# Appropriate Assessment Screening

13/10/2022

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# Contents

# 1. EXECUTIVE SUMMARY

1.1. A Stage 1 Appropriate Assessment has been undertaken for a proposed for a data centre building and associated development, located within Profile Park, Clondalkin, Dublin. The aim of the Appropriate Assessment Screening is to assess the potential for connectivity between the Proposed Development and any Natura 2000 site within a 15km radius of the Application Site.

1.2. To provide a current baseline for the Application Site, an ecological site visit was undertaken in July 2022 by Eiméar Rose Cunningham. During this site visit habitats were assessed for their potential to support protected/notable species. No evidence of any qualifying species was observed within or adjacent to the Application Site during the site visit and habitats on site are considered to be sub-optimal.

1.3. Within the 15km Zone of Influence ("ZOI") surrounding the Site, there are nine Natura 2000 designated sites, comprising six Special Areas of Conservation ("SACs") and three Special Protection Areas ("SPAs").

1.4. Connectivity (potential pathways for impact) exists between the Application Site and four designated sites; the North Dublin Bay SAC, the South Dublin Bay and River Tolka Estuary SPA and the North Bull Island SPA. This connectivity is roughly 28km downstream via the Baldonnel stream.

1.5. The Proposed Development will not impact the Baldonnell stream. Given the distance (approximately 30km downstream) and dilution factors, it is not anticipated that the Proposed Development will cause any impact to the designated site or its qualifying features.

1.6. It is therefore considered that the next stage of the Appropriate Assessment is not required, and that the development **will not result in any significant effects for any Natura 2000 site**.

# 2. INTRODUCTION

## Background

2.1. Neo Environmental Ltd has been appointed by Ramboll on behalf of Vantage Data Centers Dub 11 Limited (the "Applicant") to undertake an Appropriate Assessment (AA) Screening for a data centre building and associated development (the "Proposed Development") located on lands within Profile Park, Clondalkin, Dublin (the "Application Site").

2.2. The aim of this screening document is to determine whether a Natura Impact Statement (NIS) is required for the Proposed Development.

## Site Description

2.3. The site is located at Irish grid reference O 03911 30784, within Profile Park. Profile Park is located approximately 10 kilometres (km) to the south-west of Dublin city centre, within South Dublin County.

2.4. The site boundaries are defined by:

- New Nangor Road (R134) to the north;
- Falcon Avenue, Equinix and Grange Castle Golf Club to the east;
- Falcon Avenue to the south; and
- The consented Vantage data centre development (planning reference SD21A/0241) to the west, currently agricultural fields.

2.5. The site is a triangular parcel of agricultural land, with a residential dwelling located in the north-west corner of the site, and an area of hardstanding within the south-west of the site. The site covers a total area of 3.31 ha and lies at an elevation between approximately 74 and 75 m Above Ordnance Datum (m AOD).

2.6. The existing Baldonnel steam runs adjacent to the sites southern boundary and enters the southern section of the site, orientated in a north-west to south-east direction, flowing towards the east.

2.7. The site can currently be accessed from three access points, two from the north off New Nangor Road (R134), and one from Falcon Avenue on the eastern border, which leads to a roundabout on the R134 New Nangor Road.

## Development Description

2.8. The development includes a two-storey residential property on lands to the south of the New Nangor Road (R134), Dublin 22; and on land within the townlands of Ballybane and Kilbride within Profile Park, Clondalkin, Dublin 22 on an overall site of 3.79 hectares. The development will consist of the demolition of the two storey dwelling (207.35sqm) and associated outbuildings and farm structures (348.36sqm); and the construction of 1 no. two storey data center with plant at roof level and associated ancillary development that will have a gross floor area of 12,893sqm.

## Statement of Authority

The assessment has been conducted by an ecologist registered with the Chartered Institute of Ecology and Environmental Management (CIEEM). All work has been carried out in line with the relevant professional guidance, namely CIEEM's Guidelines for Report Writing[1] and the Environment, Heritage and Local Government Guidance on Appropriate Assessments[2].

2.9. Dara Dunlop is a Qualifying Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) with circa 3 years' experience in the ecology sector. This includes working for an ecological consultancy, undertaking a range of protected species surveys and extended phase 1 habitat surveys for residential schemes and land management of designated

2.10. sites. Dara has co-authored a number of reports for various developments including Ecological Impact Assessments and Protected Species Reports.

Eiméar Rose Cunningham is an Ecologist and is a Qualifying Member of the Chartered Institute of Ecology and Environmental Management (CIEEM), with over 3 years' experience in the environmental/planning sector. She has experience of conducting habitat surveys as well as protected species surveys, including bats. In previous roles Eiméar Rose has experience of GIS

2.11. map interpretation for large scale infrastructure projects. Furthermore, Eiméar Rose has experience in the completion of ecological report writing having co-authored a number of reports including Ecological Impact Assessments and Natura Impact Statements.

[1] CIEEM (2017) Guidelines for Ecological Report Writing. Available at www.cieem.net

[2] Environment, Heritage and Local Government (2009) Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities. Available at www.npws.ie

# 3. LEGISLATION & GUIDEANCE

## REQUIREMENT FOR APPROPRIATE ASSESSMENT

- The requirement for Appropriate Assessment of plans or projects originates from Article 6 (3) and (4) of European Union (EU) Habitats Directive. This is implemented in Ireland through the European Communities (Natural Habitats) Regulations of 1997, and the European Communities (Birds and Natural Habitats) Regulations 2011 – 2015 (as amended).
- The wording of Article 6 (3) of the Directive is as follows:

  *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."*

- The aim of Stage 1, 'Screening' is to determine whether or not Stage 2 of the Appropriate Assessment is required, therefore to determine whether the Proposed Development is likely to have a significant, negative impact upon any Natura 2000 site. This is done by considering the type of development and the conservation objectives of any Natura 2000 sites which may be impacted.
- As outlined in the European Commission document 'Assessment of plans and projects significantly affecting Natura 2000 sites'[3], any project that is not directly connected with or necessary to the management of a Natura 2000 site, but likely to have a significant effect upon it, either individually or cumulatively will be subject to Appropriate Assessment.
- Where significant effects are uncertain or unknown at the screening stage an AA will be required, due to the need to apply the precautionary principle. Conversely, if a project will have impacts on a site, but these impacts will clearly not affect or undermine those conservation objectives, it is not considered that it will have a significant effect on the site concerned.
- As part of the assessment consideration is afforded to 'in combination' effects with other plans or projects on the integrity of Natura 2000 sites. Where adverse impacts are identified,

[3] European Commission. 2021. Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

mitigation measures can be proposed that would avoid reduce or remedy any such negative impacts and the plan or project should then be amended accordingly, thereby avoiding the need to proceed to Stage 3 'Alternative Solutions'.

- If the assessment cannot exclude significant impacts either alone or in combination with other plans or projects, then the process must proceed to Stage 2.
- The following legislation were used to inform the Article 6 assessments within this report:
  - Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, 1992[4];
  - Council Directive 2009/147/EC on the conservation of wild birds, 2009[5];
  - The Planning and Development Acts 2000 (as amended)[6];and
  - National Parks & Wildlife Service (NPWS), The Status of EU Protected Habitats and Species in Ireland. Habitat Assessments, Unpublished Report, 2013[7].

## Guidance

- The following guidance has been collated and reviewed to inform the Article 6 assessments within this report:
  - Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, 2009 (as amended)[8];
  - Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10[9] & PSSP 2/10, 2008[10];
  - European Commission. 2021. Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC[11]
  - CIEEM, Guidelines for Ecological Report Writing, 2017[12].

[4] Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31992L0043
[5] Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0147
[6] Available at: http://www.irishstatutebook.ie/eli/2017/act/20/enacted/en/html
[7] Available at: https://www.npws.ie/sites/default/files/publications/pdf/Article_17_Print_Vol_3_report_species_v1_1_0.pdf
[8] Available at: https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf
[9] Available at: https://www.npws.ie/sites/default/files/general/Circular%20NPW1-10%20%26%20PSSP2-10%20Final.pdf
[10] Available at: https://www.npws.ie/sites/default/files/general/circular-npws-02-08.pdf
[11] Available at: https://ec.europa.eu/environment/nature/natura2000/management/pdf/methodological-guidance_2021-10/EN.pdf
[12] CIEEM (2017) *Guidelines for Ecological Report Writing*

# 4. ASSESSMENT METHODOLOGY

## Stages of Appropriate Assessment

- The Appropriate Assessment process comprises of four stages in order to identify whether proposals have the potential to significantly impact upon Natura 2000 designations. The stages are as follows:
  - **Stage 1 Screening**: To determine the likelihood of significant impacts;
  - **Stage 2 Natura Impact Statement**: To assess the impact of proposals on the integrity of the Natura 2000 site, considering the conservation objectives of the site and its ecological structure and function;
  - **Stage 3 Assessment of alternatives**: Where significant impacts are anticipated despite mitigation measures, the proposal should progress to Stage 3 or no longer proceed;
  - **Stage 4 Assessment where no alternative exists and where adverse impacts remain**: The final stage involves examining whether there are imperative reasons of overriding public interest for allowing the proposal to adversely impact upon a Natura 2000 site.

## Study Zone Identification

- The 'Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities'[13] states that the AA Screening should include the following:
  - *"Any Natura 2000 sites within or adjacent to the plan or project area;*
  - *Any Natura 2000 sites within the likely zone of impact of the plan or project;*
  - *A distance of 15km [...] currently recommended in the case of plans, [which] derives from UK guidance (Scott Wilson et. al., 2006). For projects, the distance could be much less than 15km, and in some cases less than 100m, but this must 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; and*
  - *Natura 2000 sites that are more than 15km from the plan or project area depending on the likely impacts of the plan or project, and the sensitivities of the ecological receptors,*

[13] Department for Environment, Heritage and Local Government (2009) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Available at: http://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf

*bearing in mind the precautionary principle. In the case of sites with water dependent habitats or species, and a plan or project that could affect water quality or quantity, for example, it may be necessary to consider the full extent of the upstream and/or downstream catchment."*

- It is considered that the Zone of Influence ('ZOI') for the Natura 2000 designated sites and their qualifying features will fall within a 15km radius of developments.

## Desk Study

- Sources of material that were consulted as part of the desk study for the purposes of the assessment are as follows:
  - NPWS natural heritage database for Natura 2000 sites within the ZOI of the Application Site[14],
  - NPWS site synopses, Natura 2000 Data Form and conservation objectives relating to each site and aerial images, and
  - Environmental Protection Agency ('EPA') maps of river catchments, sub-catchments and flow directions.

## Impact Assessment Process

- The assessment process involves:
  - Identifying and characterising Natura 2000 sites identified within the 15km zone of influence surrounding the Application Site and their qualifying features and addressing whether any of these designated sites have any connectivity with the Proposed Development. If any site is found to have no connectivity, then the designated site will be 'scoped out' (not considered further);
  - Assessing whether there will be any significant impacts to any of the Natura 2000 site, in regard to changes that result from the construction, operation and decommissioning phases of a project. Qualifying features of a Natura 2000 site that lie outside of the ZOI and not subject to any impacts from the Proposed Development will be 'scoped out' (not considered further);

[14] Environment, Heritage and Local Government (2009) Appropriate Assessment of Plan and Projects in Ireland. Available at: https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf

Environmental Protection Agency (EPA) maps available at: https://gis.epa.ie/EPAMaps/

- Identifying any significant impacts on the integrity of the Natura 2000 site from the development and 'in combination' with any other development within 5km; and
- Identifying the need for the Appropriate Assessment process to move to Stage 2: 'Natura Impact Statement'. If there are no impacts from the development, then the development may proceed.

# 5. BASELINE

5.1. In accordance with National Parks & Wildlife Service (NPWS) guidance, this stage of the AA has identified all Natura 2000 sites located within 15km of the development boundary. The potential effects associated with the Proposed Development have been identified. Those Natura 2000 sites which will not be significantly affected will be ruled out of any further assessment.

5.2. Effects can depend more on the nature of impacts, sensitivity of receptors and causal linkage, rather than actual distances. The assessment below considers connectivity, either ecological, ornithological or hydrological, that may exist between the Proposed Development and the designated sites.

## ECOLOGICAL SITE VISIT

5.1. A habitat survey was undertaken which identified the following habitats

- Building and Artificial Surfaces (BL3);
- Amenity Grassland (GA2);
- Recolonising Bare Ground (ED3);
- Scrub (WS1);
- Depositing/Lowland rivers (FW2);
- Hedgerows (WL1), and
- Treelines (WL2).

5.2. The construction of the Proposed Development will occur primarily over land which has been identified as amenity grassland and recolonising bare ground. These habitats are considered to be of low ecological value and currently offer limited potential to support wildlife.

5.3. Habitats on site are suitable for supporting low numbers of common widespread species.

# IDENTIFICATION OF NATURA 2000 SITES

5.4. There are nine Natura 2000 designated sites located within 15km of the Application Site, comprising six Special Areas of Conservation (SACs), and three Special Protection Areas (SPAs). The qualifying features of each have been outlined within **Table 5-1** below.

5.5. **Figure 1, Appendix A** of this report details the location of these sites in relation to the Application Site.

Table 5-1: Natura 2000 sites within 15km

| Site Code | Site Name | Qualifying Features | Distance (km), Direction | Potential Connectivity with the Proposed Developmen t Site |
|---|---|---|---|---|
| **SAC** | | | | |
| 001398 | Rye Water Valley/Carton SAC | Petrifying springs with tufa formation (*Cratoneurion*) [7220]<br>*Vertigo angustior* (Narrow-mouthed Whorl Snail) [1014]<br>*Vertigo moulinsiana* (Desmoulin's Whorl Snail) [1016] | 5.88km northwest | None |
| 001209 | Glenasmole Valley SAC | Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210]<br>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) [6410]<br>Petrifying springs with tufa formation (*Cratoneurion*) [7220] | 8.05km southeast | None |
| 002122 | Wicklow Mountains SAC | Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) [3110]<br>Natural dystrophic lakes and ponds [3160] | 9.76km southeast | None |

| | | | | |
|---|---|---|---|---|
| | | Northern Atlantic wet heaths with *Erica tetralix* [4010]<br>European dry heaths [4030]<br>Alpine and Boreal heaths [4060]<br>Calaminarian grasslands of the *Violetalia calaminariae* [6130]<br>Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]<br>Blanket bogs (* if active bog) [7130]<br>Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*) [8110]<br>Calcareous rocky slopes with chasmophytic vegetation [8210]<br>Siliceous rocky slopes with chasmophytic vegetation [8220]<br>Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]<br>*Lutra lutra* (Otter) [1355] | | |
| 000397 | Red Bog, Kildare SAC | Transition mires and quaking bogs [7140] | 14.44km southwest | None |
| 000210 | South Dublin Bay SAC | Mudflats and sandflats not covered by seawater at low tide [1140]<br>Annual vegetation of drift lines [1210]<br>Salicornia and other annuals colonising mud and sand [1310]<br>Embryonic shifting dunes [2110] | 15.21km east | Hydrological connectivity via the Baldonnell stream and the River Liffey |
| 000206 | North Dublin Bay SAC | Mudflats and sandflats not covered by seawater at low tide [1140]<br>Annual vegetation of drift lines [1210]<br>Salicornia and other annuals colonising mud and sand [1310] | 17.90km northeast | Hydrological connection via the Baldonnell stream and the River Liffey |

| | | | | |
|---|---|---|---|---|
| | | Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]<br>Mediterranean salt meadows (*Juncetalia maritimi*) [1410]<br>Embryonic shifting dunes [2110]<br>Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]<br>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]<br>Humid dune slacks [2190]<br>*Petalophyllum ralfsii* (Petalwort) [1395] | | |
| **SPA** | | | | |
| 004040 | Wicklow Mountains SPA | Merlin (*Falco columbarius*) [A098]<br>Peregrine (*Falco peregrinus*) [A103] | 12.88km southeast | None |
| 004024 | South Dublin Bay and River Tolka Estuary SPA | Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]<br>Oystercatcher (*Haematopus ostralegus*) [A130]<br>Ringed Plover (*Charadrius hiaticula*) [A137]<br>Grey Plover (*Pluvialis squatarola*) [A141]<br>Knot (*Calidris canutus*) [A143]<br>Sanderling (*Calidris alba*) [A144]<br>Dunlin (*Calidris alpina*) [A149]<br>Bar-tailed Godwit (*Limosa lapponica*) [A157]<br>Redshank (*Tringa totanus*) [A162]<br>Black-headed Gull (*Chroicocephalus ridibundus*) [A179]<br>Roseate Tern (*Sterna dougallii*) [A192] | 14.81km east | Hydrological connectivity via the Baldonnell stream and the River Liffey |

| | | | | |
|---|---|---|---|---|
| | | Common Tern (*Sterna hirundo*) [A193]<br>Arctic Tern (*Sterna paradisaea*) [A194]<br>Wetland and Waterbirds [A999] | | |
| 004006 | North Bull Island SPA | Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]<br>Shelduck (*Tadorna tadorna*) [A048]<br>Teal (*Anas crecca*) [A052]<br>Pintail (*Anas acuta*) [A054]<br>Shoveler (*Anas clypeata*) [A056]<br>Oystercatcher (*Haematopus ostralegus*) [A130]<br>Golden Plover (*Pluvialis apricaria*) [A140]<br>Grey Plover (*Pluvialis squatarola*) [A141]<br>Knot (*Calidris canutus*) [A143]<br>Sanderling (*Calidris alba*) [A144]<br>Dunlin (*Calidris alpina*) [A149]<br>Black-tailed Godwit (*Limosa limosa*) [A156]<br>Bar-tailed Godwit (*Limosa lapponica*) [A157]<br>Curlew (*Numenius arquata*) [A160]<br>Redshank (*Tringa totanus*) [A162]<br>Turnstone (*Arenaria interpres*) [A169]<br>Black-headed Gull (*Chroicocephalus ridibundus*) [A179]<br>Wetland and Waterbirds [A999] | 19.71km east | Hydrological connectivity via the Baldonnell stream and the River Liffey |

5.6. As shown in **Table 5-1**, the Application Site has a potential hydrological connection with four internationally designated sites.

5.7. The Baldonnell stream discharges into the River Liffey, approximately 7km from the Application Site. The River Liffey stretches approximately 28km before entering into the Dublin Bay. Therefore, it is considered that there is a hydrological connection between the Application Site and the designated sites within the Dublin Bay (South Dublin Bay and River Tolka SPA, North Bull Island SPA, South Dublin Bay SAC and North Dublin Bay SAC).

5.8. It is considered that the survey area is unlikely to support any of the Annex II species or assemblages listed above. Narrow-mouthed Whorl Snail and Desmoulin's whorl snail are restricted to the marsh vegetation of the Rye Water Valley/Carton SAC. The Application site is not considered to offer suitable habitat for otter, the Baldonnell Stream is too narrow to support breeding and foraging otter, and the surrounding habitats (business parks, a golf course and a significant amount of residential housing and shopping centres) are not suitable to support otters commuting from the Wicklow Mountains SAC.

5.9. The habitats are not suitable for supporting the qualifying bird species of the SPAs listed above. Merlin and Peregrine are associated with the upland habitats of the Wicklow Mountains SPA. Black-headed gulls (associated with Poulaphouca Reservoir SPA) nest in wetland habitats, but are not confined to wetlands, and will forage in domestic waste and fields of crop. As there is there is no food waste or crop associated within the Application Site it is considered there is no potential for gull species to scavenge within the site boundary. Greylag goose prefer coastal habitats or wetland habitats for foraging and/or breeding.

5.10. Given that no connectivity (potential pathway for impact) exists between the Application Site and the Natura 2000 designated sites, these sites have been scoped out of the impact assessment. No impacts upon these sites will result from the Proposed Development.

# 6. ASSESSMENT OF LIKELY EFFECTS

6.1. This section discusses and evaluates the likely impacts of the Proposed Development affecting the Natura 2000 sites within the Zone of Influence (ZOI) of the Application Site (i.e. where there is some ecological, ornithological or hydrological connection between the Application Site and the Natura 2000 site).

6.2. As outlined within **Table 5-1** above, the Application Site has hydrological connectivity with the South Dublin Bay and River Tolka Estuary SPA, offering a pathway for impacts through the movement of contaminated waters.

6.3. Aquatic systems and the species/habitats which are dependent on these systems are sensitive to pollution and contamination of surface waters. Pollution can result from any of the following entering a body of surface or groundwater:

- Poisonous, noxious or polluting matter;
- Waste matter (including silt, cement, concrete, oil, petroleum spirit, chemicals, solvents, sewage and other polluting matter);
- Other harmful activities detrimentally affecting the status of a waterbody.

6.4. **Table 6-1** below details common water pollutants and their effect on the aquatic environment and standard Best Practice Pollution Measures. (This table has been extracted from Ciria guidance[15]).

Table 6-1: Common water pollutants and their effects on the aquatic environment and standard prevention measures

| Common Water Pollutants | Adverse Effect on Aquatic Environment | Standard Best Practice Pollution Prevention Measures |
|---|---|---|

[15] Ciria (2015) Environmental Good Practice on Site guide, fourth edition

| | | |
|---|---|---|
| Silt | Reduces water quality, clogs fish gills, covers aquatic plants, impacts aquatic invertebrates, leads to a reduction in prey for species and leads to degradation of habitat | <u>Pollution Prevention</u><br><br>Hydrocarbons, greases and hydraulic fluids will be stored in a secure compound area;<br><br>All plant machinery will be properly serviced and maintained thereby reducing risk of spillage or leakage;<br><br>All waste produced from construction will be collected in skips with the construction site kept tidy at all times;<br><br>Excavated soil will be stored on site or removed by a licensed waste disposal unit;<br><br>All materials and substances used for construction will be stored in a secure compound and all chemicals to be stored in secure containers to avoid potential contamination;<br><br>Location of spill kit to be known by all construction workers and implemented in the event of spillage or leakage.<br><br><u>Waste Management</u><br><br>Skips are to be used for site waste/debris at all times and collected regularly or when full;<br><br>All hydrocarbons and fluids are to be collected in leak-proof containers and removed from site for disposal or recycling; |
| Bentonite (very fine silt) | Reduces water quality, clogs fish gills, covers aquatic plants, impacts aquatic invertebrates, leads to a reduction in prey for species and leads to degradation of habitat | |
| Cement or concrete wash water (highly alkaline) | Changes the chemical balance, is toxic to fish and other wildlife. This can lead to direct impacts for aquatic species (including otter), or indirect through loss of prey resources | |
| Detergent | Removes dissolved oxygen, can be toxic to fish and other wildlife present within the aquatic environment | |

| | | |
|---|---|---|
| Hydrocarbons (e.g. oil, diesel) | Suffocates aquatic life, damaging to the wildlife (e.g. birds), and to water supplies including industrial abstractions | All waste from construction is to be stored within the site confines and removed to a permitted waste facility.<br><br>Environmental Monitoring<br><br>Contractor to nominate member of staff as the environmental officer with the responsibility to ensure best practice measures are implemented and adhered to, with any incidents or non-compliance issues being reported to project team. |
| Sewage | Reduces water quality, is toxic to aquatic wildlife, and damages water supplies | |

## Assessment of Likely Impacts Affecting Natura 2000 Designated sites in Dublin Bay

## South Dublin Bay SAC

6.5. The South Dublin Bay SAC is located approximately 15km east, but connectivity is approximately 29km downstream of the Application Site. The site has been designated for a number of important Annex I habitats of the E.U. Habitats Directive, as detailed within **Table 5-1** above. The Application Site and the designated sites do not share any of the same habitats.

6.6. The only opportunity for pollution arising from the Proposed Development to impact upon the designated site is through the contamination of the Baldonell stream. Given the drainage measures in place at the site, and the large distance between the Application Site and the Dublin Bay, the dilution factor will result in a **negligible impact** upon the SAC and its qualifying species.

6.7. Notwithstanding this, during the construction phase, standard best practice measures will be adhered to.

6.8. **Chapter 5: Demolition and Construction Environmental Management** outlines the procedures that will be implemented to prevent any spillages to the Balonnell stream. In order to prevent any spillages of fuels to the Baldonnel Stream, or groundwater, the following measures are proposed:

- Designation of a bunded refuelling areas on the site;
- Provision of spill kit facilities across the site;

- Where mobile fuel bowsers are used the following measures would be taken:
- Any flexible pipe, tap or valve would be fitted with a lock and would be secured when not in use;
- Pumps or valves would be fitted with a lock and would be secured when not in use;
- All bowsers to carry a spill kit;
- Operatives must have spill response training; and
- Drip trays used on any required mobile fuel units.
- In the case of drummed fuel or other potentially polluting substances which may be used during the demolition and construction stage the following procedures will be adopted:
- Secure storage of all containers that contain potential polluting substances in a dedicated internally bunded chemical storage cabinet unit or inside a concrete bunded area;
- Clear labelling of containers so that appropriate remedial measures can be taken in the event of a spillage;
- All drums to be quality approved and manufactured to a recognised standard;
- If drums are to be moved around the site, they would be secured and on spill pallets; and
- Drums to be loaded and unloaded by competent and trained personnel using appropriate equipment.

6.9. Additional measures are outlined in Chapter 5. With the implementation of best practice measures, and considering the distance and dilution factors, **no significant effects** are predicted on qualifying habitats and species of South Dublin Bay SAC.

## North Dublin Bay SAC

6.1. The North Dublin Bay SAC is located approximately 17.9km northeast but connectivity is over 30km downstream of the Application Site.

6.2. As outlined above in the assessment of the South Dublin Bay SAC, there is limited hydrological connectivity between the Proposed Development and Natura 2000 Sites within the Dublin Bay. Due to the drainage measures in place, and likely dispersion it is considered that potential

effects are **negligible**. With best practice pollution measures in place, it is considered that there is no potential for significant effects.

6.3. Potential impacts from the Proposed Development will not be significant or have a detrimental effect on the qualifying features of any Natura 2000 designated sites with a hydrological connection.

6.4. Therefore, **no significant effects** are predicted on qualifying species of North Dublin Bay SAC.

## South Dublin Bay and River Tolka Estuary SPA

6.5. Given the large distance between the Application Site and the SPA, the dilution factor will result in a **negligible** impact upon the SPA and its qualifying species.

6.6. Therefore, **no significant effects** are predicted on qualifying species of South Dublin Bay and River Tolka Estuary SPA.

## North Bull Island SPA

6.1. Given the large distance between the Application Site and the SPA, the dilution factor will result in a **negligible** impact upon the SPA and its qualifying species.

6.2. Therefore, **no significant effects** are predicted on qualifying species of North Bull Island SPA.

# 7. CUMULATIVE IMPACTS

7.1. As well as singular effects, cumulative effects also need to be considered. Article 6 of the EU Habitats Directive and Regulation 15 of the European Communities (Natural Habitats) Regulations state that an AA should be performed for any plan or project that, either alone or in combination with other plans or projects, may significantly affect a Natura 2000 site.

7.2. Cumulative effects can be an issue when multiple proposals each have a low level of impact on Natura 2000 sites. If several proposals all have a small impact, the combined result can lead to a significant effect on the qualifying features of a Natura 2000 site.

7.3. However, the Proposed Development will have **negligible impacts** upon any Natura 2000 site. For the purposes of this assessment, it is therefore confirmed that **no likely significant cumulative effects** will occur upon any Natura 2000 sites as a result of the Proposed Development due to the

7.4. A search of the National Planning Application Database and the South Dublin County Council online planning portal identified a large number of permitted plans or projects within 5km of the Proposed Development. However, as the Proposed Development will have no significant effects upon any Natura 2000 site, for the purposes of this this assessment it is therefore confirmed that **no likely cumulative effects will occur upon any Natura 2000 site as a result of the Proposed Development.**

# 8. CONCLUSION

8.1. According to NPWS (2009), the Appropriate Assessment Stage 1: Screening exercise can result in one of three conditions:

- An Appropriate Assessment is not required i.e., where the plan/proposal is associated with the management of the site;
- There is no potential for significant effects i.e., Appropriate Assessment is not required;
- Significant effects are certain, likely or uncertain i.e., the project must either proceed to Stage 2: Appropriate Assessment or be rejected.

8.2. The Proposed Development was screened for likely significant adverse effects upon any designated sites within its Zone of Influence. Within 15km of the Application Site there are nine designated sites, comprising six Special Areas of Conservation (SACs) and three Special Protection Areas (SPAs).

8.3. Potential connectivity (potential pathways for impact) exists between the Application Site and four designated sites; the North Dublin Bay SAC, the South Dublin Bay and River Tolka Estuary SPA and the North Bull Island SPA. This connectivity is roughly 28km downstream via the Baldonnel stream.

8.4. Given that the Proposed Development does not involve any instream works, and considering the distance and dilution factors, it has been concluded that the Proposed Development **will not lead to significant adverse impacts** upon any Natura 2000 sites. **No likely significant effect** is foreseen upon these Natura 2000 sites as a result of the proposals, either alone or in combination with any other development.

8.5. This screening report, based on the best available scientific information, finds that there is no reasonable scientific doubt that the development does not pose any risk of significant adverse effects on Natura 2000 sites, and that the development does not require progression to a Stage 2 AA. It is considered that the next stage of the AA is not required.

# 9. APPENDICES

## Appendix A

- Figure 1: Natura 2000 Designated Sites