

Appropriate Assessment Screening Report for Proposed Phase 2 Residential Development, Northwood, Santry, Dublin

prepared for Cosgrave Developments

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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 applicant. It provides information on and assesses the potential for the proposed development to impact on the Natura 2000 network (hereafter referred to as European sites)¹. The proposed development is located off the Affidea Northwood road in Northwood, Santry and involves the construction of 4 blocks of apartments, ground-floor mixed-use commercial units, a childcare facility and all associated site works including roads, footpaths, landscaping, site services and SuDS measures.

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.

For the reasons set out in detail in this AA Screening Report, an <u>Appropriate Assessment of the proposed</u> <u>development is not required in this instance</u> as it can be concluded, on the basis of objective information, that the proposed development, either individually or in combination with other plans or projects, will not have a significant effect on any European sites.

2 Methodology

2.1 Guidance

This Appropriate Assessment Screening Report has been prepared with regard to the following guidance documents, as 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, 2001);
- Communication from the Commission on the precautionary principle (European Commission, 2000); and,
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (European Commission, 2018).

In Ireland these sites are designed as *European sites* - defined under the Planning Acts and/or the 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).

¹ The Natura 2000 network is a European network of important ecological sites, as defined under Article 3 of the Habitats Directive 92/43/EEC, which comprises both special areas of conservation and special protection areas. Special conservation areas are sites hosting the natural habitat types listed in Annex I, and habitats of the species listed in Annex II, of the Habitats Directive, and are established under the Habitats Directive itself. Special protection areas are established under Article 4 of the Birds Directive 2009/147/EC for the protection of endangered species of wild birds. The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats.



2.2 Assessment Methodology

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

Significant effects on a European site are those that would negatively undermine the conservation objectives supporting the favourable conservation condition of the Qualifying Interest (QI) habitats and/or the QI/Special Conservation Interest (SCI) species of a European site(s).

Screening for Appropriate Assessment involves the following steps:





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 is no requirement to undertake an Appropriate Assessment.

In establishing which European sites are potentially at risk (in the absence of mitigation) from the proposed development, a source-pathway-receptor approach was applied. In order for an impact to occur, there must be a risk enabled by having a source (e.g. water abstraction or construction works), a receptor (e.g. a European site or its QI(s) or SCI(s)²), and a pathway between the source and the receptor (e.g. pathway by air for airborne pollution, or a pathway by a watercourse for mobilisation of pollution). For an impact to occur, all three elements must exist; the absence or removal of one of the elements means there is no possibility for the impact to occur.

The identification of source-pathway-receptor connection(s) between the proposed development and European sites essentially is the process of identifying which European sites are within the Zone of Influence (ZoI) of the proposed development, and therefore potentially at risk of significant effects. The ZoI is the area over which the proposed development could affect the receiving environment such that it could potentially have significant effects on the QI habitats or QI/SCI species of a European site, or on the achievement of their conservation objectives³.

The identification of a source-pathway-receptor link does not automatically mean that significant effects will arise. The likelihood for significant effects will depend upon the characteristics of the source (e.g. extent and duration of construction works), the characteristics of the pathway (e.g. direction and strength of prevailing winds for airborne pollution) and the characteristics of the receptor (e.g. the sensitivities of the European site and its QIs/SCIs). Where uncertainty exists, the precautionary principle⁴ is applied.

2.3 Desktop Data Review

The desktop data sources used to inform the assessment presented in this report are as follows (accessed on the 16th April 2019):

- Online data available on European sites and protected habitats/species as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie, including conservation objectives documents
- Online data available on protected species as held by the National Biodiversity Data Centre (NBDC) from www.biodiversityireland.ie
- Information on the surface water network and surface water quality in the area available from www.epa.ie
- Information on groundwater resources and groundwater quality in the area available from www.epa.ie
 and www.gsi.ie
- Ordnance Survey of Ireland mapping and aerial photography available from <u>www.osi.ie</u>

² The term qualifying interest is used when referring to the habitats or species for which an SAC is designated; the term special conservation interest is used when referring to the bird species (or wetland habitats) for which an SPA is designated.

³ As defined in the Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018)

⁴ The precautionary principle is a guiding principle that derives from Article 191 of the Treaty on the Functioning of the European Union and has been developed in the case law of the European Court of Justice (e.g. ECJ case C-127/02 – Waddenzee, Netherlands).

The guidance document Communication from the Commission on the Precautionary Principle (European Commission, 2000) notes that the precautionary principle "covers those specific circumstances where scientific evidence is insufficient, inconclusive or uncertain and there are indications through preliminary objective scientific evaluation that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the chosen level of protection".

Applying the precautionary principle in the context of screening for appropriate assessment requires that where there is uncertainty or doubt about the risk of significant effects on a European site(s), it should be assumed that significant effects are possible and AA must be carried out.



 Information on the location, nature and design of the proposed development supplied by the applicant's design team

2.4 Consultations

The NPWS was consulted regarding the proposed development. At the time of writing, no response has been received.

2.5 Baseline Surveys

This section describes the ecological surveys carried out to inform the assessment of likely significant effects on European sites. A multi-disciplinary ecological survey was carried out on 8th February 2019. The site was surveyed for potential connections to European sites.

3 Provision of Information for Screening for Appropriate Assessment

The following sections provide information to facilitate the Appropriate Assessment screening of the proposed development to be undertaken by the competent authority.

A description of the proposed development and the receiving environment is provided to identify the potential ecological impacts. The environmental baseline conditions are discussed, as relevant to the assessment of ecological impacts where they may highlight potential pathways for impacts associated with the proposed development to affect the receiving ecological environment (e.g. geological, hydrogeological and hydrological data).

The potential impacts are examined in order to define the potential zone of influence of the proposed development on the receiving environment. This then informs the assessment of whether the proposed development will result in likely significant effects on any European sites; i.e. affect the conservation objectives supporting the favourable conservation condition of the European site's QIs or SCIs.

3.1 Description of the Proposed Development

A full project description is provided in the EIAR and statutory notices accompanying this planning application. In brief, the proposed development consists of 331 no. apartments in four separate blocks arranged around a communal courtyard, together with ground floor mixed-use commercial units, supporting residential service uses and a childcare facility, all over a shared basement accommodating car and bicycle parking areas. The development will also provide for all associated site works including roads, footpaths, landscaping, site services, SuDS measures, utilities and sundry related works.

A range of SuDS measures are proposed as part of this development including both source and site control measures. Permeable paving and a hydrocarbon interception system are proposed to control runoff at the source. Surface waters from the proposed development will then pass through an existing attenuation tank located in the north-west of the overall development before outfall to Santry River.

It is not anticipated that the proposed development will contribute any additional flow than is currently generated under the existing greenfield scenario.

It is proposed that foul effluent from the proposed development will drain into the existing sewer located at the roundabout on Northwood Avenue which is pumped to and treated at Ringsend Wastewater Treatment Plant via the Sutton Pumping Station. The anticipated accumulated daily flow equates to 940 P.E. (population equivalent).

3.2 Overview of the Receiving Environment

3.2.1 European sites

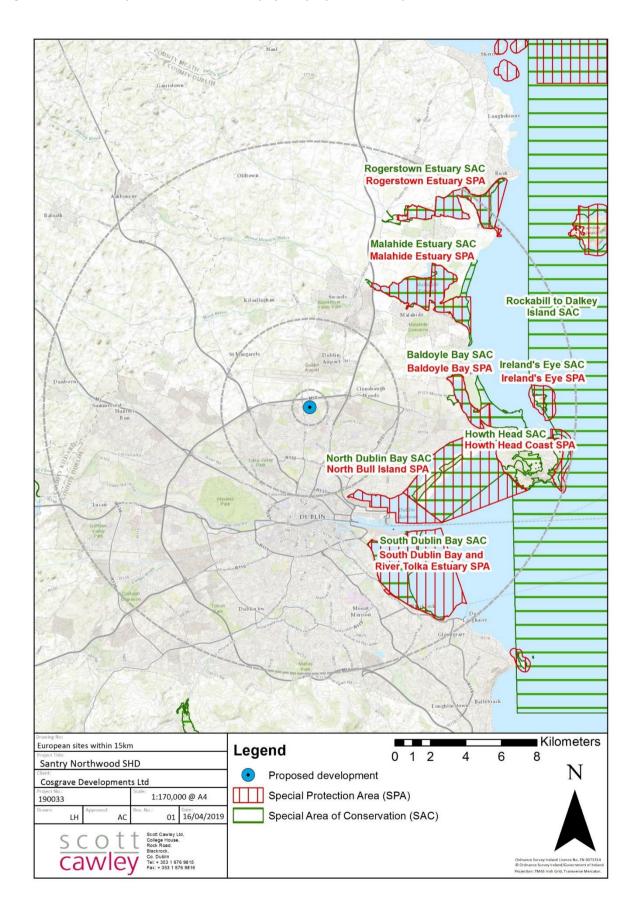
The proposed development is located approximately 170m south of the Santry River which discharges to Dublin Bay c. 7.4km downstream. The following European sites are located within Dublin Bay; North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA.



All of the European sites present in the vicinity of the proposed development are shown on Figure 1 below. The QIs/SCIs of the European sites in the vicinity of the proposed development are provided in Appendix I.



Figure 1 European sites in the vicinity of the proposed development





3.2.2 Habitats

The proposed development site is largely comprised of buildings and artificial surfaces habitat including a car park in the north of the site and a fenced path running from north to south in the eastern part of the site. The southern half of the proposed development site is comprised of recolonising bare ground. There is a hedgerow with a drainage ditch along the eastern boundary of the site. There is also a narrow strip of amenity grassland running alongside the hedgerow on the easternmost part of the site.

The proposed development site is located within Northwood Business Campus, as such, the surrounding lands are largely comprised of built land with some areas of amenity grassland and scattered trees. Santry Demesne pNHA is located *c.* 150m north of the proposed development site and is comprised of woodland habitat. The nearest watercourse to the proposed development site is the Santry River which flows through Santry Demesne *c.* 170m north of the site.

3.2.3 Flora and Fauna Species

The National Biodiversity Data Centre (NBDC) database search returned no records of protected flora species under the Flora (Protection) Order, 2015 within 2km of the subject lands. However, Santry Demesne pNHA is located approximately 150m north of the proposed development site and is designated for Hairy St. John's Wort *Hypericum hirsutum*, a species legally protected under the Flora Protection Order. This plant was not found during the site survey on the 8th February 2019.

The NBDC database search returned records of four non-native invasive species within 2km of the subject lands, one of which- giant hogweed *Heracleum mantegazzianum* is listed within Schedule 3 of the *Birds and Habitats Regulations (2011)*. The site visit noted no non-native invasive species subject to legal restrictions within the lands.

The NBDC database search returned records for 2 species for which European sites in Table 1 have been designated within 2km of the proposed development site: Black-headed gull *Larus ridibundus* and Cormorant *Phalacrocorax carbo*. Given the nature of the site and its environs, only Black-headed gull have potential to be present in the surrounding area, however are unlikely to occur within the immediate surrounding area and within the zone of influence of the development due to the built nature of the immediate surroundings.

3.2.4 Hydrology

The only surface water feature identified within the subject lands was an unconnected drainage ditch located within the hedgerow along the eastern boundary of the site. The proposed development site is located within the Santry River sub-basin. The Santry River lies c. 170m north of the proposed development site and drains to Dublin Bay c. 7.4km downstream. According to the EPA Map Viewer, the water quality status of the Santry River is 'Poor' and its Water Framework Directive (WFD) status is 'At risk'. Dublin Bay (to which the Santry River discharges) is of 'Unpolluted' status and has a WFD status of 'Not at risk'.

3.2.5 Hydrogeology

Geological Survey of Ireland (GSI) data indicates that the site is underlain by a Locally Important Bedrock Aquifer (LI), which is described by the GSI as 'Moderately productive only in local zones.'

The proposed development site is within the Dublin groundwater body which is currently classified by the EPA as having 'Good Status', and being 'Not at risk' of not achieving good status under the Water Framework Directive (2000/60/EC).

Borehole investigations undertaken at the site show boulder clay with groundwater in excess of 2.5m below ground level. There will be no significant impacts on the groundwater due to underlying boulder clay.

3.3 Assessment of Likely Significant Effects on European Sites

This section identifies the potential impacts associated with the proposed development, examines whether there are any European sites within the ZoI of effects from the proposed development, and assesses whether



there is any risk of the proposed development resulting in a likely significant effect on any European site, either alone or in combination with other plans or projects.

In assessing the potential for the proposed development to result in likely significant effects on any European sites, any measures intended to avoid or reduce the harmful effects of the project on European sites are not taken into account.

3.3.1 Habitat loss and fragmentation

The proposed development does not overlap with the boundary of any European site. Therefore, there are no European sites at risk of direct habitat loss impacts. Additionally, the proposed development site does not support any populations of any fauna species linked with QI/SCI populations of any European site(s).

As the proposed development will not result in habitat loss or habitat fragmentation within any European site, there is no potential for any in combination effects to occur in that regard.

3.3.2 Habitat degradation as a result of hydrological impacts

Surface water run-off and discharges from the proposed development will drain to the existing local surface water drainage network and will ultimately discharge into Dublin Bay. Foul waters from the proposed development will be discharged to Ringsend WWTP for treatment, via the existing foul water drainage network, prior to discharge into the Liffey Estuary/Dublin Bay. Therefore, the Zone of Influence (ZoI) of potential effects on water quality from the proposed development could extend to Dublin Bay.

Surface Water

Surface water run-off and discharges from the proposed development will enter the downstream receiving environment via the existing surface water drainage network.

Considering the following, the proposed development will not have any measurable effects on water quality in Dublin Bay or the Irish Sea:

- the scale and location of the proposed development relative to the receiving surface water network;
- the relatively low volume of any surface water run-off or discharge events relative to the receiving surface water and marine environments; and
- the level of mixing, dilution and dispersion of any surface water run-off/discharges in the receiving watercourses, Dublin Bay and the Irish Sea.

Therefore, there is no possibility of the proposed development undermining the conservation objectives of any of the qualifying interests or special conservation interests of the European sites in, or associated with, Dublin Bay as a result of surface water run-off or discharges.

Foul Water

Foul water, comprising sewage and industrial effluent (and some surface water run-off), from the Dublin area has historically been, and will continue to be, treated at Ringsend WWTP prior to discharge to Dublin Bay. The most recent information from Irish Water indicates that the plant is operating above its capacity of 1.64 million P.E. (Irish Water, 2017), with a current operational loading of *c*.2.2 million P.E. Ringsend WWTP operates under a discharge licence from the EPA (D0034-01) and must comply with the licence conditions.

Despite the capacity issues associated with the Ringsend WWTP, the Liffey Estuary Lower and Dublin Bay are currently classified by the EPA as being of "Unpolluted" water quality status⁵. The Tolka Estuary is currently classified by the EPA as being "Potentially Eutrophic". The pollutant content of future surface water discharges to Dublin Bay is considered likely to decrease in the long-term given that further upgrade of the WWTP to

⁵ Transitional and Coastal Surface Water Quality data (2010-2012) accessed from the EPA Envision Mapviewer <u>www.gis.epa.ie/Envision</u> (accessed April 2019)



increase its treatment capacity is currently in planning. It is also an objective of the Greater Dublin Strategic Drainage Study, and all development plans within the catchment of Ringsend WWTP, to include Sustainable Urban Drainage Systems (SUDS) as for new development. The relevant development plans also have protective policies/objectives in place to protect water quality in the receiving freshwater and marine environments, and to implement the Water Framework Directive in achieving good water quality status for Dublin Bay.

Considering the above, particularly the current unpolluted status of Dublin Bay, the proposed development will not impact on the overall water quality status of Dublin Bay.

Therefore, there is no possibility of the proposed development undermining the conservation objectives of any of the qualifying interests or special conservation interests of the European sites in, or associated with, Dublin Bay as a result of foul water discharges.

In Combination

There is potential for "in-combination" effects on water quality in Dublin Bay from any other projects carried out within the functional areas of the *Dublin City Development Plan 2016-2022* (Dublin City Council, 2016), the *Dún Laoghaire-Rathdown County Development Plan 2016-2022* (Dún Laoghaire-Rathdown County Council, 2016), the *Fingal Development Plan 2017-2023* (Fingal County Council, 2017), *South Dublin County Council Development Plan 2016-2022* (South Dublin County Council, 2016), or any other county level land use plans which can influence conditions in Dublin Bay via rivers and other surface water features.

As noted under the surface water and foul water sections above, Dublin Bay is currently unpolluted and the proposed development will not result in any measurable effect on water quality in Dublin Bay. There are also protective policies and objectives in place at a strategic planning level to protect water quality in Dublin Bay.

Therefore, there is no possibility of any other plans or projects acting in combination with the proposed development to undermine the conservation objectives of any of the qualifying interests or special conservation interests of the European sites in, or associated with, Dublin Bay as a result of water quality effects.

3.3.3 Habitat degradation as a result of introducing/spreading non-native invasive species

The proposed development site does not support any non-native invasive species which could be accidentally spread or introduced to habitats within European sites.

3.3.4 Disturbance and displacement impacts

Construction-related disturbance and displacement of fauna species could potentially occur within the vicinity of the proposed development. For mammal species such as otter, disturbance effects would not be expected to extend beyond 150m⁶. For birds, disturbance effects would not be expected to extend beyond a distance of *c.* 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance. There are no European sites within the disturbance ZoI; the next nearest European site to the proposed development is *c.*7km away.

As the proposed development will not result in the disturbance/displacement of the qualifying/special conservation interest species of any European site, there is no potential for any in combination effects to occur in that regard.

3.3.5 Summary

The potential impacts associated with the proposed development do not have the potential to affect the receiving environment and, consequently, do not have the potential to affect the conservation objectives

⁶ This is consistent with Transport Infrastructure Ireland (TII) guidance (*Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes* and *Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes*) documents. This is a precautionary distance, and likely to be moderated by the screening effect provided by surrounding vegetation and buildings, with the actual ZoI of construction related disturbance likely to be much less in reality.



supporting the qualifying interest/special conservation interests of any European sites. Therefore, the proposed development is not likely to have significant effects on any European sites.

As the proposed development itself will not have any effects on the QIs/SCIs or conservation objectives of any European sites, there is no potential for any other plan or project to act in combination with it to result in likely significant effects on any European sites.

The potential impacts of the proposed development on the receiving environment, their ZoI, and the European sites at risk of likely significant effects are summarised in Table 1 below.

Table 1 Summary of Analysis of Likely Significant Effects on European sites

Potential Direct, Indirect In Combination Effects and the ZoI of the Potential Effects	Are there any European sites within the ZoI of the proposed development?
Habitat loss Habitat loss will be confined to the lands within the proposed development boundary.	No There are no European sites within the proposed development boundary
Habitat degradation as a result of hydrological impacts Habitats and species downstream of the proposed development site and the associated surface water drainage discharge points, and downstream of offsite wastewater treatment plants.	No There are no European sites at risk of hydrological effects associated with the proposed development
Habitat degradation as a result of hydrogeological impacts Groundwater-dependant habitats, and the species those habitats support, in the local area that lie downgradient of the proposed development site.	No There are no European sites at risk of hydrogeological effects associated with the proposed development
Habitat degradation as a result of introducing/spreading non-native invasive species Habitat areas within, adjacent to, and potentially downstream of the proposed development site.	No There are no non-native invasive species present on the proposed development site and, therefore, no risk associated with the proposed development to any European sites from the spread/introduction of non-native invasive species
Disturbance and displacement impacts Potentially up to several hundred metres from the proposed development boundary, dependent upon the predicted levels of noise, vibration and visual disturbance associated with the proposed development, in conjunction with the sensitivity of the qualifying interest species to disturbance effects	No There are no European sites within the potential zone of influence of disturbance effects associated with the construction or operation of the proposed development. Bird species for which European sites have been designated are unlikely to occur within the immediate surrounding area and within the zone of influence of the development due to the built nature of the immediate surroundings.

4 Conclusions of Screening Assessment Process

Following an examination, analysis and evaluation of the relevant information, including in particular, the nature of the project and its potential relationship with European sites and their conservation objectives, 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 there is no potential for likely significant effects on any European sites, for the reasons set out in Section 3.3 above.

Therefore, it is the professional opinion of the authors of this report that the application for consent for the proposed development does not require an Appropriate Assessment or the preparation of a Natura Impact Statement (NIS).



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

- 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 have a significant effect on any European sites;
- 2 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 have a significant effect on any European sites.



Appendix I

The Qualifying Interests (QIs) and Special Conservation Interests (SCIs) of the European sites in the vicinity of the proposed development site (see Figure 1)

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site
Special Area of Conservation (SAC)	
North Dublin Bay SAC [000206] [1140] 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) [1395] Petalwort Petalophyllum ralfsii [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 NPWS (2013a) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National	Located c. 7km south-east east of the proposed development site
Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
South Dublin Bay SAC [000210] [1140] 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 [2110] Embryonic shifting dunes NPWS (2013b) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Located <i>c.</i> 8.1km south-east of the proposed development site
Baldoyle Bay SAC [000199] [1140] Mudflats and sandflats not covered by seawater at low tide [1310] Salicornia and other annuals colonizing mud and sand [1330] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1410] Mediterranean salt meadows (Juncetalia maritimi) NPWS (2012) Conservation Objectives: Baldoyle Bay SAC 000199. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht	Located <i>c.</i> 7.7km east of the proposed development site



European Site Name [Code] and its	Location Relative to the
Qualifying interest(s) / Special Conservation Interest(s)	Proposed Development
(*Priority Annex I Habitats)	Site
Malahide Estuary SAC [000205]	Located c. 7.5km north of
[1140] Mudflats and sandflats not covered by seawater at low tide	the proposed development
[1310] Salicornia and other annuals colonising mud and sand	site
[1320] Spartina swards (Spartinion maritimae)	
[1330] Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	
[1410] Mediterranean salt meadows (Juncetalia maritimi)	
[2120] Shifting dunes along the shoreline with Ammophila arenaria (white dunes)	
[2130] Fixed coastal dunes with herbaceous vegetation (grey dunes)	
NPWS (2013) Conservation Objectives: Malahide Estuary SAC 000205. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Howth Head SAC [000202]	Located c. 12km east of the
[1230] Vegetated sea cliffs of the Atlantic and Baltic coasts	proposed development site
[4030] European dry heaths	
NPWS (2016) Conservation Objectives: Howth Head SAC 000202. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	
Rogerstown Estuary SAC [000208]	Located c. 11.2km north-
[1130] Estuaries	east of the proposed
[1140] Mudflats and sandflats not covered by seawater at low tide	development site
[1310] Salicornia and other annuals colonising mud and sand	
[1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	
[2120] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	
[2130] Fixed coastal dunes with herbaceous vegetation (grey dunes)	
NPWS (2013) Conservation Objectives: Rogerstown Estuary SAC 000208. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Rockabill to Dalkey Island SAC [003000]	Located c. 12km east of the
[1170] Reefs	proposed development site
[1351] Harbour porpoise <i>Phocoena phocaena</i>	
NPWS (2013) Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Ireland's Eye SAC [002193]	Located c. 12.5km east of
[1220] Perennial vegetation of stony banks	the proposed development
[1230] Vegetated sea cliffs of the Atlantic and Baltic coasts	site
NPWS (2017) Conservation Objectives: Ireland's Eye SAC 002193. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	
Special Protection Area (SPA)	



European Site Name [Code] and its	Location Relative to the
Qualifying interest(s) / Special Conservation Interest(s)	Proposed Development
(*Priority Annex I Habitats)	Site
North Bull Island SPA [004006]	Located c. 5.4km south-east
[A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i>	of the proposed
[A048] Shelduck <i>Tadorna tadorna</i>	development site
[A052] Teal <i>Anas crecca</i>	
[A054] Pintail <i>Anas acuta</i>	
[A056] Shoveler <i>Anas clypeata</i>	
[A130] Oystercatcher Haematopus ostralegus	
[A140] Golden Plover <i>Pluvialis apricaria</i>	
[A141] Grey Plover <i>Pluvialis squatarola</i>	
[A143] Knot Calidris canutus	
[A144] Sanderling Calidris alba	
[A149] Dunlin <i>Calidris alpina</i>	
[A156] Black-tailed Godwit <i>Limosa limosa</i>	
[A157] Bar-tailed Godwit <i>Limosa lapponica</i>	
[A160] Curlew Numenius arquata	
[A162] Redshank <i>Tringa totanus</i>	
[A169] Turnstone Arenaria interpres	
[A179] Black-headed Gull Croicocephalus ridibundus	
[A999] Wetlands & Waterbirds	
NPWS (2015a) Conservation Objectives: North Bull Island SPA 004006. Version 1. National	
Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
South Dublin Bay and River Tolka Estuary SPA [004024]	Located 8.3km south-east of the proposed
[A046] Light-bellied Brent Goose Branta bernicla hrota	development site
[A130] Oystercatcher Haematopus ostralegus	development site
[A137] Ringed Plover Charadrius hiaticula	
[A141] Grey Plover <i>Pluvialis squatarola</i>	
[A143] Knot Calidris canutus	
[A144] Sanderling Calidris alba	
[A149] Dunlin Calidris alpina	
[A157] Bar-tailed Godwit <i>Limosa lapponica</i>	
[A162] Redshank <i>Tringa totanus</i>	
[A179] Black-headed Gull Croicocephalus ridibundus	
[A192] Roseate Tern Sterna dougallii	
[A193] Common Tern Sterna hirundo	
[A194] Arctic Tern Sterna paradisaea	
[A999] Wetland and Waterbirds	
NPWS (2015b) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	



European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site
Baldoyle Bay SPA [004016]	Located 8.4km east of the
[A046] Light-bellied Brent Goose Branta bernicla hrota	proposed development site
[A048] Shelduck <i>Tadorna tadorna</i>	
[A137] Ringed Plover Charadrius hiaticula	
[A140] Golden Plover <i>Pluvialis apricaria</i>	
[A141] Grey Plover <i>Pluvialis squatarola</i>	
[A157] Bar-tailed Godwit <i>Limosa lapponica</i>	
[A999] Wetland and Waterbirds	
NPWS (2013) Conservation Objectives: Baldoyle Bay SPA 004016. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Malahide Estuary SPA [004025]	Located 7.8km north-east
[A005] Great Crested Grebe Podiceps cristatus	of the proposed development site
[A046] Light-bellied Brent Goose Branta bernicla hrota	
[A048] Shelduck <i>Tadorna tadorna</i>	
[A054] Pintail Anas acuta	
[A067] Goldeneye Bucephala clangula	
[A069] Red-breasted Merganser Mergus serrator	
[A130] Oystercatcher Haematopus ostralegus	
[A140] Golden Plover <i>Pluvialis apricaria</i>	
[A141] Grey Plover Pluvialis squatarola	
[A143] Knot Calidris canutus	
[A149] Dunlin Calidris alpina	
[A156] Black-tailed Godwit <i>Limosa limosa</i>	
[A157] Bar-tailed Godwit <i>Limosa lapponica</i>	
[A162] Redshank Tringa totanus	
[A999] Wetland and Waterbirds	
NPWS (2013) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Ireland's Eye SPA [004117]	Located 12.2km east of the
[A017] Cormorant <i>Phalacrocorax carbo</i>	proposed development site
[A184] Herring Gull <i>Larus argentatus</i>	
[A188] Kittiwake <i>Rissa tridactyla</i>	
[A199] Guillemot <i>Uria aalge</i>	
[A200] Razorbill <i>Alca torda</i>	
NPWS (2018) Conservation objectives for Ireland's Eye SPA [004117]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.	



European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site
Rogerstown Estuary SPA [004015]	Located 12.3km north-east of the proposed
[A043] Greylag Goose Anser anser	development site
[A046] Brent Goose Branta bernicla hrota	
[A048] Shelduck <i>Tadorna tadorna</i>	
[A056] Shoveler Anas clypeata	
[A130] Oystercatcher Haematopus ostralegus	
[A137] Ringed Plover Charadrius hiaticula	
[A141] Grey Plover <i>Pluvialis squatarola</i>	
[A143] Knot Calidris canutus	
[A149] Dunlin Calidris alpina alpina	
[A156] Black-tailed Godwit <i>Limosa limosa</i>	
[A162] Redshank <i>Tringa totanus</i>	
[A999] Wetlands	
NPWS (2013) Conservation Objectives: Rogerstown Estuary SPA 004015. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Howth Head Coast SPA [004113]	Located 13.7km east of the
[A188] Kittiwake <i>Rissa tridactyla</i>	proposed development site
NPWS (2018) Conservation objectives for Howth Head Coast SPA [004113]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.	