat in South Dublin Bay and River Tolka Estuary</i>	The Conservation Objective for Wetlands is defined by a single Attribute, namely “Habitat area”, the Target for which is <i>“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. See map 3”</i> . As the Project does not provide for any reduction in the permanent area of	No

Qualifying Interest	Conservation Objective as per NPWS (2015a)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
	<i>SPA as a resource for the regularly occurring migratory waterbirds that utilise it"</i>	this habitat within the site, it has no potential to delay or interrupt the achievement of this Conservation Objective.	

Table 3.3 Evaluation of the likely effects of the Project in view of the Conservation Objectives of the North Bull Island SPA.

Qualifying Interest	Conservation Objective as per NPWS (2015b)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
<p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</p>	<p><i>“To maintain the favourable conservation condition of Light-bellied Brent Goose in North Bull Island SPA”</i></p>	<p>Areas of amenity grassland within the zone of impact for the Project including Martin Savage Park (c. 35m south of the Project) Ashington Park (c. 56m south of the Project) and Glasnevin/St. Vincent’s Park (c.50m north of the Project) are considered to be feeding sites for Light-bellied Brent Goose.</p> <p>The Project will not lead to any impacts on Light-bellied Brent Goose for the following reasons:</p> <ul style="list-style-type: none"> • The Project involves upgrading existing public paths. • Light-bellied Brent Geese are grazers and are known for their preference for foraging in intertidal areas on beds of Eelgrass (<i>Zostera</i> spp.) (Robinson et al., 2004). Where this food source is absent or becomes depleted, the birds feed upon green algae species (<i>Enteromorpha</i> and <i>Ulva</i> spp) and saltmarsh plants. Light-bellied Brent Geese are also known to undertake terrestrial grazing on recreational grasslands from mid-winter onwards (Inger et al., 2006). Recent surveys have shown that terrestrial inland feeding sites around Dublin city support an internationally important number of Light-bellied Brent Geese in Dublin (Scott Cawley, 2017). There will be no direct or indirect loss of suitable foraging habitat at any feeding site used by this species as a result of the Project and therefore the construction and operation of the Project will not lead to a change in distribution of Light-bellied Brent Geese. • The areas habitually used by Light-bellied Brent Geese along the route of the Project are separated by the Royal Canal, hedgerows, treelines, fences and buildings. These natural and artificial features will screen the adjacent feeding sites from both the works and the upgraded cycleway therefore the construction and operation of the Project will not lead to visual disturbance. • At certain times during the construction phase the Project will create elevated levels of noise and / or vibration. However, the proposed works are of a small scale and relatively unobtrusive nature. There will be some demolition of minor structures but no blasting or piling is proposed. The resultant impacts will be brief to temporary and localised. The operational phase of the project does not provide for a significant increase in noise, visual disturbance or vibration within the study area. • The current level of habituation will determine a bird’s response to disturbance. Currently, there is a high level of visual disturbance from pedestrians and cyclists within the parks, and passing cars and trains outside the parks, therefore, Light-bellied Brent Geese which currently use the park are habituated to the presence of people, noise and visual disturbance. • The Project is hydrologically connected to North Bull Island SPA. This provides a pathway for contaminants such as construction materials and sediments that may be spilled during construction to be transported to the site. However, the quantities of construction materials and sediment that will be used and produced during construction will be small and the level of impact 	<p>No</p>

Qualifying Interest	Conservation Objective as per NPWS (2015b)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
		<p>these spillages may have on water quality within the site will be negligible considering the volume of water and the dilution capacity of the Royal Canal, the River Liffey and Dublin Bay. There are no water quality impacts associated with the operational phase of the Project.</p> <p>Therefore, owing to the temporary nature and scale of the works, as well as the assimilative capacity of the Royal Canal, the River Liffey and Dublin Bay in an urban environment and industrial port, it can be concluded beyond reasonable scientific doubt that the Project will not significantly affect Light-bellied Brent Goose.</p>	
Shelduck (<i>Tadorna tadorna</i>) [A048]	<i>“To maintain the favourable conservation condition of Shelduck in North Bull Island SPA”</i>	The closest suitable habitat for these species is 6.6 km downstream of the project in Dublin Bay. Given the distance between such habitat and the Project there is no potential for these species to be disturbed by the Project.	No
Teal (<i>Anas crecca</i>) [A052]	<i>“To maintain the favourable conservation condition of Teal in North Bull Island SPA”</i>	Therefore, owing to the location, temporary nature and scale of the works, as well as the assimilative capacity of the Royal Canal, the River Liffey and Dublin Bay in an urban environment and industrial port, it can be concluded beyond reasonable scientific doubt that the Project will not significantly affect these Qualifying Interests.	No
Pintail (<i>Anas acuta</i>) [A054]	<i>“To maintain the favourable conservation condition of Pintail in North Bull Island SPA”</i>		No
Shoveler (<i>Anas clypeata</i>) [A056]	<i>“To maintain the favourable conservation condition of Shoveler in North Bull Island SPA”</i>		No
Oystercatcher (<i>Haematopus ostralegus</i>) [A130]	<i>“To maintain the favourable conservation condition of Oystercatcher in North Bull Island SPA”</i>		No
Golden Plover (<i>Pluvialis apricaria</i>) [A140]	<i>“To maintain the favourable conservation condition of Grey Plover in North Bull Island SPA”</i>		No
Grey Plover (<i>Pluvialis squatarola</i>) [A141]	<i>“To maintain the favourable conservation condition of Grey Plover in North Bull Island SPA”</i>	No	

Qualifying Interest	Conservation Objective as per NPWS (2015b)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
Knot (<i>Calidris canutus</i>) [A143]	<i>"To maintain the favourable conservation condition of Knot in North Bull Island SPA"</i>	[See above]	No
Sanderling (<i>Calidris alba</i>) [A144]	<i>"To maintain the favourable conservation condition of Sanderling in North Bull Island SPA"</i>		No
Dunlin (<i>Calidris alpina alpina</i>) [A149]	<i>"To maintain the favourable conservation condition of Dunlin in North Bull Island SPA"</i>		No
Black-tailed Godwit (<i>Limosa limosa</i>) [A156]	<i>"To maintain the favourable conservation condition of Black-tailed Godwit in North Bull Island SPA"</i>		No
Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]	<i>"To maintain the favourable conservation condition of Bar-tailed Godwit in North Bull Island SPA"</i>		No
Curlew (<i>Numenius arquata</i>) [A160]	<i>"To maintain the favourable conservation condition of Curlew in North Bull Island SPA"</i>		No
Redshank (<i>Tringa totanus</i>) [A162]	<i>"To maintain the favourable conservation condition of Redshank in North Bull Island SPA"</i>		No
Turnstone (<i>Arenaria interpres</i>) [A169]	<i>"To maintain the favourable conservation condition of Turnstone in North Bull Island SPA"</i>		No
Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]	<i>"To maintain the favourable conservation condition of Black-headed Gull in North Bull Island SPA"</i>		No

Qualifying Interest	Conservation Objective as per NPWS (2015b)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
Wetlands [A999]	<i>“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”</i>	The Conservation Objective for Wetlands is defined by a single Attribute, namely “Habitat area”, the Target for which is <i>“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. See map 3”</i> . As the Project does not provide for any reduction in the permanent area of this habitat within the site, it has no potential to delay or interrupt the achievement of this Conservation Objective.	No

Table 3.4 Evaluation of the likely effects of the Project in view of the Conservation Objectives of the North Dublin Bay SAC.

Qualifying Interest	Conservation Objective as per NPWS (2013b)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
Mudflats and sandflats not covered by seawater at low tide [1140]	<i>“To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in North Dublin Bay SAC”</i>	<p>‘Mudflats and sandflats not covered by seawater at low tide’ occur c. 8.2km downstream of the Project at North Bull Island. This habitat occurs below the mean high-water mark therefore a hydrological connection exists between this habitat and the Project This provides a pathway for contaminants such as construction materials and sediments that may be spilled during construction to be transported to the site. However, the quantities of construction materials and sediment that will be used and produced during construction will be small and the level of impact these spillages may have on water quality within the site will be negligible considering the volume of water and the dilution capacity of the Royal Canal, the River Liffey and Dublin Bay. There are no water quality impacts associated with the operational phase of the Project.</p> <p>Therefore, owing to owing to the small scale of the works and the assimilative capacity of the Royal Canal, the River Liffey and Dublin Bay in an urban environment and industrial port, it can be concluded beyond reasonable scientific doubt that the Project will not significantly affect ‘Mudflats and sandflats not covered by seawater at low tide’.</p>	No
Annual vegetation of drift lines [1210]	<i>“To restore the favourable conservation condition of Annual vegetation of drift lines in North Dublin Bay SAC”</i>	<p>These habitats occur > 8.2 km from the Project at North Bull Island. All of these habitats occur at or below the mean high-water mark therefore a hydrological connection exists between these habitats and the Project. This provides a pathway for contaminants such as construction materials and sediments that may be spilled during construction to be transported to the site. However, the quantities of construction materials and sediment that will be used and produced during construction will be small and the level of impact these spillages may have on water quality within the site will be negligible considering the volume of water and the dilution capacity of the Royal Canal, the River Liffey and Dublin Bay. There are no water quality impacts associated with the operational phase of the Project.</p> <p>Therefore, owing to the small scale of the works and the assimilative capacity of the Royal Canal, the River Liffey and Dublin Bay in an urban environment and industrial port, it can be concluded beyond reasonable scientific doubt that the Project will not significantly affect these Qualifying Interests.</p>	No
Salicornia and other annuals colonising mud and sand [1310]	<i>“To restore the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in North Dublin Bay SAC”</i>		
Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330]	<i>“To maintain the favourable conservation condition of Atlantic Salt meadows (<i>Glaucopuccinellietalia maritima</i>) in North Dublin Bay SAC”</i>		
Mediterranean salt meadows (<i>Juncetalia maritima</i>) [1410]	<i>“To maintain the favourable conservation condition of Mediterranean salt meadows (<i>Juncetalia maritima</i>) in North Dublin Bay SAC”</i>		

Qualifying Interest	Conservation Objective as per NPWS (2013b)	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
Embryonic shifting dunes [2110]	<i>“To restore the favourable conservation condition of Embryonic shifting dunes in North Dublin Bay SAC”</i>	<p>All of these habitats are located > 6.3 km from the Project on North Bull Island and above the mean high-tide water mark. Therefore, there will be no direct loss, fragmentation or damage to any of these habitats as a result of the Project. There is however a pathway for contaminants such as construction materials and sediments that may be spilled during construction to be transported to the site. However, the quantities of construction materials and sediment that will be used and produced during construction will be small and the level of impact these spillages may have on water quality within the site will be negligible considering the volume of water and the dilution capacity of the Royal Canal, the River Liffey and Dublin Bay. There are no water quality impacts associated with the operational phase of the Project.</p> <p>Therefore, owing to the small scale of the works and the assimilative capacity of the Royal Canal, the River Liffey and Dublin Bay in an urban environment and industrial port, it can be concluded beyond reasonable scientific doubt that the Project will not significantly affect these Qualifying Interests.</p>	No
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]	<i>“To restore the favourable conservation condition of Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (‘white dunes’) in North Dublin Bay SAC”</i>		
Fixed coastal dunes with herbaceous vegetation (grey dune) [2130]	<i>“To restore the favourable conservation condition of fixed coastal dunes with herbaceous vegetation (‘grey dunes’) in North Dublin Bay SAC”</i>		
Humid dune slacks [2190]	<i>“To restore the favourable conservation condition of Humid dune slacks in North Dublin Bay SAC”</i>		
Petalwort <i>Petalophyllum ralfsii</i> [1395]	<i>“To maintain the favourable conservation condition of Petalwort in North Dublin Bay SAC”</i>	The nearest occurrence of Petalwort is c. 9.1km to the north-east of the Project among the fixed dunes on the north end of Bull Island (Campbell et al., 2019). Petalwort is a terrestrial species and thus has no hydrological connection to the Project. Therefore, there is no pathway for impacts between the Project and Petalwort. Therefore, the Project will not significantly affect Petalwort.	No

Table 3.4 Evaluation of the likely effects of the Project in view of the Conservation Objectives of the North-West Irish Sea SPA.

Qualifying Interest	Conservation Objective	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
Common Scoter (<i>Melanitta nigra</i>) [A065]	<i>To maintain or restore the favourable conservation condition of Common Scoter in the North-West Irish Sea SPA, as per the Dundalk Bay SPA Conservation Objectives (COs) (NPWS, 2011b).</i>	<p>For European sites where Site-specific Conservation Objectives have been developed, the Conservation Objective for a particular Qualifying Interest depends on the breeding status. The Site Synopsis for the North-West Irish Sea SPA does not explicitly state if it is the wintering or breeding populations (or both) that are the Qualifying Interests. Applying an abundance of caution, both the wintering and breeding populations, where relevant, have been considered in this assessment.</p> <p>The Qualifying Interests of this European site can be broken down into groups:</p> <ul style="list-style-type: none"> Species that are present within the SPA year-round, including coastal and inshore areas (Herring Gull, Lesser Black-backed Gull, Great Black-backed Gull, Fulmar, Cormorant Shag) Species which breed within the SPA but spend the winter months offshore (Puffin, Guillemot, Razorbill, Kittiwake) Species which breed within the SPA but migrate from Ireland to the southern hemisphere (Terns, Manx Shearwater) Species that winter in the SPA and breed in other areas of Ireland, typically inland lake islands or western Ireland (Common Scoter, Common Gull, Red-throated Diver, Black-headed Gull) 	No
Red-throated Diver (<i>Gavia stellata</i>) [A001]	<i>To maintain or restore the favourable conservation condition of Red-throated Diver in the North-West Irish Sea SPA as per the Blacksod Bay/ Broadhaven Bay SPA COs (NPWS, 2014).</i>		No
Great Northern Diver (<i>Gavia immer</i>) [A003]	<i>To maintain or restore the favourable conservation condition of Great Northern Diver in the North-West Irish Sea SPA as per the Inner Galway Bay SPA COs (NPWS, 2013) for the wintering population.</i>		No
Fulmar (<i>Fulmarus glacialis</i>) [A009]	<i>To maintain or restore the favourable conservation condition of Fulmar in the North-West Irish Sea SPA, as per the Saltee Island SPA COs (NPWS, 2011d) for the breeding population and the Foula SPA and Seas off Foula SPA COs (NatureScot, 2021a) for the non-breeding population.</i>		No
Manx Shearwater (<i>Puffinus puffinus</i>) [A013]	<i>To maintain or restore the favourable conservation condition of Manx Shearwater in the North-West Irish Sea SPA, as per the St Kilda and Seas of St Kilda SPA COs (NatureScot, 2021b) for the breeding and non-breeding population.</i>		No
Little Gull (<i>Larus minutus</i>) [A117]	<i>To maintain or restore the favourable conservation condition of Little Gull in the North-West Irish Sea SPA, as per the Dundalk Bay SPA COs (NPWS, 2011b), for the wintering population of Common Gull.</i>		No
Kittiwake (<i>Rissa tridactyla</i>) [A188]	<i>To maintain or restore the favourable conservation condition of Kittiwake in the North-West Irish Sea SPA, as per the Saltee Island SPA (NPWS, 2011d) COs for the breeding population and the Foula SPA and Seas off Foula SPA COs (NatureScot, 2021a) for the non-breeding population.</i>		No

Qualifying Interest	Conservation Objective	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]	<i>To maintain or restore the favourable conservation condition of Black-headed Gull in the North-West Irish Sea SPA, as per the North Bull Island SPA COs (NPWS, 2013f) for the wintering population of Black-headed Gull.</i>	<ul style="list-style-type: none"> Species which migrate to Ireland in the winter but do not breed in Ireland (Great Northern Diver, Little Gull) 	No
Common Gull (<i>Larus fuscus</i>) [A183]	<i>To maintain or restore the favourable conservation condition of Common Gull in the North-West Irish Sea SPA, as per the Dundalk Bay SPA COs (NPWS, 2011b).</i>	For non-breeding populations, the Attributes of 'Population Trend' and 'Distribution' have been examined. For breeding populations, Attributes and Targets have been applied from the respective Qualifying Interests in other SPAs, as referenced in this table.	No
Lesser Black-backed Gull (<i>Larus marinus</i>) [A183]	<i>To maintain or restore the favourable conservation condition of Lesser Black-backed Gull in the North-West Irish Sea SPA, as per the Saltee Islands SPA (NPWS, 2011c) for the breeding population and as per the Dundalk Bay SPA COs (NPWS, 2011b) for the wintering population of Common Gull (In the absence of a site-specific conservation objective for the wintering populations of this species in Ireland, the CO of wintering common Gull has been used, as a species that fills a similar ecological niche).</i>	The closest suitable habitat within the SPA is 6km from the proposed development in Dublin Bay. Some of the Qualifying Interests occur closer to the proposed development, namely: <ul style="list-style-type: none"> Roseate Tern, Common Tern and Artic Tern breed on the ESB Dolphin in the Liffey Estuary, which is 5.8km east the proposed development and on the Royal Canal Lock Gates in Dublin City. Small number of Common Tern nest on the Royal Canal Basin locks. These species also feed throughout the Liffey Estuary and Dublin Bay. 	No
Herring Gull (<i>Larus argentatus</i>) [A184]	<i>To maintain or restore the favourable conservation condition of Herring Gull in the North-West Irish Sea SPA, as per the Saltee Islands SPA COs (NPWS, 2011c) for the breeding population, and, as per the Dundalk Bay SPA COs (NPWS, 2011b) for the wintering population of Common Gull (In the absence of a site-specific conservation objective for the wintering populations of this species in Ireland, the CO of wintering common Gull has been used, as a species that fills a similar ecological niche).</i>	<ul style="list-style-type: none"> Herring Gull, Lesser Black-backed Gull, Great Black-backed Gull, Cormorant, Guillemot, Razorbill Black-headed Gull regularly occur in the environs of Dublin City. The Gull species are also found in suburban areas, ponds and wetlands, towns, parks, and agricultural areas in the vicinity of the proposed development. 	No
Great Black-backed Gull (<i>Larus marinus</i>) [A187]	<i>To maintain or restore the favourable conservation condition of Great Black-backed Gull in the North-West Irish Sea SPA, as per the Saltee Islands SPA (NPWS, 2011c) for the breeding population of Herring Gull, and, as per the Dundalk Bay SPA COs (NPWS, 2011b) for the wintering population of Common Gull (In the absence of a site-specific conservation objective for the wintering populations of this species in Ireland, the CO of winter common Gull has been used, as a species that fills a similar ecological niche).</i>	<ul style="list-style-type: none"> Other species such as Puffin and Shag feed in the Liffey Estuary/ Dublin Bay area. 	No

Qualifying Interest	Conservation Objective	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
Little Tern (<i>Sterna albifrons</i>) [A195]	<i>To maintain or restore the favourable conservation condition of Little Tern in the North-West Irish Sea SPA, as per the Boyne Estuary SPA COs (NPWS, 2013f).</i>	<p>The proposed development does not have the potential to significantly affect these Qualifying Interests, in view of their Conservation Objectives, for the following reasons:</p> <ul style="list-style-type: none"> The location, nature and scale of the proposed development are such that any water quality impacts would be very localised and will dissipate in a very short time, before reaching the SPA, or indeed Dublin Bay in general. This assessment has also considered the baseline conditions of the area, being close to a city with a population of over 1m, and an industrial port. Cormorant is regularly seen feeding in the Royal Canal. These species are accustomed to noise and visual disturbance along the Royal Canal. The number of Cormorant feeding in the Royal Canal is insignificant in the context of the SPA population, which accounts for 30% of the Irish population during the breeding season. Gulls are widespread in environs of Dublin City as well as suburban areas, towns, parks and agricultural areas in the vicinity of the proposed development. These species are accustomed to disturbance and the proposed development will not have any effect of these species. <p>Therefore, it can be concluded that the proposed development does not have the potential to significantly affect these Qualifying Interests, in view of their Conservation Objectives.</p>	No
Roseate Tern (<i>Sterna dougallii</i>) [A192]	<i>To maintain or restore the favourable conservation condition of Roseate Tern in the North-West Irish Sea SPA, as per the Rockabill SPA COs (NPWS, 2013e).</i>		No
Common Tern (<i>Sterna hirundo</i>) [A193]	<i>To maintain or restore the favourable conservation condition of Common Tern in the North-West Irish Sea SPA, as per the Rockabill SPA COs (NPWS, 2013e).</i>		No
Arctic Tern (<i>Sterna paradisaea</i>) [A194]	<i>To maintain or restore the favourable conservation condition of Arctic Tern in the North-West Irish Sea SPA, as per the Rockabill SPA COs (NPWS, 2013e).</i>		No
Puffin (<i>Fratercula arctica</i>) [A204]	<i>To maintain or restore the favourable conservation condition of Puffin in the North-West Irish Sea SPA, as per the Saltee Islands SPA COs (NPWS, 2011c) for the breeding population and the Foula SPA and Seas off Foula SPA COs (NatureScot, 2021a) for the non-breeding population.</i>		No
Razorbill (<i>Alca torda</i>) [A200]	<i>To maintain or restore the favourable conservation condition of Razorbill in the North-West Irish Sea SPA, as per the Saltee Islands SPA COs (NPWS, 2011c) for the breeding population and the Foula SPA and Seas off Foula SPA COs (NatureScot, 2021a) for the non-breeding population.</i>		No
Guillemot (<i>Uria aalge</i>) [A199]	<i>To maintain or restore the favourable conservation condition of Guillemot in the North-West Irish Sea SPA, as per the Saltee Islands SPA COs (NPWS, 2011c) for the breeding population and the Foula SPA and Seas off Foula SPA COs (NatureScot, 2021a) for the non-breeding population.</i>		No
Shag (<i>Phalacrocorax aristotelis</i>) [A018]	<i>To maintain or restore the favourable conservation condition of Shag in the North-West Irish Sea SPA, as per the Saltee Islands SPA COs (NPWS, 2011c) for the breeding population and the Foula SPA and Seas off Foula SPA COs (NatureScot, 2021a) for the non-breeding population.</i>		No

Qualifying Interest	Conservation Objective	Does the Project provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
Cormorant (<i>Phalacrocorax carbo</i>) [A017]	<i>To maintain or restore the favourable conservation condition of Cormorant in the North-West Irish Sea SPA, as per the Saltee Islands SPA COs (NPWS, 2011c) for the breeding population and the Castlemaine Harbour SPA COs (NPWS, 2011a) for the non-breeding population.</i>		No

3.4 Summary of Likely Significant Effects

In Section 3.1, it was established that four European sites, namely the South Dublin Bay and River Tolka Estuary SPA, the North Bull Island SPA, the North Dublin Bay SAC and the North-West Irish Sea SPA occur within the likely zone of impact of the Project. It was determined that potential pathways for effects exist between the Project and these sites. There are no pathways for effects between the Project and any other European sites. The sites were described in detail in Section 3.2.

In Section 3.3, it was established, in light of best scientific knowledge, that the Project will not give rise to ecological impacts which would constitute significant effects on the sites, in view of the sites' Conservation Objectives. This finding had regard to the nature, size and location of the Project as well as the existing levels of noise and visual disturbance in the area and the sensitivities of the Qualifying Interest of the sites concerned.

4. IN-COMBINATION EFFECTS

4.1 Introduction

Article 6(3) of the Habitats Directive requires that AA be carried out in respect of plans and projects that are likely to have significant effects on European sites, “*either individually or in combination with other plans or projects*”. Therefore, regardless of whether or not the likely effects of a plan or project are significant when considered on their own, the significance of the combined effects of the plan or project under assessment and other plans and projects must also be evaluated.

4.2 Methodology

Plans and projects with potential for interactions with the Project were selected for assessment. For the purposes of the assessment, small scale and domestic developments were not considered given the nature of the Project and the fact that these developments would be subject to the stringent planning controls of Dublin City Council.

The ePlanning website for Dublin City Council and the EIA Portal was used to search for planning applications.

4.3 Outcome

Table 4.1 below details the assessment of the likelihood of significant effects arising from the Project in combination with other plans or projects. This assessment was undertaken in view of the Conservation Objectives of the relevant European site and found that the Project does not have the potential to significantly affect any European site in combination with other plans or projects.

Table 4.1: Assessment of the likelihood of significant effects on European sites arising from the combination of the Project with other plans and projects.

Plan or project	Description of plan or project	In-combination effect(s)
<p>Royal Canal Cycleway Phase 3</p>	<p>The proposed works shall comprise the construction of c.2.1km cycle and pedestrian route from North Strand Road (Newcomen Bridge – Protected Structure) to Phibsborough Road. The route shall traverse past Clarke’s Bridge and Binns Bridge, both Protected Structures.</p> <p>Toucan (pedestrian and cycle) crossings shall be provided at the following locations: North Strand Street / Newcomen Bridge; Summerhill Parade / Clarke’s Bridge; Russell Street / Russell Street Bridge; Drumcondra Road Lower / Binn’s Bridge; Phibsborough Road / Cross Guns Bridge. Two new pedestrian/cycle bridges and associated ramps are proposed to facilitate the route at Croke Park south east of Russell Street and at the 3rd Royal Canal Lock.</p>	<p>Given the nature, scale and locations of this development relative the Project and European sites, significant, in-combination effects are not anticipated.</p>
<p>Strategic Housing Development at Rathborne Avenue, Pelletstown, Ashtown, Dublin 15.</p>	<p>The proposed development is for the construction of a mixed-use development, comprising 730 apartment in six blocks, interconnected by lower blocks on the northern site. The development ranges in height from six to twelve storeys, built over a podium/undercroft basement. The stated floor space of non-residential uses is 3206 sqm. The subject site is located in Pelletstown, Ashtown, approximately 5.5km north-west of Dublin City Centre. The southern boundary along the canal towpath measures approximately 290m in width. This boundary comprises palisade fencing with some mature trees/hedgerow. There is currently no access to the canal along this boundary. Planning permission has been granted in November 2020.</p>	<p>Given the nature, scale and locations of this development relative the Project and European sites, significant, in-combination effects are not anticipated.</p>
<p>Dodder Public Transportation Opening Bridge</p>	<p>Dublin City Council has commenced the planning and design of the Dodder Public Transportation Opening Bridge. The scheme comprises a new public transportation opening bridge over the River Dodder at its confluence with the River Liffey along with the construction of approach roads associated with the bridge; the construction of a new control building; the provision of a new club house and facilities for St Patrick’s Boat Club; the reclamation of land to the west of Tom Clarke Bridge to facilitate the build; the landscaping of the area between York Road/Thorncastle street and the R131 over the extents of the project. The planning application for this project will be lodged as part of the NTA BusConnects project. Preliminary design is complete and the EIAR is being amalgamated into that of BusConnects.</p>	<p>Given the nature, scale and locations of this development relative the Project and European sites, significant, in-combination effects are not anticipated.</p>
<p>Point Pedestrian & Cycling Bridge and Tom Clarke Widening Works</p>	<p>In 2018, DCC applied to ABP to amend the Planning Scheme for the North Lotts and Grand Canal Dock SDZ. In their subsequent decision, ABP allowed the addition of a new pedestrian and cyclist bridge to the west of the Tom Clarke Bridge. This proposed bridge has been progressed by DCC as the ‘Point Pedestrian & Cycling Bridge and Tom Clarke Bridge Widening Works’.</p> <p>The project in question is intended to tie in with the eastern abutment and approaches of the proposed Dodder Public Transportation Opening Bridge (Plate 17.24), and involves the following major elements:</p>	<p>An assessment of in-combination effects with this project without detail on location, scale and design is not feasible at this stage and is not included as part of this assessment.</p>

Plan or project	Description of plan or project	In-combination effect(s)
	<ul style="list-style-type: none"> • Provision of a new pedestrian and cycle bridge immediately west of the existing Tom Clarke Bridge, capable of opening to allow the passage of river traffic; and • Widening of the southern fixed spans of the Tom Clarke Bridge to allow for a dedicated right turn onto the proposed Dodder Public Transportation Opening Bridge, to accommodate a BusConnects bus route. <p>In July 2020, DCC issued a request for tender in relation to a multi-party framework agreement for design team services for the project. Since the application for planning permission for the project is not expected to be submitted prior to that for the proposed development, there are no environmental assessment documents available upon which to base an assessment of cumulative impacts in combination with the proposed development. Therefore, this project is discounted from further consideration herein. Should the project be progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	
<p>Poolbeg Strategic Development Zone Planning Scheme</p>	<p>Poolbeg West SDZ consists of an area between Pigeon House Road, Sean Moore Road, Sean Moore Park and extends in an easterly direction along Sandymount Strand as far as Irishtown Nature. The new three-tiered vision for the development of Poolbeg West includes sets out to:</p> <ul style="list-style-type: none"> • CONNECT with the physical, environmental, economic and social fabric of the city, the bay and adjoining neighbourhoods. • CREATE a new sustainable urban neighbourhood that responds to the areas unique location and enhances the enjoyment of local amenities. • PROTECT the special status of Dublin Bay, the intrinsic functions of the port/municipal facilities and the amenity of existing and future residents. 	<p>No in-combination likely significant effect – This is a high-level plan which was subject to its own AA. The plan includes objectives to protect the integrity of the Natura 2000 Network.</p>
<p>Alexandra Basin Redevelopment Project</p>	<p>This project includes 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 remediation of contaminated materials, infilling of Graving Dock No.2, provision of 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 52 and 53 at the eastern end of the Port and the provision of new landside and berthing facilities. Dredging of the approach channel and provision of a marina protection structure to the north of the Poolbeg Yacht, Boat Club and Marina. Planning permission for this Project was granted in 2015 with construction commencing in 2016.</p>	<p>There are no in-combination significant effects predicted to arise from the combination of this plan with the Project.</p>
<p>Dublin Port Road Network</p>	<p>The development includes:</p> <ol style="list-style-type: none"> 1. Improvement works to Dublin Port's road network north of the River Liffey, as described in the accompanying engineering report for planning; 2. Provisions of a shared cycle and pedestrian facility (hereafter referred to as "greenway") of approximately 4km in length along the northern boundary of Dublin Port 	<p>There are no in-combination significant effects predicted to arise from the combination of this plan with the Project.</p>

Plan or project	Description of plan or project	In-combination effect(s)
	3. A proposed new pedestrian/cycleway cable stayed bridge promenade road and associated approach structures across	
DART+ WEST	At the time of writing the DART+ West railway order application was submitted in July 2022. The proposed pedestrian and cycleway development runs parallel to the existing railway line connecting Sligo, Maynooth and several other towns/urban centres along the railway line including at Ashtown Station close to the proposed development. DART+ will introduce electrified high-capacity trains at increased frequency for all stations between Maynooth / M3 Parkway and Connolly and Spencer Dock stations in Dublin city centre (40km corridor). It is anticipated that the DART+ West railway order application will be submitted in late 2021 or early 2022.	Given the nature, scale and locations of this development relative the Project and European sites, significant, in-combination effects are not anticipated.
MetroLink TII project at Cross Guns Quay Glasnevin	The MetroLink project aims to develop a new high-capacity high frequency segregated rail corridor from Charlemont to Swords, via Dublin Airport. The MetroLink Project integrates with Irish Rail, Dublin Bus and Luas services to provide a fully integrated public transport system in the Greater Dublin Area. The corridor is predominately in tunnel and includes 16 new stations, including 11 underground stations, and a park and ride facility. A MetroLink station is proposed to be built next to Cross Guns Quay, Glasnevin. Planning permission was lodged in September 2022, with construction earmarked to commence in 2025. .	Given the nature, scale and locations of this development relative the Project and European sites, significant, in-combination effects are not anticipated.
Luas Finglas	<p>At the time of writing the Luas Finglas project is at design and public consultation stage. Luas Finglas is the proposed extension of the Luas Green Line from its terminus in Broombridge to the north of Finglas in Charlestown, beside the junction of the M50 and N2. The proposed route will include four new stops along its 3.9 kilometre length. These are at St Helena's, Finglas Village, Mellows Park and Charlestown. The final stop at Charlestown, close to the M50 will include a 600 vehicle park and ride facility. The line will be constructed mostly using grass track and will include a parallel cycle path along much of the route.</p> <p>Light-bellied Brent Geese which occur along the Tolka Valley and which may be impacted by the Luas Finglas, are also known to use Martin Savage Park as per ringed bird study (pers. comm., Maryann Harris). As the Project does not provide for likely significant effects on Light-bellied Brent Geese, significant, negative cumulative impacts arising from the Project in-combination Luas Finglas are not anticipated.</p>	Given the nature, scale and locations of this development relative the Project and European sites, significant, in-combination effects are not anticipated.

5. CONCLUSION

In accordance with Article 6(3) of the Habitats Directive, Part XAB of the Planning and Development Acts, the relevant case law, established best practice and the Precautionary Principle, this AA Screening Report has examined the details of the Royal Canal Greenway Cycle and Pedestrian Route Phase 4 – Phibsborough to Ashtown and the relevant European sites and has concluded, on the basis of objective information, that the Project, either individually or in combination with other plans or projects, in view of best scientific knowledge, is not likely to give rise to impacts which would constitute significant effects in view of the Conservation Objectives of the South Dublin Bay and River Tolka Estuary SPA, the North Bull Island SPA, the North Dublin Bay SAC, the North-West Irish Sea SPA or any other European site.

In light of this conclusion, it is the considered opinion of ROD-AECOM, as the author of this AA Screening Report, that Dublin City Council, as the Competent Authority, may find in completing its AA Screening in respect of the Royal Canal Greenway Cycle and Pedestrian Route Phase 4 – Phibsborough to Ashtown, that the Project, either individually or in combination with other plans and projects, is not likely to have a significant effect on the South Dublin Bay and River Tolka Estuary SPA, the North Bull Island SPA, the North Dublin Bay SAC, the North-West Irish Sea SPA or any other European site, in view of best scientific knowledge and the Conservation Objectives of the site concerned. Therefore, it is the recommendation of the author of this AA Screening Report that the Competent Authority may determine that AA is not required in respect of the Project.

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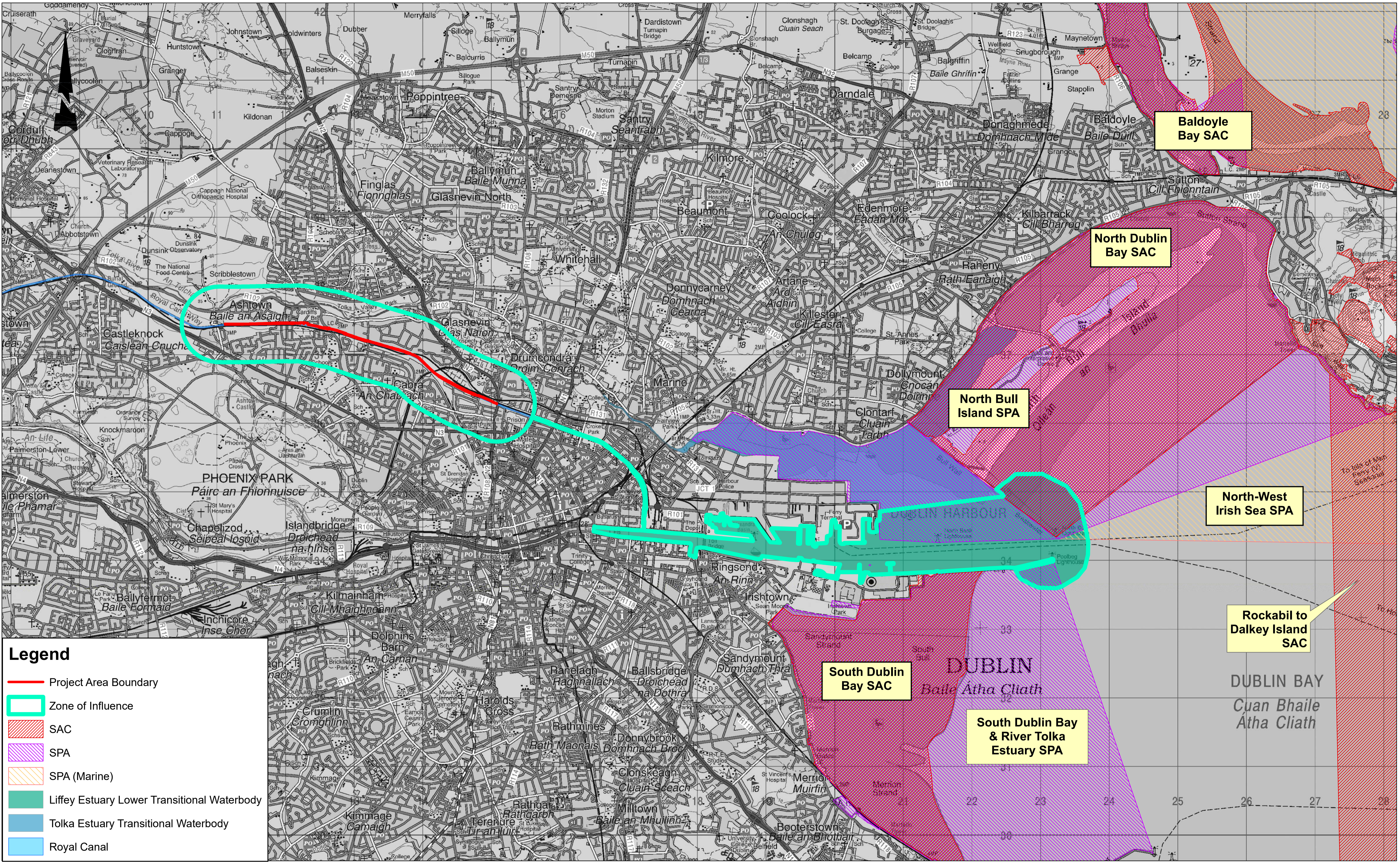
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APPENDIX A

LOCATION OF EU DESIGNATED SITES



Legend

- Project Area Boundary
- Zone of Influence
- SAC
- SPA
- SPA (Marine)
- Liffey Estuary Lower Transitional Waterbody
- Tolka Estuary Transitional Waterbody
- Royal Canal

<p>Project Ireland 2040 Building Ireland's Future</p>	<p>Comhairle Cathrach Baile Átha Cliath Dublin City Council</p>	<p>NTA Údarás Náisiúnta Iompair National Transport Authority</p>	<table border="1"> <thead> <tr> <th>No.</th> <th>Revision</th> <th>Date</th> <th>By</th> <th>Chk'd</th> <th>App'd</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ISSUED FOR INFORMATION</td> <td>Sept 2023</td> <td>MMC</td> <td>PO'S</td> <td>PO'S</td> </tr> </tbody> </table>	No.	Revision	Date	By	Chk'd	App'd	1	ISSUED FOR INFORMATION	Sept 2023	MMC	PO'S	PO'S	<p>AECOM - Roughan & O'Donovan Alliance</p> <p>ROUGHAN & O'DONOVAN CONSULTING ENGINEERS ARENA HOUSE, ARENA ROAD, SANDYFORD, DUBLIN 18 D18 V8P6, IRELAND</p>	<p>Project Title: Royal Canal Premium Cycle Route Phase 4B - Pibsborough to Ashtown</p> <p>Drawing Title: Boundaries of European Sites Relative to the Location of the Project</p> <p>Drawing Number: RCP4 - RODA - ENV - ROUT - DR - V - Fig. 3.1</p> <p>Scale (A1): 1:25,000 Date: April 2021 Job No: 18-152 Rev: V2.0</p>
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