



PROVISION OF INFORMATION

FOR SCREENING FOR APPROPRIATE ASSESSMENT

PROPOSED DEVELOPMENT, PARNELL SQUARE, DUBLIN 1

Prepared for Stephen Little & Associates

On behalf of Dublin City Council and PSQ Developments Ltd (Joint Applicants)

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TABLE OF CONTENTS

1 Introduction 1
 2 Methodology..... 2
 3 Conclusions of Screening Assessment Process 45
 4 References 47

LIST OF TABLES

Table 1 Overview of the Proposed Development and its Receiving Environment 5
 Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)..... 16

LIST OF FIGURES AND APPENDICES

Figure 1. European sites within 15km of the proposed development 42

1 Introduction

This report, which contains information required for the competent authority (in this instance An Bord Pleanála) to undertake a screening for Appropriate Assessment (AA), has been prepared by Scott Cawley Ltd. on behalf of the joint applicants Dublin City Council and PSQ Developments Ltd. It provides information on and assesses the potential for the proposed development on Parnell Square North, Dublin 1 to impact on Natura 2000 sites (hereafter referred to as European sites)¹.

It is necessary that the proposed development has regard to Article 6 of the Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter "the Habitats Directive"). This is transposed in Ireland primarily by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011) (hereafter the Birds and Habitats Regulations) and the Planning and Development (Amendment) Act, 2010 as amended.

An AA is required if likely significant effects on European sites arising from a proposed development cannot be ruled out at the screening stage, either alone or in combination with other plans or projects.

It is the responsibility of the competent authority to make a decision as to whether or not the proposed development is likely to have significant effects on European sites, either individually or in combination with other plans or projects. In accordance with the legislation and national guidance, the competent authority issues an AA Screening Determination which will set out their decision and the reasons for it.

Following the preparation of this report it may be objectively concluded that there is no likelihood of any significant effects on any European sites arising from the proposed development, either alone or in combination with other plans or projects. Therefore, it is our view that an Appropriate Assessment is not required in this instance. The information in the tables below provide a summary of the information gathered for this screening exercise and the conclusions made.

¹ Natura 2000 sites are defined under the Habitats Directive (Article 3) as a European ecological network of special areas of conservation composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II. The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats. In Ireland these sites are designed as *European sites* - defined under the Planning Acts and/or Birds and Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (d) a special area of conservation, (e) a candidate special protection area, or (f) a special protection area. They are commonly referred to in Ireland as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)

2 Methodology

This Appropriate Assessment Screening report has been prepared with regard to the following guidance documents where relevant:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 revision).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2001); hereafter referred to as the EC Article 6 Guidance Document. The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and (4) of the Habitats Directive.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC Environment Directorate-General, updated April 2015); hereafter referred to as MN2000.
- Communication from the Commission on the precautionary principle. European Commission (2000).

The above referenced guidance sets out a staged process for carrying out Appropriate Assessment. To determine if a full Appropriate Assessment is required, documented screening is required. Screening identifies the likely significant effects on European sites, if any, which would arise from a proposed plan or project, either alone or in combination with other plans and projects.

If the conclusions at the end of screening are that there is no likelihood of significant effects occurring on any European sites, as a result of the proposed plan or project, either alone or in combination with other plans and projects, then there would be no requirement to undertake a full Appropriate Assessment.

However, even if screening makes a finding of no significant effects, and therefore concludes that Appropriate Assessment is not required, these findings must be clearly documented in order to provide transparency of

decision-making, and to ensure the application of the 'precautionary principle'².

Screening for Appropriate Assessment involves the following:

- Determining whether a project or plan is directly connected with or necessary to the conservation management of any European sites³;
- Describing the details of the project/plan and other plans or projects that may cumulatively affect any European sites (see Table 1);
- Describing the characteristics of relevant European sites (Table 2); and
- Assessing the likelihood and significance of effects on relevant European sites (see Table 2).

The information that was collected to allow the competent authority to screen the proposed development was based on a site visit undertaken on the 9th May 2018 and a desktop study carried out on 18th June 2018. Information relied upon included the following information sources, which included maps, ecological and water quality data:

- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie;
- Online data available on protected species as held by the National Biodiversity Data Centre (NBDC) from www.biodiversityireland.ie;
- Online data available on European sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie;
- Information on land-use zoning from the online mapping of the Department of the Environment, Community and Local Government www.myplan.ie;
- Information on water quality in the area available from www.epa.ie;
- Information on soils, geology and hydrogeology in the area available from www.gsi.ie;
- Information on the location, nature and design of the proposed development supplied by the applicant's design team;

² One of the primary foundations of the precautionary principle, and globally accepted definitions, results from the work of the Rio Declaration. Principle #15 declaration notes:

"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

³ In this instance the proposed development is not directly connected with or necessary to the conservation management of any European sites.

- Information on the status of EU protected habitats and species in Ireland (National Parks & Wildlife Service, 2013a & 2013b);
- Information on the Conservation Status of Birds in Ireland 2014 – 2019 (Colhoun & Cummins, 2014).

Other Key Information Sources:

- Dublin City Development Plan 2016-2022 (Dublin City Council, 2016)
- Dublin City Biodiversity Action Plan 2015-2020 (Dublin City Council, 2015)
- National Biodiversity Action Plan 2017 – 2021 (Department of Culture, Heritage and the Gaeltacht, 2017)

Table 1 Overview of the Proposed Development and its Receiving Environment

<p>Brief Site Description</p>	<p>The subject lands (c. 0.99ha in total area) are located at houses 28-23 and 20-21 and public realm at Parnell Square North, Dublin 1 (centroid grid reference: O 15569 35131). The site of the proposed public realm development consists almost entirely of areas of hardstanding and existing buildings, as well as some very small patches of recolonising bare ground within the existing courtyard. The surrounding area is predominantly urban in nature and consists of areas of hardstanding and commercial and residential buildings. The River Liffey is located c. 820m south of the proposed development site.</p>
<p>Features of the Surrounding Environment</p>	<p>The subject lands and all surrounding areas consists of built land and are currently zoned as “Georgian conservation areas”. The purpose of this zoning includes “to protect the existing architectural and civic design character, and to allow only for limited expansion consistent with the conservation objective” (Dublin City Council, 2016). The surrounding lands are also zoned as:</p> <ul style="list-style-type: none"> • “Amenity/Open Space Lands/Green Network” with the objective to “To preserve, provide and improve recreational amenity and open space and green networks”; • “Sustainable residential neighbourhoods” with the objective to “to protect, provide and improve residential amenities”; • “District Centres” with the objective to “To provide for and improve mixed-services facilities”; and, • “City Centre” with the objective to “To protect the existing architectural and civic design character, and to allow only for limited expansion consistent with the conservation objective”.

Table 1 Overview of the Proposed Development and its Receiving Environment

The desktop study found one record of Herring gull *Larus argentatus* [A184], a Special Conservation Interest (SCI) species of Ireland's Eye SPA [004117], located within the subject lands. This species was also recorded within the subject lands during the site visit. No other records of any species or habitats within the subject lands, or their immediate environs, for which European sites listed in Table 2 are designated were found. The following species (for which European sites listed in Table 2 have been designated) have been recorded within 2km of the proposed development⁴:

- [A046] Light-bellied Brent Goose *Branta bernicla hrota*, located c. 1.3km south-west of the proposed development site (recorded in 2013);
- [A179] Black-headed Gull *Croicocephalus ridibundus*, located c. 540m north-west of the proposed development site (recorded in 2016);
- [A017] Cormorant *Phalacrocorax carbo*, located c. 1.3km south-west of the proposed development site (recorded in 2016);
- [1355] Otter – *Lutra lutra*, located c. 820m to the south of the proposed development site (recorded on the River Liffey in 1980).

The subject lands fall entirely within the Liffey and Dublin Bay catchment. The River Liffey is located c. 840m south of the proposed development site and the Royal Canal is located c. 880m north of the proposed development. According to the EPA Map Viewer, the water quality of the Lower Liffey Estuary transitional waterbody is classified as "Unpolluted", its Water

⁴ According to NBDC online data www.biodiversity.ie accessed 18th June 2017. This excludes NBDC records with a resolution greater or equal to 1km².

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Framework Directive (WFD) status 2010-2015 is listed as 'Moderate', and it has a WFD risk score of 'At risk of not achieving good status'⁵.

The Liffey Estuary discharges to the Dublin Bay Coastal Waterbody c. 7.8km downstream distance of the proposed development. The most recent surface water quality data for Dublin Bay (2010-2012) indicates that it is "Unpolluted", it has a WFD status (2010-2015) of "Good", and it has a WFD risk score of "At risk of not achieving good status". Under the "Trophic Status Assessment Scheme" classification of the EPA, "Unpolluted" means there have been no breaches of the EPA's threshold values for nutrient enrichment, accelerated plant growth, or disturbance of the level of dissolved oxygen normally present (Environmental Protection Agency, 2015).

Several European sites listed in Table 2 are located within the downstream receiving environment within the Liffey Estuary Lower transitional waterbody and Dublin Bay coastal waterbody, to which the development is connected by the combined sewer network, which discharges to Dublin Bay at the Poolbeg Peninsula.

The proposed development is within the "Dublin" groundwater body and is classified as "Poorly productive bedrock" and with groundwater vulnerability to human activities being mapped as "Low"⁶. The most recent WFD groundwater status for the site (2007-2015) is "Good". The bedrock formation on site is 'Dark limestone and shale'.

⁵ Information gathered from EPA Envision MapViewer gis.epa.ie/envision (Accessed 18th June 2018)

⁶ According to the GSI Groundwater web mapping www.gsi.ie (Accessed 18th June 2018)

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<p>Description of the Proposed Development</p>	<p>Full details of the proposed new Dublin City Library and Public Realm Works can be found in the applicants planning application. In brief, it consists of the following:</p> <ul style="list-style-type: none"> • The adaptive re-use of Nos. 20-21 & Nos. 23-28 Parnell Square North (all Protected Structures) for library and cultural use and ancillary restaurant. • The construction of a new 5-storey over basement extension, with roof gardens, for library and cultural use (c.5,720 sq m gross floor area, and associated demolition of existing 3-storey amharclann (Theatre) building, single storey atrium and 2-storey return, to the rear of Nos. 23-28 Parnell Square North. • The total gross floor area of the existing and new buildings amounts to c.11,198 sq.m. • Improvements works to the public realm to facilitate a new public realm area, including reconfiguration of vehicular roadway (2-lane), parking and set down areas, street furniture, street art and public lighting, widening of footpaths, and relocation of Dublin Bikes Station, at Parnell Square North, to facilitate a new public realm area in the area contained between Parnell Square West and East and the Garden of Remembrance. • Modifications to Bethesda Place and Frederick Lane North to facilitate access by service and emergency vehicles to Frederick Lane North. <p>The overall site area measures c. 0.99 ha, and includes Nos. 23 – 28 Parnell Square (Scoil Mhuire) and Nos. 20 – 21 Parnell Square (All Protected Structures) and the Public Realm. The Georgian houses are located either side of Hugh Lane Gallery (Protected Structure). The site is otherwise generally bounded by Parnell Square North, East & West, the Garden of Remembrance to the south, Bethesda Place, Frederick Lane North and the Sheridan Court Residential Apartments to the North.</p>
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Table 1 Overview of the Proposed Development and its Receiving Environment

	<p>Excavated material from the proposed development site will be assessed on-site and any contaminated materials identified will be correctly disposed of in accordance with international best practice guidelines and in compliance with relevant environmental legislation.</p> <p>Surface water runoff generated from the existing Georgian houses 23-28 will be split with two thirds of the existing roof area, diverted and connected to the proposed new drainage system and attenuation tank prior to restricted discharge to the existing sewerage system located on Bethesda Place. The remaining one third of surface water runoff from the roof area and basement area will be discharged by gravity to the existing sewerage system on Parnell Square. Surface water run-off from the proposed Public Realm area in front of the proposed development on Parnell Square North will discharge through new drainage channels and gully outlets to a new surface water sewer, which will discharge to the existing combined sewer located on Parnell Square North. SuDS features will be incorporated into the development, including an underground storm attenuation tank, greenroofs, rainwater butts and permeable paving.</p> <p>The proposed development will have a Population Equivalent (P.E.) of 3,070 upon completion (i.e. 70 P.E. with respect to the library staff and 3,000 P.E. with respect to visitors per day to the library), and will be discharged to the existing sewerage system located on Bethesda Place. From there, it will be carried to Ringsend Wastewater Treatment Plant (WwTP), where it will be treated and then discharged into Dublin Bay.</p>
<p>Defining the Zone of Influence of the Proposed Works</p>	<p>The zone of influence (ZoI) is a distance within which the proposed works could potentially affect the conservation condition of QI habitats or species. There is no set recommended distance for which European sites are considered as being relevant (i.e. within the ZoI of proposed works) for AA. Available guidance (NPWS, 2010) recommends that “the distance</p>

Table 1 Overview of the Proposed Development and its Receiving Environment

	<p>should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects". As a general rule of thumb, it is often considered appropriate to examine all European sites within 15km as a starting point. In some instances where there are far reaching hydrological/hydrogeological connections, a whole river catchment or a groundwater aquifer may need to be included in determining the ZoI. All European sites within 15km of the proposed works are listed in Table 2 and illustrated on Figure 1. In this case, the distance of 15km exceeds the potential zone of influence of the proposed development and any likelihood of significant effects in relation to European sites beyond 15km can be ruled out. In this instance, there is a potential connection between the subject lands and European sites in Dublin Bay via the existing surface water and foul water drainage networks, which ultimately drain to Dublin Bay. Habitat loss and disturbance pressures can be ruled out as impact pathways in this instance due to the nature of the subject lands (i.e. they are entirely composed of artificial surfaces and are therefore not of importance to qualifying interests of any European sites).</p>
<p>Potential pressures on European sites as a result of the proposed development</p>	<p>Pressures from loss of habitats to QI Species</p> <p>The subject lands do not physically overlap with any European sites. They are dominated by existing buildings and areas of hardstanding. There are no habitats listed under Annex I of the Habitats Directive present. The proposed development site is not connected with any habitats within any European site (e.g. by groundwater).</p> <p>During the site visit undertaken on the 9th May 2018, a small number of Herring gulls (i.e. estimated eight individual birds) were recorded nesting on the rooftops of the buildings 28 to 23 on Parnell Square North. Herring gulls are a species of Special Conservation Interest (SCI) for Ireland's Eye SPA [004117]. The proposed development will have no significant effect on</p>

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the conservation objectives of this SCI species due to the relatively small number of Herring gulls recorded within the subject lands and the availability of other suitable nesting sites in the surrounding environment.

No other mobile fauna species for which European sites were designated are known or considered likely to use the habitats within the subject lands. There is therefore no potential for significant effects on European sites resulting from loss of habitats arising from the proposed development.

Existing pressures on Water Quality within European sites in proximity to the site

Several intertidal habitats for which European sites in Dublin Bay were designated were failing to meet favourable conservation status at the time of writing. For some of these, water pollution is considered a threat ranked as being of “high importance”⁷ (NPWS, 2013a).

Pressures from surface waters

There is some potential for contaminants generated during the construction phase of the proposed development to enter the downstream receiving environment. However, there is no possibility for significant effects on European sites in Dublin Bay for the following reasons:

- The likelihood of an accidental pollution event occurring during the construction phase of the proposed development is considered to be very low in light of the drainage on-site and location of the development;

⁷ For example, “tidal mudflats and sandflats” was of “Inadequate” conservation status. This habitat was threatened by water pollution and was a reason for designation of North Dublin Bay SAC, and South Dublin Bay SAC. Under ‘wetlands’, the habitat was also a Special Conservation Interest of the South Dublin Bay and River Tolka Estuary SPA, and North Dublin Bay SPA.

Table 1 Overview of the Proposed Development and its Receiving Environment

- Any accidental pollution event is likely to be short in duration (i.e. confined to storm events), limiting the magnitude and extent of effects;
- The relatively short duration of the proposed works (i.e. a period of 24-36 months), which limits the potential period within which an accidental pollution incident could occur;
- The significant distance between the outfall of surface water runoff and the nearest European site in Dublin Bay (i.e. c. 2.3km), meaning that it is very unlikely that sediments or pollutants from the proposed development are likely to result in any discernible effects on European sites in Dublin Bay; and,
- Enriched water entering Dublin bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of the bay water (O'Higgins and Wilson, 2005).

Pressures from foul waters

Foul waters from the proposed development will be discharged to the existing sewerage system and carried to Ringsend WWTP for treatment prior to discharge into Dublin Bay. The proposed development is anticipated to result in an additional foul water loading value of 3,070 P.E . to Ringsend WWTP. Nonetheless, there is no possibility for significant effects due to the following reasons:

- There was no proven link between WWTP discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate Nitrogen signatures (Wilson and Jackson, 2011);

Table 1 Overview of the Proposed Development and its Receiving Environment

	<ul style="list-style-type: none"> • Enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O'Higgins and Wilson, 2005); • Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007); and, • Recent modelling of water quality in Dublin Bay for the Ringsend WWTP Upgrade Project demonstrates that the effects of nutrients from Ringsend WWTP are largely confined to the area between the South Wall and the Tolka Estuary (Irish Water, 2018).
<p>Other existing or proposed plans or projects nearby which may lead to cumulative effects on European sites</p>	<p>Existing pressures on water quality within European sites in proximity to the site</p> <p>Pressures on European sites in Dublin Bay from surface waters</p> <p>There is potential for “in-combination” effects of proposed plans and projects within the Dublin City Development Plan 2016-2022, Dún Laoghaire-Rathdown County Development Plan 2016-2022 (Dún Laoghaire-Rathdown County Council, 2016), Fingal Development Plan 2017-2023 (Fingal County Council, 2017), and other county level land use plans which can influence conditions in Dublin Bay via rivers and other surface water features.</p> <p>Based on data from the EPA⁸, Dublin Bay is of “Unpolluted” water quality status and the pollutant content of future surface water discharges to the Bay is considered likely to be decreased in the long-term. This is because it is an objective of the Greater Dublin Strategic Drainage Study, and all development plans within the catchment of Ringsend WWTP to include</p>

⁸ Coastal Surface Water Quality data (2010-2012) accessed from the EPA Envision Mapviewer gis.epa.ie/Envision (Accessed 19th June 2018)

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Sustainable Urban Drainage Systems (SUDS) in new development. Together these objectives are considered likely to reduce pressures on designated marine and intertidal species and habitats in Dublin Bay.

Pressures on European sites in Dublin Bay from effluent

The Greater Dublin Area including the subject lands and satellite towns in counties bordering Dublin, fall within the catchment of the Ringsend Waste Water Treatment Works (WWTP). During operation, foul effluent generated from the proposed development will be carried by the public sewerage network to the Ringsend WWTP for treatment prior to discharge to Dublin Bay.

Foul water comprising sewage and industrial effluent (and some surface water run-off) from the Dublin area has historically, and will continue to be treated at Ringsend WWTW prior to discharge to Dublin Bay. It currently has the capacity to treat 1.64 million population equivalents (P.E.); however the average influent loading to the WWTW is currently approximately 1.8 million P.E. A proposal to upgrade the existing facility to treat a daily loading of 2.4 million P.E. and a maximum weekly loading of 3.6 million P.E. has been submitted for planning (Irish Water, 2018). Any existing or proposed projects discharging to the plant have the potential to act cumulatively to reduce water quality in Dublin Bay, affecting European sites therein. Despite Ringsend WWTP historically operating at or above capacity and the proposed development adding to the loading of the plant, no significant effects from discharge arising from the proposed development are predicted.

Conclusion for potential in-combination impacts from surface and/or foul waters

Table 1 Overview of the Proposed Development and its Receiving Environment

There will be no likelihood for significant effects on any European sites, and no adverse impacts to European site integrity arising from surface and foul water discharges during the construction and/or operation of the proposed development in combination with other plans or projects. This judgement was reached on the basis that:

- Enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O’Higgins and Wilson, 2005);
- Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007);
- There was no proven link between WWTP discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate Nitrogen signatures (Wilson and Jackson, 2011); and,
- Recent modelling of water quality in Dublin Bay for the Ringsend WWTP Upgrade Project demonstrates that the effects of nutrients from Ringsend WWTP are largely confined to the area between the South Wall and the Tolka Estuary (Irish Water, 2018).

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
Special Areas of Conservation (SAC)			
South Dublin Bay SAC [0210]	Located c. 3.9km south-east of proposed development site.	<p>Conservation Objectives Version 1.0 (22/08/13)</p> <p>Annex I Habitats:</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1210] Annual vegetation of drift lines</p> <p>[1310] Salicornia and other annuals colonizing mud and sand</p> <p>[2110] Embryonic shifting dunes</p>	<p>Whilst there is a potential source-receptor pathway between the proposed development and the European site, no significant effects are likely.</p> <p>1. Surface waters generated during construction may carry silt, oils, or other chemicals into the local storm water sewer network which ultimately discharges to Dublin Bay. However, there will be no significant effects on</p>

⁹ “Qualifying Interests” for SACs and “Special Conservation Interests” for SPAs based on Petrifying springs with tufa formation (Cratoneurion) relevant Statutory Instruments for each SPA, and NPWS Conservation Objectives for SACs downloaded from www.npws.ie in June 2018.

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			<p>the Qualifying Interests of the European site in view of the relevant conservation objectives. This judgement was informed by the following:</p> <ul style="list-style-type: none"> • The coastal waters in Dublin Bay are classed as “Unpolluted” by the EPA; • The temporary nature of any discharges related to construction of the site; • The incorporation of SUDS measures into the design of the proposed development; and, • In the unlikely event of a pollution event during construction, this would not be

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Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			<p>of such a magnitude that it would have a significant adverse effect on water quality in Dublin Bay.</p> <p>2. Foul waters generated during operation which will ultimately discharge to Dublin Bay via Ringsend WWTP will not give rise to significant effects on the Qualifying Interests of the European site in view of the relevant conservation objectives. This judgement was informed by the following:</p> <ul style="list-style-type: none"> • The receiving waters at the Ringsend outfall are of unpolluted status according to the most recent statistics from the EPA;

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Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			<ul style="list-style-type: none"> • There was no proven link between WWTP discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate Nitrogen signatures (Wilson and Jackson, 2011). • Recent modelling of water quality in Dublin Bay for the Ringsend WWTP Upgrade Project demonstrates that the effects of nutrients from Ringsend WWTP are largely confined to the area between the South Wall and the Tolka Estuary (Irish Water, 2018) • Enriched water entering Dublin bay has been shown to rapidly

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			<p>mix and become diluted such that the plume is often indistinguishable from the rest of the bay water (O'Higgins and Wilson, 2005);</p> <ul style="list-style-type: none"> • Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007); and, • There is no data available suggesting water quality between the South Wall and the Tolka Estuary is adversely affecting

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Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			qualifying interests of the European site.

<p>North Dublin Bay SAC [000206]</p>	<p>Located c. 5.7km east of the proposed development site</p>	<p>Conservation Objectives Version 1.0 (06/11/13)</p> <p>Annex I Habitats:</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1210] Annual vegetation of drift lines</p> <p>[1310] Salicornia and other annuals colonizing mud and sand</p> <p>[1330] Atlantic salt meadows (<u>Glauco-Puccinellietalia</u> maritimae)</p> <p>[1410] Mediterranean salt meadows (<u>Juncetalia</u> maritimi)</p> <p>[2110] Embryonic shifting dunes</p> <p>[2120] Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")</p> <p>[2130] * Fixed coastal dunes with herbaceous vegetation ("grey dunes")</p> <p>[2190] Humid dune slacks</p> <p>Annex II Species:</p> <p>[1395] Petalwort Petalophyllum ralfsii</p>	<p>No, for the same reasons outlined above for South Dublin Bay SAC.</p>
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Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
Baldoyle Bay SAC [000199]	Located 10.3km north-east of the proposed development site	<p>Conservation Objectives Version 1.0 (19/11/12)</p> <p>Annex I Habitats:</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1310] Salicornia and other annuals colonizing mud and sand</p> <p>[1330] Atlantic salt meadows (Glauco-Puccinellietalia maritimae)</p> <p>[1410] Mediterranean salt meadows (Juncetalia maritimi)</p>	No, whilst the subject lands are connected to the European site by foul and surface water networks, which discharge to Dublin Bay at Ringsend and the River Liffey respectively, there is a significant open marine water buffer between these outfalls and the European site over which any potential pollutants/inputs would become diluted.
Howth Head SAC [000202]	Located 11.3km east of the proposed	<p>Conservation Objectives Version 4.0 (06/12/16)</p> <p>Annex I Habitats:</p>	No. The European site has been designated for terrestrial habitats that do not occur within subject lands. In light of the large distance of

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
	development site	[4030] European dry heaths [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts	separation between the European site and the subject lands and as the proposed development will not result in the loss of any qualifying interest habitat, there are no potential impact pathways between the two and therefore no possibility of significant effects.
Rockabill to Dalkey Island SAC [003000]	Located 11.7km east of the proposed development site	Conservation Objectives Version 1.0 (07/05/13) Annex I Habitats: [1170] Reefs Annex II Species: [1351] Harbour porpoise <u>Phocoena phocoena</u>	No, whilst the subject lands are connected to the European site by foul and surface water networks, which discharge to Dublin Bay at Ringsend and the River Liffey respectively, there is a significant open marine water buffer between these outfalls and the European site over which any potential

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			pollutants/inputs would become diluted
Wicklow Mountains SAC [002122]	Located 12.8km south of the proposed development site	<p>Conservation Objectives Version 1.0 (31/07/17)</p> <p>Annex I Habitats:</p> <p>[3110] Oligotrophic waters containing very few minerals of sandy plains (<u>Littorelletalia uniflorae</u>)</p> <p>[3160] Natural dystrophic lakes and ponds</p> <p>[4010] Northern Atlantic wet heaths with Erica tetralix</p> <p>[4030] European dry heaths</p> <p>[4060] Alpine and Boreal heaths</p>	No. The European site has been designated for terrestrial habitats and species that do not occur within subject lands. In light of the large distance of separation between the European site and the subject lands and as the proposed development will not result in the loss of any qualifying interest habitat or threaten the conservation objectives for any qualifying interest species, there are no potential impact pathways between the two and therefore no possibility of significant effects.

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
		<p>[6130] Calaminarian grasslands of the <i>Violetalia calaminariae</i></p> <p>[6230] Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and sub-mountain areas, in Continental Europe)</p> <p>[7130] Blanket bogs (* if active only)</p> <p>[8110] Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)</p> <p>[8210] Calcareous rocky slopes with chasmophytic vegetation</p> <p>[8220] Siliceous rocky slopes with chasmophytic vegetation</p>	

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
		<p>[91A0] Old sessile oak woods with Ilex and Blechnum in the British Isles</p> <p>Annex II Species:</p> <p>[1355] Otter – <u>Lutra lutra</u></p>	
<p>Glenasmole Valley SAC [001209]</p>	<p>Located 12.6km south-west of the proposed development site</p>	<p>Conservation Objectives Generic Version 6.0 (21/02/18)</p> <p>Annex I Habitats:</p> <p>[6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<u>Festuco Brometalia</u>)(* important orchid sites)</p> <p>[6410] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<u>Molinion caeruleae</u>)</p>	<p>No due to the large distance of separation and the lack of any pathway between the proposed development and the European site: The European site is designated for terrestrial habitats which are not physically linked to the subject lands. The subject lands are not connected to the European site by semi-natural habitats or by water features.</p>

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
		[7220] * Petrifying springs with tufa formation (<u>Cratoneurion</u>)	
Malahide Estuary SAC [000205]	Located 12.4km north of proposed development site	<p>Conservation Objectives Version 1.0 (27/05/13)</p> <p>Annex I Habitats:</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1310] <u>Salicornia</u> and other annuals colonising mud and sand</p> <p>[1320] <u>Spartina</u> swards (<u>Spartinion maritimae</u>)</p> <p>[1330] Atlantic salt meadows (<u>Glauco-Puccinellietalia maritimae</u>)</p>	No, whilst the subject lands are connected to the European site by foul and surface water networks, which discharge to Dublin Bay at Ringsend and the River Liffey respectively, there is a significant open marine water buffer between these outfalls and the European site over, which any potential pollutants/inputs would become diluted.

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
		<p>[1410] Mediterranean salt meadows (<u>Juncetalia maritimi</u>)</p> <p>[2120] Shifting dunes along the shoreline with <u>Ammophila arenaria</u> (white dunes)</p> <p>[2130] Fixed coastal dunes with herbaceous vegetation (grey dunes)</p>	
Ireland's Eye SAC [002193]	Located 14.2km north-east of the proposed development site	<p>Conservation Objectives Version 1.0 (27/01/17)</p> <p>Annex I Habitats:</p> <p>[1220] Perennial vegetation of stony banks</p> <p>[1230] Vegetated sea cliffs of the Atlantic and Baltic coasts</p>	No, whilst the subject lands are connected to the European site by foul and surface water networks, which discharge to Dublin Bay at Ringsend and the River Liffey respectively, there is a significant open marine water buffer between these outfalls and the European site over, which any potential

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)			
Site name and code	Distance from proposed development (approximate)	Reasons for designation⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			pollutants/inputs would become diluted.
Rye Water Valley/Carron SAC (001398)	Located c. 15km west of the proposed development site	<p>Conservation Objectives Generic Version 6.0 (21/02/18)</p> <p>Annex I Habitats:</p> <ul style="list-style-type: none"> • Petrifying springs with tufa formation (<u>Cratoneurion</u>) [7220] <p>Annex II Species:</p> <ul style="list-style-type: none"> • <u>Vertigo angustior</u> (Narrow-mouthed Whorl Snail) [1014] • <u>Vertigo moulinsiana</u> (Desmoulin's Whorl Snail) [1016] 	No, there were no linkages between the proposed development and the European site, as none of the QI habitats for which the European Site has been designated occur within the subject lands. The subject lands are not connected to the European site by semi-natural habitats or by water features.
Special Protection Areas (SPA)			
South Dublin	Located c. 2.3km east of	Conservation Objectives Version 1.0 (09/03/15)	Whilst there is a potential source-receptor pathway between the

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Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
Bay and River Tolka Estuary SPA [004024]	the proposed development site	<p>Special Conservation Interest Species:</p> <p>[A046] Light-bellied Brent Goose <u>Branta bernicla hrota</u></p> <p>[A130] Oystercatcher <u>Haematopus ostralegus</u></p> <p>[A137] Ringed Plover <u>Charadrius hiaticula</u></p> <p>[A140] Grey Plover <u>Pluvialis squatarola</u></p> <p>[A143] Knot <u>Calidris canutus</u></p> <p>[A144] Sanderling <u>Calidris alba</u></p> <p>[A149] Dunlin <u>Calidris alpina</u></p> <p>[A157] Bar-tailed Godwit <u>Limosa lapponica</u></p> <p>[A162] Redshank <u>Tringa totanus</u></p> <p>[A179] Black-headed Gull <u>Croicocephalus ridibundus</u></p> <p>[A192] Roseate Tern <u>Sterna dougallii</u></p>	<p>proposed development and the European site, no significant effects are likely.</p> <p>1. Surface waters generated during construction may carry silt, oils, or other chemicals into Dublin Bay. However, there will be no significant effects on the Qualifying Interests of the European site in view of the relevant conservation objectives. This judgement was informed by the following:</p> <ul style="list-style-type: none"> • The coastal waters in Dublin Bay are classed as “Unpolluted” by the EPA;

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
		[A193] Common Tern <u>Sterna hirundo</u> [A194] Arctic Tern <u>Sterna paradisaea</u> [A999] Wetlands & Waterbirds	<ul style="list-style-type: none"> • The temporary nature of any discharges related to construction of the site; • The incorporation of SUDS measures into the design of the proposed development; and, • In the unlikely event of a pollution event during construction, this would not be of such a magnitude that it would have a significant adverse effect on water quality in Dublin Bay. <p>2. Foul waters generated during operation which will ultimately discharge to Dublin Bay via Ringsend WWTP will not give rise to significant effects on the Qualifying Interests of</p>

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			<p>the European site in view of the relevant conservation objectives. This judgement was informed by the following:</p> <ul style="list-style-type: none"> • The receiving waters at the Ringsend outfall are of unpolluted status according to the most recent statistics from the EPA; • There was no proven link between WWTP discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate Nitrogen signatures (Wilson and Jackson, 2011). • Recent modelling of water quality in Dublin Bay for the Ringsend

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			<p>WWTP Upgrade Project demonstrates that the effects of nutrients from Ringsend WWTP are largely confined to the area between the South Wall and the Tolka Estuary (Irish Water, 2018)</p> <ul style="list-style-type: none"> • Enriched water entering Dublin bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of the bay water (O'Higgins and Wilson, 2005); • Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			<p>mixing within a short distance of the outfall pipe (Dowly & Bedri 2007); and,</p> <ul style="list-style-type: none"> • There is no data available suggesting water quality between the South Wall and the Tolka Estuary is adversely affecting qualifying interests of the European site. <p>3. The lands are not considered to be an important ex situ site for special conservation interest species of the European sites. This is because the lands are composed of hard standing, habitat which is not considered to be</p>

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			suitable for roosting or foraging overwintering waterfowl.
North Bull Island SPA [004006]	Located 6.2km east of the proposed development site	<p>Conservation Objectives Version 1.0 (09/03/15)</p> <p>Special Conservation Interest Species:</p> <p>[A046] Light-bellied Brent Goose <u>Branta bernicla hrota</u></p> <p>[A048] Shelduck <u>Tadorna tadorna</u></p> <p>[A052] Teal <u>Anas crecca</u></p> <p>[A054] Pintail <u>Anas acuta</u></p> <p>[A056] Shoveler <u>Anas clypeata</u></p> <p>[A130] Oystercatcher <u>Haematopus ostralegus</u></p> <p>[A140] Golden Plover <u>Pluvialis apricaria</u></p> <p>[A141] Grey Plover <u>Pluvialis squatarola</u></p>	See South Dublin Bay and River Tolka Estuary SPA, above.

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
		[A143] Knot <u>Calidris canutus</u> [A144] Sanderling <u>Calidris alba</u> [A149] Dunlin <u>Calidris alpina</u> [A156] Black-tailed Godwit <u>Limosa limosa</u> [A157] Bar-tailed Godwit <u>Limosa lapponica</u> [A160] Curlew <u>Numenius arquata</u> [A162] Redshank <u>Tringa totanus</u> [A169] Turnstone <u>Arenaria interpres</u> [A179] Black-headed Gull <u>Croicocephalus ridibundus</u> [A999] Wetlands & Waterbirds	
Baldoyle Bay SPA [004016]	Located c. 10.4km north-east of the proposed	Conservation Objectives Version 1.0 (27/02/13) Special Conservation Interest Species:	There is no risk of disturbance or linkage to special conservation interest bird species given the distance between the proposed

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
	development site	[A046] Light-bellied Brent Goose <u>Branta bernicla hrota</u> [A048] Shelduck <u>Tadorna tadorna</u> [A137] Ringed Plover <u>Charadrius hiaticula</u> [A140] Golden Plover <u>Pluvialis apricaria</u> [A141] Grey Plover <u>Pluvialis squatarola</u> [A157] Bar-tailed Godwit <u>Limosa lapponica</u> [A999] Wetlands & Waterbirds	development and the European site, and lack of suitable habitat for QI species associated with the development.

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
Wicklow Mountains SPA [004040]	Located 13.2km south of the proposed development site	Special Conservation Interest Species: [A098] Merlin <u>Falco columbarius</u> [A103] Peregrine falcon <u>Falco peregrinus</u>	There is no risk of disturbance or any linkage to QI bird species given the distance between the proposed development and the European site. The distance between the two means that any foraging territories held by special conservation interest species within the European site are highly unlikely to overlap with the subject lands.
Dalkey Islands SPA [004172]	Located 14km south-east of the proposed development site	Special Conservation Interest Species: [A192] Roseate tern <u>Sterna dougallii</u> [A193] Common Tern <u>Sterna hirundo</u> [A194] Arctic tern <u>Sterna paradisaea</u>	There is no risk of disturbance or linkage to special conservation interest bird species given the distance between the proposed development and the European site, and lack of suitable habitat for QI

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			species associated with the development.
Malahide Estuary SPA [004025]	Located 12.4km north east of the proposed development site	<p>Conservation Objectives Version 1.0 (16/08/13)</p> <p>Special Conservation Interest Species:</p> <p>[A005] Great Crested Grebe <u>Podiceps cristatus</u></p> <p>[A046] Light-bellied Brent Goose <u>Branta bernicla hrota</u></p> <p>[A048] Shelduck <u>Tadorna tadorna</u></p> <p>[A054] Pintail <u>Anas acuta</u></p> <p>[A067] Goldeneye <u>Bucephala clangula</u></p> <p>[A069] Red-breasted <u>Merganser Mergus serrator</u></p>	There is no risk of disturbance or linkage to QI bird species given the distance between the proposed development and the European site, and lack of suitable habitat for QI species associated with the development.

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (* = Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
		[A130] Oystercatcher <u>Haematopus ostralegus</u> [A140] Golden Plover <u>Pluvialis apricaria</u> [A141] Grey Plover <u>Pluvialis squatarola</u> [A143] Knot <u>Calidris canutus</u> [A149] Dunlin <u>Calidris alpina</u> [A156] Black-tailed Godwit <u>Limosa limosa</u> [A157] Bar-tailed Godwit <u>Limosa lapponica</u> [A162] Redshank <u>Tringa totanus</u> [A999] Wetlands & Waterbirds	
Howth Head Coast SPA [004113]	Located c. 11.4km north-east of the proposed	Special Conservation Interest Species: [A188] Kittiwake <u>Rissa tridactyla</u>	There is no risk of disturbance or linkage to QI bird species given the distance between the proposed development and the European site, and lack of suitable habitat for QI

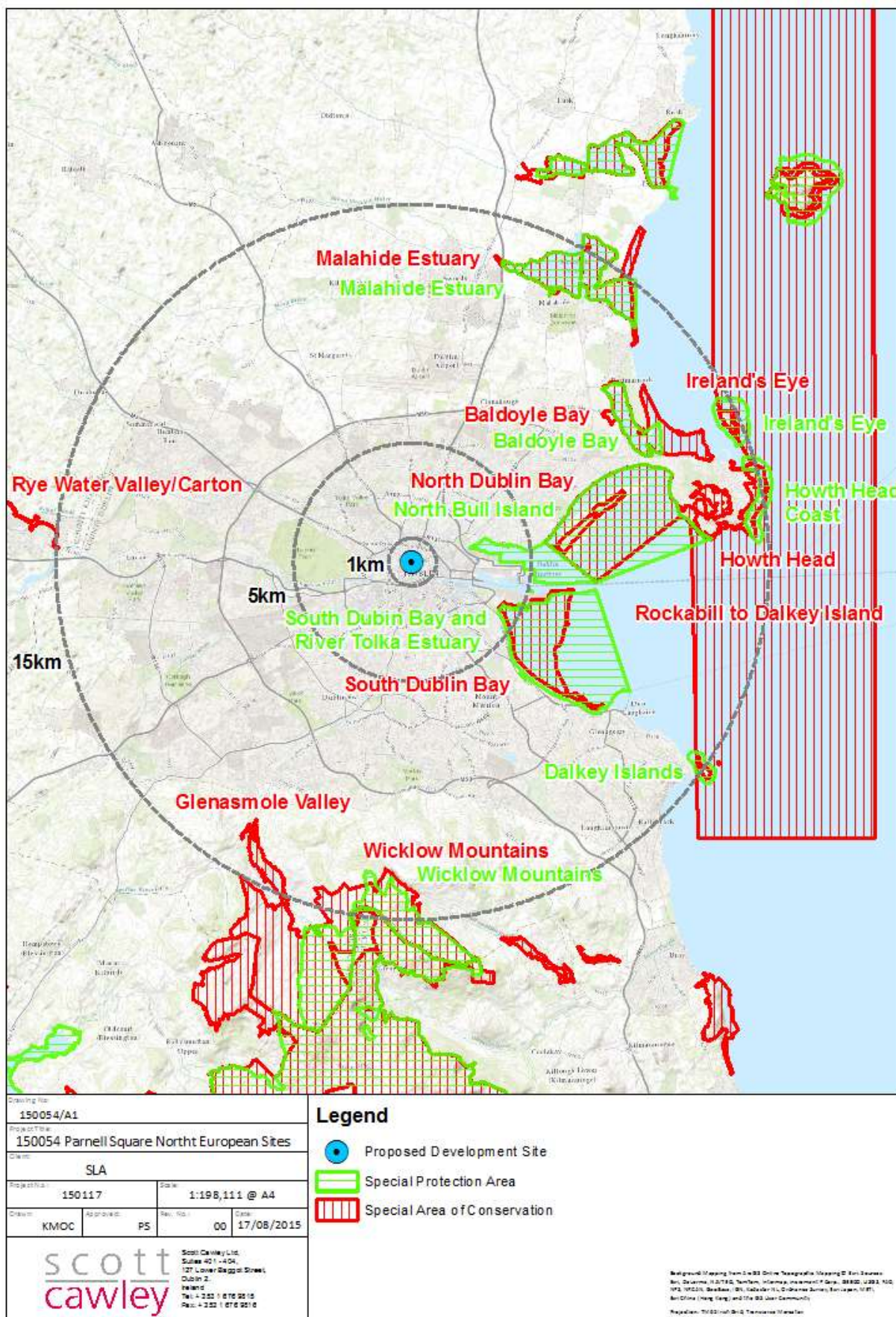
Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
	development site		species associated with the development.
Ireland's Eye SPA [004117]	Located c. 13.9km north east of the proposed development site	Special Conservation Interest Species: [A017] Cormorant <u>Phalacrocorax carbo</u> [A184] Herring gull <u>Larus argentatus</u> [A188] Kittiwake <u>Rissa tridactyla</u> [A199] Guillemot <u>Uria aalge</u> [A200] Razorbill <u>Alca torda</u>	Whilst a small number of Herring gulls were recorded nesting on the rooftops of buildings within the proposed development, no significant effect is predicted. This is due to the availability of a large number of other suitable nesting sites in the surrounding environment and the small number of Herring gulls recorded within the subject lands, the proposed development will have no significant effect on this SCI species.

Table 2 European sites within 15km of the Proposed Development (information downloaded from www.npws.ie)

Site name and code	Distance from proposed development (approximate)	Reasons for designation ⁹ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Potential for Significant Effects on European Site
			There is also no risk of disturbance or linkage to any other QI bird species given the distance between the proposed development and the European site, and lack of suitable habitat for any other QI species associated with the development.

Figure 1: The proposed development in the context of European sites within the vicinity of the proposed development



3 Conclusions of Screening Assessment Process

Following an examination, analysis and evaluation of the relevant information, including, the nature of the proposed works and their potential relationship with European sites, as well as considering other plans and projects, and applying the precautionary principle, it is the professional opinion of the authors of this report that it is possible to rule out likely significant effects on all European sites. The judgement has been reached for the reasons outlined below.

This report has identified that a number of European sites in Dublin Bay lie within the potential zone of influence of the proposed development. However, for the reasons outlined below none of these European sites are deemed to be at risk of likely significant effects from construction or operation of the proposed development:

Surface Water

The existing local surface water drainage network which drains to Dublin Bay, and the discharge of treated effluent from the combined sewer network are potential pathways between the proposed development and Dublin Bay. No likely significant effects are predicted due to the following:

- The temporary nature and small scale of any discharges related to construction of the site;
- The significant distance between the outfall of surface water runoff and the nearest European site in Dublin Bay (i.e. c. 2.3km), meaning that it is very unlikely that sediments or pollutants from the proposed development are likely to result in any discernible effects on European sites in Dublin Bay; and,
- Enriched water entering Dublin bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of the bay water (O'Higgins and Wilson, 2005).

Foul Water

Foul waters generated on site during operation will be treated at Ringsend WWTP before being discharged into Dublin Bay. The proposed development will include an increase in loading to the Ringsend WWTP of 3,070 P.E.

The Ringsend WWTP currently operates above its capacity of 1.64 million P.E. at 1.8 million P.E. (Irish Water, 2018). Any existing or proposed projects

discharging to the plant have the potential to act cumulatively to reduce water quality in Dublin Bay, affecting European sites therein. Despite Ringsend WWTP historically operating at or above capacity, no significant effects from discharge arising from the proposed development are predicted due to the following:

- Enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O'Higgins and Wilson, 2005);
- Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007);
- There was no proven link between WWTP discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate Nitrogen signatures (Wilson and Jackson, 2011);
- Recent modelling of water quality in Dublin Bay for the Ringsend WWTP Upgrade Project demonstrates that the effects of nutrients from Ringsend WWTP are largely confined to the area between the South Wall and the Tolka Estuary (Irish Water, 2018); and,
- There is no data available suggesting water quality between the South Wall and the Tolka Estuary is adversely affecting qualifying interests/special conservation interests of European sites.

For these reasons, it is the professional opinion of the authors of this report that the application for planning permission for the proposed development does not require an Appropriate Assessment.

However, the authors of this report acknowledge that it is for An Bord Pleanála as the competent authority, to carry out a screening for AA and to reach one of the following determinations:

- a) AA of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites;
- b) AA of the proposed development is not required if it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites.

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