



Appropriate Assessment Screening

Profile Park Data Centre

20/08/2021



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Neo Environmental Ltd	
<p>Head Office - Glasgow: Wright Business Centre, 1 Lonmay Road, Glasgow. G33 4EL T 0141 773 6262 E: info@neo-environmental.co.uk</p>	
<p>Warrington Office: Cinnamon House, Crab Lane, Warrington, WA2 0XP. T: 01925 661 716 E: info@neo-environmental.co.uk</p>	<p>Rugby Office: Valiant Suites, Lumonics House, Valley Drive, Swift Valley, Rugby, Warwickshire, CV21 1TQ. T: 01788 297012 E: info@neo-environmental.co.uk</p>
<p>Ireland Office: Johnstown Business Centre, Johnstown House, Naas, Co. Kildare. T: 00 353 (0)45 844250 E: info@neo-environmental.ie</p>	<p>Northern Ireland Office: 83-85 Bridge Street, Ballymena, Co. Antrim BT43 5EN T: 0282 565 04 13 E: info@neo-environmental.co.uk</p>

Prepared For:


Ramboll

Prepared By:

Dara Dunlop BSc (Hons)

Ashleen Blom BSc (Hons) MSc



	Name	Date	
Edited By:	Dara Dunlop	20/08/2021	
Checked By:	Daniel Flenley	20/08/2021	
	Name	Signature	
Approved By	Paul Neary		

Contents

1. Executive Summary	5
2. Introduction	6
3. Legislation & Guidance	9
Requirement for Appropriate Assessment	9
Guidance	10
4. Assessment Methodology	12
Stages of Appropriate Assessment	12
Study Zone Identification	13
Desk Study	13
Impact Assessment Process	14
5. Baseline	15
Ecological Site Visit	15
Identification of Natura 2000 Sites	16
6. Assessment of Likely Effects	20
Impact Assessment	20
Summary of Potential Impacts on Natura Sites within 15km	24
7. Cumulative Impacts	25
8. Conclusion	29
9. Appendices	30

1. EXECUTIVE SUMMARY

- 1.1. A Stage 1 Appropriate Assessment has been undertaken for a proposed new data center, located off the Nangor Road, 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. Within the 15km zone of influence surrounding the Site there are seven Natura 2000 designated sites, comprising four Special Areas of Conservation (SACs) and three Special Protection Areas (SPAs).
- 1.3. To provide a current baseline for the Application Site, an ecological site visit was undertaken in June 2021 by Ashleen Blom BSc (Hons) MSc. 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.
- 1.4. Connectivity (potential pathways for impact) exists between the Application Site and one designated site, namely, South Dublin Bay and River Tolka Estuary SPA through the Baldonnel stream.
- 1.5. The Proposed Development includes the realignment of the Baldonnel 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 to inform a planning application for a proposed data centre (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 proposed site consists of agricultural land with mature treelines, hedgerow, building and a stream. These habitats have potential to support breeding birds, bats badgers and other protected species.

Development Description

- 2.4. The development will consist of the demolition of the abandoned single storey dwelling and associated outbuilding (206sqm); and the construction of 2 no. two storey data centers with plant at roof level of each facility and associated ancillary development that will have a gross floor area of 40,589sqm that will consist of the following:
 - 1 no. two storey data center (Building 11) that will be located to the south of the site and will have a gross floor area of 24,667sqm. It will include 22 no. emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height;
 - 1 no. two storey data center (Building 12) that will be located to the north of the site, and to the immediate north of Building 11 and will have a gross floor area of 12,915sqm. It will include 11 no. emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height;
 - Each of the two data centers will includes data storage rooms, associated electrical and mechanical plant rooms, loading bays, maintenance and storage spaces, office administration areas, and plant including PV panels at roof level as well as a separate house generator for each facility that will provide emergency power to the admin and

ancillary spaces. Each generator will include a diesel tank and there will be a refuelling area to serve the proposed emergency generators;

- The overall height of each data center apart from the flues and plant at roof level is c. 14.23m above the finished floor level;
 - Construction of internal road network and circulation areas, with main entrance off Falcon Avenue to the south, as well as a secondary vehicular access off Legacy Drive to the south-west, both from within Profile Park; footpaths, provision of 144 no. car parking spaces, and 66 no. cycle parking spaces;
 - single storey step-up substation (38sqm) as well as 2 no. single storey switch substations (121sqm);
 - AGI Gas Regulator compound that include 3 no. single storey buildings (134sqm);
 - construction of a gas powered generation plant in the form of a 13m high single storey building with a gross floor area of 2,714sqm that will contain 10 gas generators with associated flues that will be 25m in height, and grouped in pairs and threes. The Gas Plant will be located to the west of Building 11;
 - Ancillary site development works, that will include reorientation of the Baldonnel Stream, biodiversity management initiatives, attenuation ponds and the installation and connection to the underground foul and storm water drainage network, and installation of utility ducts and cables, that will include the drilling and laying of ducts and cables under the internal road network within Profile Park. Other ancillary site development works will include hard and soft landscaping, lighting, fencing, signage, services road, entrance gates, sprinkler tanks and pump room; and
 - A temporary gas powered generation plant within a fenced yard containing 22 no. generator units in containers, each with associated flues (each 25m high), 12 transformers and 10 containers of controls to be located to the west of, and associated with the first phase of Building 11, and will be required for a period of up to 2 years if connection to the national grid is delayed. This temporary plant will not be built if the connection to the national grid is in place prior to the operation of Building 11.
- 2.5. The development will be accessed from Falcon Avenue and Legacy Drive from within the Profile Park Business Park that contains an access from the New Nangor Road (R134).

Statement of Authority

- 2.6. 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 Writing¹ and the Environment, Heritage and Local Government Guidance on Appropriate Assessments².
- 2.7. 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 sites. Dara has co-authored a number of reports for various developments including Ecological Impact Assessments and Protected Species Reports.
- 2.8. Ashleen Blom BSc (Hons) MSc is a senior ecologist with 5 years' professional experience in ecological consultancy. She has worked as part of multidisciplinary and dedicated ecology teams contributing towards projects in education, commercial, defence, energy, residential, and infrastructure sectors in Northern Ireland and the Republic of Ireland. She has contributed towards large multidisciplinary and small-scale private developments. Ashleen has experience in completing a range of surveys and ecological assessments including Ecological Impacts Assessments Phase 1 and Fossitt habitat surveys, Natura Impact Assessments (Habitat Regulation Assessments) and a variety of protected species surveys including bat, otter, smooth newt and badger. She has experience classifying Potential Roosting Features for bats in trees and structures and classifying habitats for their potential to support foraging and commuting bats. Ashleen has experience in completing invasive species surveys including invasive aquatic species.

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 & GUIDANCE

REQUIREMENT FOR APPROPRIATE ASSESSMENT

- 3.1. 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) and in particular, in relation to the planning consent process, in Part XAB of the Planning and Development Act 2000 – 2015 (as amended) where Section 177U sets out the requirements for Screening for AA.
- 3.2. This Appropriate Assessment Screening Report has been prepared in accordance with the above and the European Commission Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (European Commission 2002), the European Commission Guidance Managing Natura 2000 Sites (European Commission 2000) and with reference to the Department of the Environment and Heritage and Local Government guidance on Appropriate Assessment of plans and projects in Ireland (DEHLG 2009) and Natura 2000 (European Commission 2010).
- 3.3. The EU Habitats Directive (92/43/EEC) provides the framework for legal protection for habitats and species of European importance. The directive provides the legislative means to establish a network of sites (known as the Natura 2000 network) throughout the EU with the objective of conserving habitats and species deemed to be of International Importance. These sites include Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Birds Directive (formally known as the Conservation of Wild Birds Directive 79/409/EEC).
- 3.4. 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.”
- 3.5. The relevant wording of Section 177U (4) of the Planning and Development Act is as follows:

“The competent authority shall determine that an appropriate assessment of a [...] 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 a European site. As outlined in the European Commission document 'Assessment of plans and projects significantly affecting Natura 2000 sites', 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, 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'.

- 3.6. 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.
- 3.7. The following legislation was 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, 1992³;
 - Council Directive 2009/147/EC on the Conservation of Wild Birds, 2009⁴;
 - The Planning and Development Acts 2000 (as amended)⁵.
 - NPWS, The Status of EU Protected Habitats and Species in Ireland. Habitat Assessments, Unpublished Report, 2013⁶.

GUIDANCE

- 3.8. The following guidance has been compiled and reviewed to inform the Article 6 assessments within this report:

³ European Commission (2001) 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. Available at: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

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>

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, 2009 (as amended)⁷;
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10⁸ & PSSP 2/10, 2008⁹;
- 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, 2001¹⁰;
- CIEEM, Guidelines for Ecological Report Writing, 2017¹¹.

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 CIEEM (2017) Guidelines for Ecological Report Writing. CIEEM, Winchester.

4. ASSESSMENT METHODOLOGY

STAGES OF APPROPRIATE ASSESSMENT

4.1. The Appropriate Assessment process comprises of four stages in order to identify whether proposals have the potential to impact significantly 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.

Source – Pathway - Receptor Model

4.2. The 'source-pathway-receptor' conceptual model is a tool used for environmental assessment. In order for an effect to occur, all elements of this model must be linked. The removal or absence of one of the elements of the model results in there being no likelihood for the effect in question to occur. For example:

- Source(s), e.g. blasting;
- Pathway(s) e.g. vibration and noise; and,
- Receptor(s) e.g. disturbance of nesting birds.

4.3. For an AA or NIS, this model is focused solely on the selection features of Natura 2000 sites as defined by National Parks and Wildlife Services (NPWS), and referenced within this report.

4.4. The Proposed Development may have the potential to result in a number of impacts, which could potentially affect the selection features of Natura 2000 sites. The analysis of these effects, using scientific knowledge and professional judgement, leads to the identification of a "zone of influence" for each effect (i.e. the distance at which the impact of the Proposed

Development could have potential effects, using professional judgement and published guidance).

STUDY ZONE IDENTIFICATION

- 4.5. The 'Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities'¹² 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 is currently recommended in the case of plans, and 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.

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, 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.”

- 4.6. It is considered that the Zone of Influence (ZOI) in connection with the Natura 2000 designated sites and their qualifying features will extend to a 15km radius. While this would be greater were the Proposed Development to have any hydrological influence beyond 15km, no such influence has been identified.

DESK STUDY

- 4.7. Sources of material that were consulted as part of the desk study for the purposes of the assessment are as follows:

- National Parks & Wildlife Service (NPWS) natural heritage database for Natura 2000 sites within the 15km ZOI of the Application Site¹³;

¹² 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

¹³ 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

- NPWS site synopses, Natura 2000 Data Form and conservation objectives relating to each site and aerial images.

IMPACT ASSESSMENT PROCESS

4.8. The assessment process involves:

- Identifying and characterising Natura 2000 sites identified within the 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 these designated sites will be 'scoped out' or 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 then these will be 'scoped out' or not considered further;
- Identifying any significant impacts on the integrity of the Natura 2000 site from the development and 'in combination' with any other development within 5km;
- Identifying the need for the Appropriate Assessment process to move to Stage 2: 'Natura Impact Statement or, if there are no impacts from the development, that 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
 - Improved agricultural grassland (GA1);
 - Amenity grassland (improved) (GA2);
 - Dry meadows and grassy verges (GS2);
 - Hedgerows (WL1);
 - Treelines (WL2);
 - Depositing/lowland rivers (FW2) (Baldonnel Stream);
 - Recolonising bare ground (ED3); and
 - Buildings and artificial surfaces (BL3).

No evidence of protected species was noted on site during this survey. Bat surveys were also carried out on site with common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelles *Pipistrellus pygmaeus* and Leisler's bat *Nyctalus leisleri*, noted in flight on site. No roosts bats were identified.

An invertebrate survey of the Baldonnel stream was also completed on site which showed that the stream is dominated by freshwater shrimp *Gemmerus* sp. and stone clingers *Baetidaesp.*.

IDENTIFICATION OF NATURA 2000 SITES

- 5.2. There are seven Natura 2000 designated sites located within 15km of the Application Site, comprising four Special Areas of Conservation (SACs), and three Special Protection Areas (SPAs). The qualifying features of each have been outlined within **Table 5-1** below.
- 5.3. **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 Development Site
SAC				
001398	Rye Water Valley/Carnton	Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014] <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016]	5.71km northwest	No connection
001209	Glenasmole Valley SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]	7.91km southeast	No connection
002122	Wicklow Mountains SAC	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110]	9.62km southeast	No connection

		<p>Natural dystrophic lakes and ponds [3160]</p> <p>Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]</p> <p>European dry heaths [4030]</p> <p>Alpine and Boreal heaths [4060]</p> <p><i>Calaminarian</i> grasslands of the <i>Violetalia calaminariae</i> [6130]</p> <p>Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]</p> <p>Blanket bogs (* if active bog) [7130]</p> <p>Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110]</p> <p>Calcareous rocky slopes with chasmophytic vegetation [8210]</p> <p>Siliceous rocky slopes with chasmophytic vegetation [8220]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p><i>Lutra lutra</i> (Otter) [1355]</p>		
000397	Red Bog, Kildare SAC	Transition mires and quaking bogs [7140]	14.04km southwest	No connection
SPA				
004040	Wicklow Mountains SPA	<p>Merlin (<i>Falco columbarius</i>) [A098]</p> <p>Peregrine (<i>Falco peregrinus</i>) [A103]</p>	12.74km southeast	No connection
004024	South Dublin Bay and River	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]	14.90km northeast	Hydrological connection through the River Liffey,

	Tolka Estuary SPA	<p>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</p> <p>Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Knot (<i>Calidris canutus</i>) [A143]</p> <p>Sanderling (<i>Calidris alba</i>) [A144]</p> <p>Dunlin (<i>Calidris alpina</i>) [A149]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p> <p>Redshank (<i>Tringa totanus</i>) [A162]</p> <p>Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p> <p>Roseate Tern (<i>Sterna dougallii</i>) [A192]</p> <p>Common Tern (<i>Sterna hirundo</i>) [A193]</p> <p>Arctic Tern (<i>Sterna paradisaea</i>) [A194]</p> <p>Wetland and Waterbirds [A999]</p>		approximately 29 km downstream
004063	Poulaphouca Reservoir SPA	<p>Greylag Goose (<i>Anser anser</i>) [A043]</p> <p>Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]</p>	14.98km southwest	No connection

- 5.4. As shown in Table 5-1, the Application Site only has connection with South Dublin Bay and River Tolka Estuary SPA, which lies approximately 30km downstream from the Application Site. No other SPA or SAC has connectivity and are therefore not considered within this report.
- 5.5. The Baldonnel stream is present on site, and is the source of any hydrological connectivity to any designated site. This stream is a tributary of the Griffeen River and has been heavily modified downstream to allow for the construction of the new Nagor Road. The Baldonnel stream enters a culvert at the western boundary of the site.
- 5.6. This stream then joins the River Griffen and discharges into the River Liffey approximately 7km downstream before entering Dublin but a further 22km downstream.

- 5.7. On the EPA Map Viewer¹⁴, the Water Framework Directive (WFD) (2000/60/EC) status 2010-2015 the Griffeen river has a Water Framework Directive (WFD) status of 'good' and a WFD risk status of 'at risk'. Approximately 2.8km north of where the Baldonnel stream joins the Griffeen River the Q-values for the Griffeen River are 3 (poor).
- 5.8. Given that no connectivity (potential pathway for impact) exists between the Application Site and the other 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.
- 5.9. The only internationally designated site with connectivity to the Application site is South Dublin Bay and River Tolka Estuary SPA, which is designated as it supports assemblages of wetland and waterbirds. Habitats on site are not suitable to support any of this SPAs qualifying features, and is discussed below.

¹⁴ Available from : <https://gis.epa.ie/EPAMaps/Water>

6. ASSESSMENT OF LIKELY EFFECTS

IMPACT ASSESSMENT

- 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 guidance¹⁵).

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

<p>Silt</p>	<p>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</p>	<p><u>Pollution Prevention</u></p> <p>Hydrocarbons, greases and hydraulic fluids will be stored in a secure compound area;</p> <p>All plant machinery will be properly serviced and maintained thereby reducing risk of spillage or leakage;</p> <p>All waste produced from construction will be collected in skips with the construction site kept tidy at all times;</p>
<p>Bentonite (very fine silt)</p>	<p>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</p>	<p>Excavated soil will be stored on site or removed by a licensed waste disposal unit;</p> <p>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;</p>
<p>Cement or concrete wash water (highly alkaline)</p>	<p>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</p>	<p>Location of spill kit to be known by all construction workers and implemented in the event of spillage or leakage.</p>
<p>Detergent</p>	<p>Removes dissolved oxygen, can be toxic to fish and other wildlife present within the aquatic environment</p>	<p><u>Waste Management</u></p> <p>Skips are to be used for site waste/debris at all times and collected regularly or when full;</p> <p>All hydrocarbons and fluids are to be collected in leak-proof containers and removed from site for disposal or recycling;</p>

<p>Hydrocarbons (e.g. oil, diesel)</p>	<p>Suffocates aquatic life, damaging to the wildlife (e.g. birds), and to water supplies including industrial abstractions</p>	<p>All waste from construction is to be stored within the site confines and removed to a permitted waste facility.</p> <p><u>Environmental Monitoring</u></p> <p>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.</p>
<p>Sewage</p>	<p>Reduces water quality, is toxic to aquatic wildlife, and damages water supplies</p>	

South Dublin Bay and River Tolka Estuary SPA

6.5. As described within Table 5, The South Dublin Bay and River Tolka Estuary SPA is designated for its importance for the following Annex II species:

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

- Arctic Tern (*Sterna paradisaea*) [A194]; and
- Wetland and Waterbirds [A999].

Conservation Objectives for South Dublin Bay and River Tolka Estuary SPA

6.6. The main conservation objective¹⁶ of the South Dublin Bay and River Tolka Estuary SPA is to restore the favourable conservation status of habitats and species of community interest. The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Character of the South Dublin Bay and River Tolka Estuary SPA

6.7. Table 6-2 below, identifies the percentage of the extent of various habitat types within the South Dublin Bay and River Tolka Estuary SPA .

Table 6-2: Habitats within South Dublin Bay and River Tolka Estuary SPA

Code	Habitats	Extent (%)
	River Boyne and Blackwater SAC	
N01	Marine areas and sea inlets	40
N02	Tidal rivers, estuaries, mud flats, sand flats, lagoons (including saltwork basins)	58
N04	Coastal sand dunes, Sand beaches, Machair	1
N05	Shingle, Sea cliffs, Islets	1

Assessment of Likely Impacts Affecting South Dublin Bay and River Tolka Estuary SPA

6.8. The South Dublin Bay and River Tolka Estuary SPA is located approximately 15km northeast but connectivity is approximately 29km downstream of the Application Site, and has been designated for a number of important Annex II species of the E.U. Habitats Directive, as detailed within Table 5-1 above. The Application Site and the designated sites do not share any similar habitats, as demonstrated by comparing Section 5-1 and Table 6-2.

¹⁶ NPWS (2015) 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.

- 6.9. The Proposed Development will result in the diversion and realignment of the Baldonnel stream. The new stream channel will be created first, followed by the diversion into the new channel and then the closure of the old stream channel.
- 6.10. The stream realignment is the only opportunity for pollution arising from the Proposed Development to impact upon the designated site. Realignment would extend the length of the Baldonnel stream within the site from 306m to 379m.
- 6.11. Given the relatively small realignment (73m) and 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.
- 6.12. The potential occurrence of contaminants (see **Table 6-1** above) and their capability of affecting water quality have been considered during the various phases of the Proposed Development.
- 6.13. There will be no significant contamination of water in the absence of mitigation. Notwithstanding this, during the construction phase, standard best practice measures will be adhered to.
- 6.14. Therefore, **no significant effects** are predicted on qualifying species of South Dublin Bay and River Tolka Estuary SPA

SUMMARY OF POTENTIAL IMPACTS ON NATURA SITES WITHIN 15KM

- 6.15. Potential impacts from the Proposed Development **will not be significant** or have a detrimental effect on the qualifying features of the Natura 2000 designated sites outlined within this report. The Proposed Development **will not significantly affect** any Natura 2000 designated site.

7. CUMULATIVE IMPACTS

- 7.1. As well as singular effects, cumulative effects need to be considered. Article 6 of the EU Habitats Directive and Regulation 15 of the European Communities (Natural Habitats) Regulations state that any plan or project that may (either alone or in combination with other plans or projects) significantly affect a Natura 2000 site should be the subject of an Appropriate Assessment.
- 7.2. Cumulative impacts can cause problems when proposals have a small impact on Natura 2000 sites. If other proposals have a small impact, the combined result can have a significant impact on the Natura site.

Table 2-11: Key Developments within 3km of the Proposed Development

Planning Reference	Project Type	Distance and Direction	Planning Status	Date Granted
SD20A/0121	Construction of 3 two storey data centres with mezzanine floors at each level of each facility and associated ancillary development that will have a gross floor area of 80,269sq.m on an overall site of 16.5hectares.	150m west	Granted	29/07/2020
SD20A/0295	Amendments and modifications to the permitted data centre development granted under Reg. Ref. SD18A/0134 - ABP Ref. ABP-302813-18 and the temporary substation permission granted under SD19A/0300 , Demolition of the existing single storey house of 'Erganagh' and the construction of a two storey data centre and delivery bays with associated three storey office block and services that will have a gross floor area of 35,426sq.m on an overall site of 9.2 hectares.	430m west	Granted	16/03/2021

SD14A/0023 and SD14A/0284	Construction of a two storey data storage facility (30,361sq.m.),	200m south west	Granted	23/02/2015
SD16A/0087	Site enabling works including demolition of existing vacant house and outbuildings (total floor area c.241sq.m), diversion of Baldonnel stream, provision of below ground attenuation and associated landscape works on a site of c.9.4ha	30m north	Granted	09/05/2016
SD13A/0265	Construction of a single data centre with plant at roof level (total gross floor area 35,000 sq.m. as the approved SD13A/0143	370m north	Granted	24/03/2014
SD13A/0015	Construction of a single storey data centre with plant at roof level (total gross floor area 15,825sq.m.)	850m north west	Granted	21/03/2013
SD20A/0058	Demolition of the existing single storey house of 'Little Acre' and its associated garage and other buildings; Construction of a gas powered Power Plant with all its associated elements; the part single and part two storey property of Bulmer and an agricultural building to the east of the overall site will not be demolished; The Power Plant compound of 14,475sq.m will	1.4km west	Granted	17/12/2020
SHD3ABP- 305267-19	1034 residential units comprising of (578 houses: 449 3-bed & 129 4-bed), 456 apartments: 142 1-bed, 224 2-bed, 90 3-bed), 2 childcare facilities (1 temporary, 1 permanent), 1 retail unit, 1 community facility and all associated site works.	1km east	Granted	04/08/2021

SD19A/0264	Warehouse with ancillary three storey office and staff facilities and associated development. The warehouse will have a parapet height of 17 metres with a gross floor area of 14,649sq.m including a warehouse area (13,494sq.m), ancillary office areas (1099sq.m) and staff facilities (56sq.m); provision of a new vehicular access/egress onto the Jordanstown Road; internal roadways; pedestrian access; 152 ancillary car parking spaces; bicycle parking; HGV yard including 26 HGV parking stands and 18 loading docks; hard and soft landscaping	2.5km southwest	Granted	10/10/2019
SD20A/0258	Demolition of the existing dwelling (252sq.m) and associated domestic garage (49sq.m) and shed (12sq.m) located towards the north-west of the site and the construction of 3 warehouses with ancillary office and staff facilities and associated development	3km south	Granted	10/50/2021
SD20A/0319	Amend permitted logistics/warehouse units C and D and incorporate other amendments, providing for a resultant; Unit C, 7,937sq.m including 757sq.m ancillary office space (permitted 11,492sq.m total); Unit D, 12,050sq.m including 911sq.m ancillary office space (permitted 7, 856sqm total); Overall increase of 639sq.m for Units C and D; provision of maintenance ramp to swale; resultant amendments to site	3km south	Granted	15/03/2021

	layout, minor revisions to flood mitigation strategy.			
SD18A/0180	Provision of a new 100,000m ³ covered reservoir approximately 31,520sq.m	4.3km south	Granted	16/07/2018
SD15A/0388	Residential development consisting of 218 3 and 4 bed 2 storey houses and a creche of (246sq.m) to be built on a site of circa of 8.16ha which will form Phase 1 of development of the Boherboy Neighbourhood within the Fortunestown Local Area Plan (2012)	4.3km south east	Granted	15/07/2016

- 7.1. As the Proposed Development is situated within an industrial area, the majority of planning applications are for similar developments. Beyond 1km of the Application site, many sites to the north and east are residential in nature, with industrial and military areas also noted to the south.
- 7.2. It has been concluded, that with measures included in Proposed Development and the implementation of best practice measures, that it is likely that there will be **no significant cumulative** effects to designated sites or any other ecological feature in combination with any other 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 seven designated sites, comprising four Special Areas of Conservation (SACs) and three Special Protection Areas (SPAs).
- 8.3. It was found that only one site is connected to the Proposed Development site. South Dublin Bay and River Tolka Estuary SPA and is approximately 30km downstream from the Application Site, the distance and dilution factor will negate any negative impact from the Proposed Development.
- 8.4. No evidence of any qualifying species or habitat associated with South Dublin Bay and River Tolka Estuary SPA was observed within the Application Site boundary.
- 8.5. It has been concluded that the Proposed Development will not lead to significant adverse impacts upon any Natura 2000 sites. Thus, no likely significant effect upon a Natura 2000 site is foreseen as a result of the proposals, either alone or in combination with any other development.
- 8.6. 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 Appropriate Assessment. It is considered that the next stage of the Appropriate Assessments is not required.

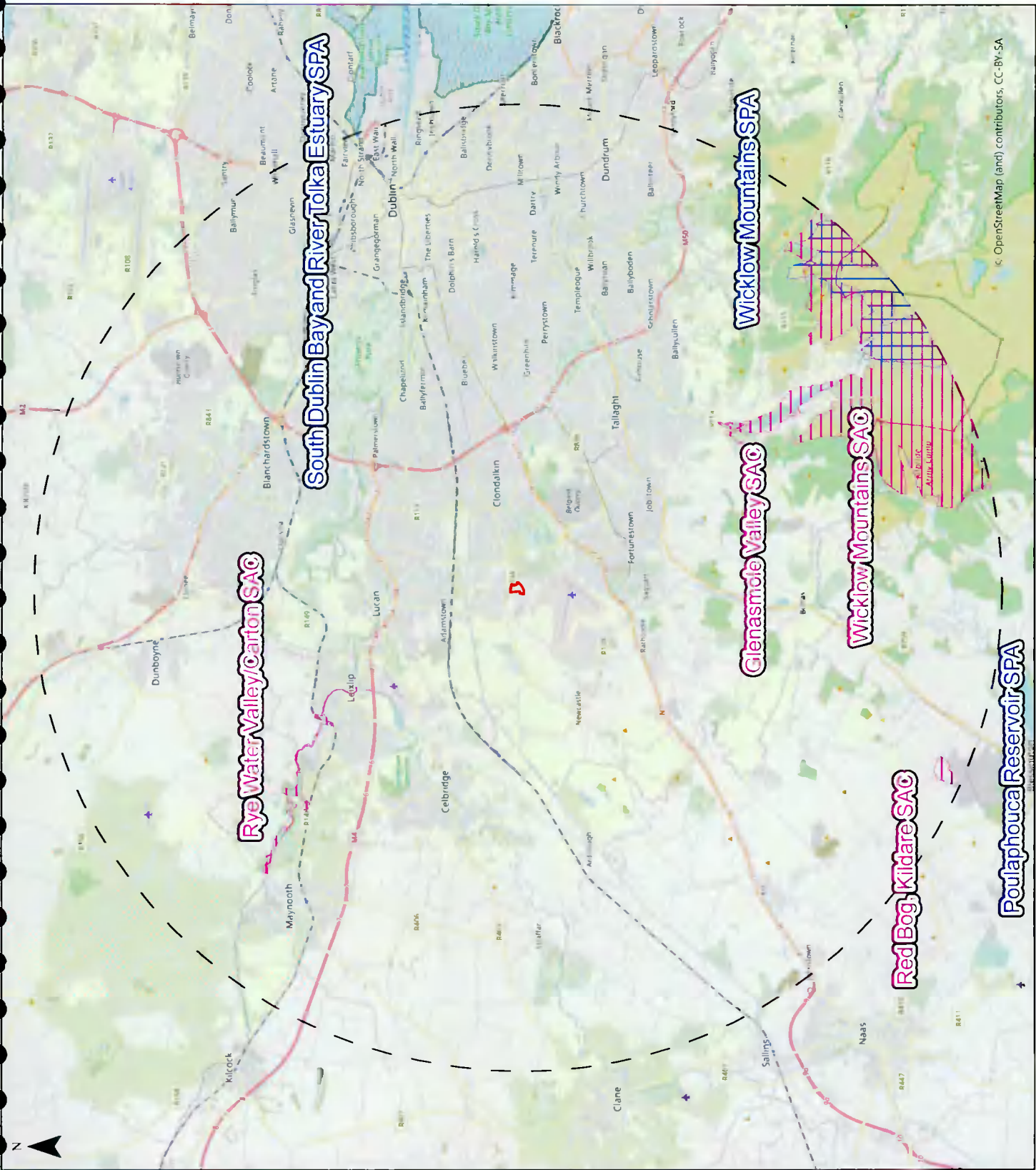
9. APPENDICES

Appendix A

- Figure 1: Natura 2000 Designated Sites

Profile Park Data Centre
 Natura 2000 Designated Sites
 Figure 1

- Key
-  Development Boundary
 -  15km Study Area
 -  Special Protection Area (SPA)
 -  Special Area of Conservation (SAC)



Neo Office Address
 Johnstown Business Centre, Johnstown House Naas Co. Kildare



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GLASGOW - HEAD OFFICE

Wright Business Centre, 1 Lonmay Road, Glasgow G33 4EL
T: 0141 773 6262
www.neo-environmental.co.uk

N. IRELAND OFFICE

83-85 Bridge Street
Ballymena, Co. Antrim
Northern Ireland
BT43 5EN
T: 0282 565 04 13

IRELAND OFFICE

Johnstown Business Centre
Johnstown House, Naas
Co. Kildare
T: 00 353 (0)45 844250
E: info@neo-environmental.ie

RUGBY OFFICE

Valiant Office Suites
Lumonics House, Valley Drive,
Swift Valley, Rugby,
Warwickshire, CV21 1TQ
T: 01788 297012

WARRINGTON OFFICE

Cinnamon House, Cinnamon Park
Crab Lane, Fearnhead
Warrington
Cheshire
T: 01925 661 716