HABITATS DIRECTIVE (APPROPRIATE ASSESSMENT) SCREENING REPORT FOR A PROPOSED ROAD BETWEEN COOKSTOWN ESTATE ROAD AND BELGARD ROAD



Prepared May 2020 by:



Forest, Environmental Research and Services Ltd. Sillogue Kilberry Navan Co. Meath 046 9062021/087 1611886 emma.reeves@fers.ie

OSI License No.: EN0064509

Table of Contents

1	Intr		tion							
	1.1	FERS Ltd. Company background								
	1.2	The	aim of this report	4						
	1.3	An c	outline of the Appropriate Assessment process	5						
	1.4	Met	hodology for Appropriate Assessment	6						
	1.4.	1	Stage (1) Appropriate Assessment Screening	6						
	1.4.	2	Stage (2) Preparation of Natura Impact Statement	7						
	1.4.	3	Stage (3) Assessment of Alternative Solutions	7						
	1.4.	4	Stage (4) Assessment where Adverse Impacts Remain	7						
	1.5	Con	sultations	8						
	1.5.	1	National Parks and Wildlife Service	8						
	1.5.	2	NBDC Database	8						
	1.5.	3	Other Data sources as relevant	8						
2	Scre	enin	g	9						
	2.1	Des	cription of proposed development	10						
	2.2	Des	cription of existing conditions on site							
	2.3	Des	cription of scope	16						
	2.4	Ider	ntification of Natura 2000 sites potentially impacted upon by the development	18						
	2.5	Sum	mary of Natura 2000 sites potentially impacted upon by the proposed development	t 22						
	2.6	Ider	ntification and evaluation of likely significant effect	26						
	2.6.	1	Description of source-pathway-receptor linkages and identification of "Zone of Influence"	26						
	2.6.	2	Sources of potential impacts	27						
	2.6.	3	Presence of pathway and receptor	27						
	2.6.	4	Natura 2000 site(s) with potential to be impacted upon and Zone of Influence	27						
	2.6.	5	Sources of potential Direct, Indirect or Secondary Impacts							
	2.6.	6	Potential cumulative impacts in association with other plans							
	2.6.	7	"Do nothing" scenario	33						
	2.6.	8	Gauging of Impacts on Natura 2000 sites – Integrity of site checklist	34						
	2.7	Con	clusions of screening	35						
3	Refe	erenc	es and Bibliography	36						

EXECUTIVE SUMMARY

South Dublin Co. Council is preparing a Part 8 for the construction of a road between Cookstown Estate Road and the Belgard Road. In accordance with Article 6(3) of the EU Habitats Directive, Appropriate Assessment screening is required. FERS Ltd won a competitive tender to undertake this work.

In order for Appropriate Assessment to comply with the criteria set out in the Habitats Directive and Part XAB of the Planning and Development Act 2000, an Appropriate Assessment undertaken by the Competent Authority must include an examination, analysis, evaluation, findings, conclusions and a final determination. The information to enable the Competent Authority to perform its statutory function in this regard is presented within this report.

Following an Appropriate Assessment screening exercise, no potential for significant negative impacts upon the Natura 2000 network associated with the proposed development have been identified. As such, it is deemed not necessary for further progression to Stage II Appropriate Assessment.

1 Introduction

1.1 FERS Ltd. Company background

Forest, Environmental Research and Services have been conducting ecological surveys and research since the company's formation in 2005 by Dr Patrick Moran and Dr Kevin Black. Dr Moran, the principal ecologist with FERS, holds a 1st class honours degree in Environmental Biology (UCD), a Ph.D. in Ecology (UCD), a Diploma in EIA and SEA management (UCD) a Diploma in Environmental and Planning Law (King's Inn) and a M.Sc. in Geographical Information Systems and Remote Sensing (University of Ulster, Coleraine). Patrick has in excess of 20 years of experience in carrying out ecological surveys on both an academic and a professional basis. Dr Emma Reeves, senior ecologist with FERS holds a 1st class honours degree in Botany and a Ph.D. in Botany. Emma has in excess of 10 years of experience in undertaking ecological surveys on an academic and professional basis. Ciarán Byrne, a senior ecologist with FERS holds a 1st class honours degree in Environmental Management (DIT) and a M.Sc. in Applied Science/Ecological Assessment (UCC). Ciarán has in excess of 5 years in undertaking ecological surveys on both an academic and a professional basis.

FERS client list includes National Parks and Wildlife Service, An Bord Pleanála, various County Councils, the Heritage Council, Teagasc, University College Dublin, the Environmental Protection Agency, Inland Waterways Association of Ireland, the Department of Agriculture, the Office of Public Works and Coillte in addition to numerous private individuals and companies. FERS Ltd. has prepared in excess of 300 Appropriate Assessment Screenings/Natura Impact Statements for a wide range of plans and projects.

1.2 The aim of this report

This report provides the information required in order to establish whether or not the proposed development is likely to have a significant ecological impact on any Natura 2000 sites, in the context of their conservation objectives and specifically on the habitats and species for which the sites have been designated.

This report has been prepared in accordance with the following European Commission Guidance:

- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC Commission Notice C (2018) 7621.
- DEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (Revised 2010).
- EC (2000) Managing Natura 2000 Sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC; and
- EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC: Clarification of the concepts of alternative solutions and imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the Commission.

This report has similarly been prepared with regard to relevant rulings by the Court of Justice of the European Union (CJEU), the High Court, and the Supreme Court including but not limited to:

- [2018] C-323/17 People Over Wind and Sweetman v Coillte Teoranta The (CJEU) ruled that mitigation measures could not be considered at the screening stage of an appropriate assessment.
- [2018] IESC 31 Connelly v An Bord Pleanála Appropriate Assessment must contain complete, precise and definitive findings;
- [2018] C-461/17 Holohan v An Bord Pleanála AA must be beyond reasonable scientific doubt, and assessment of impacts from construction details can only be deferred if the consenting authority can apply strict conditions to the consent ensuring no adverse impact on the site; and
- [2019] IEHC 84 Kelly v An Bord Pleanála The Irish High Court concluded that SUDS form part of the development and are not mitigation measures which a competent authority cannot consider at the screening for AA stage.

1.3 An outline of the Appropriate Assessment process

The "Habitats Directive" (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna) is the main legislative instrument for the protection and conservation of biodiversity within the European Union and lists certain habitats and species that must be protected within wildlife conservation areas, considered to be important at a European as well as at a national level. A "Special Conservation Area" or SAC is a designation under the Habitats Directive.

The "Birds Directive" (Council Directive 2009/147/EC on the Conservation of Wild Birds) provides for a network of sites in all member states to protect birds at their breeding, feeding, roosting and wintering areas. This directive identifies species that are rare, in danger of extinction or vulnerable to changes in habitat and which need protection. A "Special Protection Area" or SPA, is a designation under The Birds Directive.

Special Areas of Conservation and Special Protection Areas form a pan-European network of protected sites known as Natura 2000 sites.

The Habitats Directive sets out the protocol for the protection and management of SACs. The Directive sets out key elements of the system of protection including the requirement for Appropriate Assessment of plans and projects. The requirements for an Appropriate Assessment are set out in the EU Habitats Directive. Articles 6(3) and 6(4) of the Directive respectively, state:

"...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...."

"...If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of over-riding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted...."

1.4 Methodology for Appropriate Assessment

A number of guidance documents on the appropriate assessment process have been consulted during the preparation of this NIS. These are:

- Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (2000);
- 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 (Nov. 2001 published 2002);
- EU Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC (2007);
- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (DoEHLG 2009, Revised February 2010);
- European Communities (Birds and Natural Habitats) Regulations 2011 (DoEHLG 2011); and
- Commission notice "Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Brussels, 21.11.2018 C(2018) 7621 final.

The assessment requirements of Article 6 are generally dealt with in a stage by stage approach. The stages as outlined in "Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities" are outlined.

1.4.1 Stage (1) Appropriate Assessment Screening

This initial process identifies the likely impacts of a proposed project or plan upon a Natura 2000 site, either alone, or in combination with other projects or plans and considers whether these impacts are likely to be significant. A recent judgement in the ECJ (C323/17) that has large implications for appropriate assessment screening in Ireland has found that:

"...Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site..."

1.4.2 Stage (2) Preparation of Natura Impact Statement

The consideration of the impact of the project or plan on the integrity of the Natura 2000 Site, either alone or in combination with other projects or plans to the sites structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.

1.4.3 Stage (3) Assessment of Alternative Solutions

The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

1.4.4 Stage (4) Assessment where Adverse Impacts Remain

An assessment of compensatory measures where, in the light of an assessment of Imperative Reasons of Overriding Public Interest (IROPI), it is deemed that the project or plan should proceed.

At each stage, there is a determination as to whether a further stage in the Appropriate Assessment process is required. If, for example, the conclusions of the Screening stage indicate that there will be no significant impacts on the Natura 2000 site, there is no requirement to proceed further. Appropriate Assessment stages 1 and 2 deal with the main requirements for assessment under Article 6.3. Stage 3 may be part of Article 6(3) or a necessary precursor for Stage 4. This report is comprised of the ecological impact assessment and testing required under the provisions of Article 6(3) by means of the first stage of Appropriate Assessment, the screening process (as set out in the EU Guidance documents).

EU guidance states:

"... This stage examines the likely effects of a project or plan, either alone or in combination with other projects or plans, upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant...".

This report has been undertaken in accordance with the European Commission's Guidance on Appropriate Assessment (European Commission, 2001) which comprises the following:

- Description of the Plan.
- Identification of Natura 2000 sites potentially affected by the Plan.
- Identification and description of individual and cumulative impacts likely to result from the Plan.

- Assessment of the significance of the impacts identified on the conservation objectives of the site(s).
- Exclusion of sites where it can be objectively concluded that there will be no significant impacts on conservation objectives.

1.5 Consultations

1.5.1 National Parks and Wildlife Service

The primary body consulted with regard to matters involving Natura 2000 sites is the National Parks and Wildlife Service (NPWS). The role of the NPWS is:

- To secure the conservation of a representative range of ecosystems and maintain and enhance populations of flora and fauna in Ireland.
- To implement the EU Habitats and Birds Directives.
- To designate and advise on the protection of Natural Heritage Areas (NHA) having particular regard to the need to consult with interested parties.
- To make the necessary arrangements for the implementation of National and EU legislation and policies and for the ratification and implementation of the range of international Conventions and Agreements relating to the natural heritage.
- To manage, maintain and develop State-owned National Parks and Nature Reserves.

Information pertaining to Natura 2000 sites within the Republic of Ireland is typically held by NPWS and is publicly accessible through their on-line database at <u>www.npws.ie</u> . Consultations carried out involved querying the NPWS database for information pertaining to Natura 2000 sites within 15 km of the proposed development.

1.5.2 NBDC Database

The National Biodiversity Database Centre database was queried for records of species of conservation concern present within the immediate vicinity of the proposed development.

1.5.3 Other Data sources as relevant

2 Screening

Following the guidelines set out by NPWS (2009), Appropriate Assessment Screening (Phase I Appropriate Assessment) is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3) of the EU Habitats Directive. According to the guidelines as laid by NPWS (2009), Appropriate Assessment Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3).

- Is the plan or project directly connected to or necessary for the management of the site?
- Is the plan or project, alone or in combination with other such plans or projects likely to have significant negative effects on a Natura 2000 site(s) in view of the conservation objectives of that site(s)?

The proposed development is not directly connected to, or necessary for the management of any Natura 2000 site. The screening exercise will therefore inform the Appropriate Assessment process in determining whether the proposed development, alone or in combination with other plans and projects, has any potential to have significant effects on the Natura 2000 sites within the study area. If the effects are deemed to be significant, potentially significant, or uncertain, or it the screening process becomes overly complicated, then applying the Precautionary Principle and in accordance with Article 6(3) of the Habitats Directive, a Stage 2 Appropriate Assessment is required stage, i.e., *"The consideration of the impact of the project or plan on the integrity of the Natura 2000 Site, either alone or in combination with other projects or plans to the sites structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts."*

2.1 Description of proposed development

SDCC are currently preparing a Part 8 for the construction of a new link road between Cookstown Estate Road and Belgard Road. The approximate location of the proposed development site is illustrated in Figure 1, Figure 2, Figure 3 and Figure 4. Excerpts from the Engineers' drawings illustrating the proposed layout of the development are shown in Figure 5. Please note that the approximate location is illustrative only and indicates the area surveyed, the proposed development footprint is substantially smaller.



Figure 1:Approximate location of proposed development site (1:50,000)



Figure 2: Approximate location of proposed development site (1:25,000)



Figure 3: Approximate location of proposed development (1:10,000)



Figure 4: Approximate location of proposed development relative to surrounding habitats



Figure 5: Excerpt from Engineer's drawing illustrating layout

2.2 Description of existing conditions on site

A site visit was carried out on the 18th May 2020 by Dr Emma Reeves. The field work was carried out during the optimal window for undertaking ecological assessments. Given the nature of the site (largely BL3 – buildings/artificial surfaces with some GS2-rough dry meadow/scrub), it was deemed within the optimal window for the purposes of a site visit in order to identify the potential presence of Annex I Habitats or Annex II/IV species (habitats directive), Annex I Bird Species (EU Birds Directive) or species of conservation concern as relates to adjacent Natura 2000 sites.

The location at which the proposed development is to be constructed extends from the Belgard Road to the Cookstown Estate Road. The site extends into the grounds of a disused industrial estate. For the most part, the area of the industrial estate that will be affected by this development is the habitat type BL3 – Buildings and Artificial Surfaces, with a small amount of associated boundary hedge, semi-improved grassland, and scrub.



Figure 6: Entrance to the industrial estate, area in the foreground falls into the footprint of the proposed works.



Figure 7: Scrub alongside palisade fencing , adjacent to the B&Q garden centre, site works would require removal of the fencing and significant area of scrub.



Figure 8: Scrub along site boundary, B&Q in middle ground, Illustrates the more rank GSi2 habitat type in foreground.

2.3 Description of scope

The geographical scope of the assessment is to determine if the proposed development has the potential to have any significant negative impact on the Natura 2000 sites occurring within 15 km of the proposed development.

The NBDC database was accessed on 12/05/20 to query records occurring within the vicinity of the proposed development area (2 km square in which proposed development site is located (see Figure 9). The species of conservation concern as recorded within this 2 km square are illustrated in Table 1.



Figure 9: Location of polygon queried (National Biodiversity Data Centre)

Table 1: Species of conservation concern recorde	d within vicinity of the proposed development site
--	--

Scientific name	Common name	Date of last record
Hirundo rustica	Barn Swallow	15/09/2017
Larus ridibundus	Black-headed Gull	30/07/2017
Fulica atra	Common Coot	31/12/2001
Falco tinnunculus	Common Kestrel	31/12/2011
Alcedo atthis	Common Kingfisher	31/12/2001
Carduelis cannabina	Common Linnet	31/12/2011
Phasianus colchicus	Common Pheasant	31/12/2011
Aythya ferina	Common Pochard	31/12/2001
Gallinago gallinago	Common Snipe	31/12/2011
Sturnus vulgaris	Common Starling	28/11/2016
Columba palumbus	Common Wood Pigeon	31/12/2011
Passer montanus	Eurasian Tree Sparrow	31/12/2011
Anas penelope	Eurasian Wigeon	31/12/2001
Larus marinus	Great Black-backed Gull	31/12/2001
Phalacrocorax carbo	Great Cormorant	31/12/2001
Larus argentatus	Herring Gull	31/12/2001
Delichon urbicum	House Martin	15/09/2017
Passer domesticus	House Sparrow	31/12/2011
Larus fuscus	Lesser Black-backed Gull	31/12/2001
Tachybaptus ruficollis	Little Grebe	31/12/2001
Anas platyrhynchos	Mallard	10/02/2016
Larus canus	Mew Gull	31/12/2001
Cygnus olor	Mute Swan	31/12/2001
Vanellus vanellus	Northern Lapwing	31/12/2001
Falco peregrinus	Peregrine Falcon	31/12/2011
Columba livia	Rock Pigeon	31/12/2011
Alauda arvensis	Sky Lark	31/12/2011
Aythya fuligula	Tufted Duck	31/12/2001
Cygnus cygnus	Whooper Swan	31/12/2001
Emberiza citrinella	Yellowhammer	31/12/2011
Pastinaca sativa	Wild Parsnip	11/07/2015
Bombus (Melanobombus) Iapidarius	Large Red-Tailed Bumble Bee	07/06/2019
Meles meles	Eurasian Badger	24/01/2015
Oryctolagus cuniculus	European Rabbit	19/10/2018
Martes martes	Pine Marten	31/12/2012
Erinaceus europaeus	West European Hedgehog	14/07/2018

Of the species of conservation concern recorded, few if any are likely to utilise the habitats present. The area of rough grassland may be utilised by various invertebrates and bird species, buildings and hedgerows may be utilised by nesting birds.

2.4 Identification of Natura 2000 sites potentially impacted upon by the development

It is general practice, when screening a plan or project for compliance with the Habitats Directive, to identify all Natura 2000 sites within the functional area of the plan/project itself and within 15 km of the boundaries of the area the plan/project applies to (with an appropriate "Zone of Influence" identified from any Source-Pathway-Receptor linkages). This approach is currently recommended in the Department of the Environmental, Heritage and Local Government's document Guidance for Planning Authorities and as a precautionary measure, to ensure that all potentially affected Natura 2000 sites are included in the screening process. The maintenance of habitats and species within individual Natura 2000 sites at favourable conservation condition contributes to the overall maintenance of favourable conservation status of those habitats and species at a national level. It is therefore necessary to identify any potential impacts of the proposed development on the conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, is stable or increasing.
- The ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future.
- The conservation status of its typical species is favourable.

The National Parks and Wildlife Service deem that the favourable conservation status of a species is achieved when:

- Population data on the species concerned indicate that it is maintaining itself.
- The natural range of the species is neither being reduced, or likely to be reduced in the foreseeable future.
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

There are seven sites designated as a special area of conservation (SAC) and four areas designated as a Special Protection Area (SPA) within 15 km of the proposed development site (see Table 2, Figure 10 and Figure 11).

N2K Site Code	Designation	Site Name
000206	SAC	NORTH DUBLIN BAY SAC
000210	SAC	SOUTH DUBLIN BAY SAC
000397	SAC	RED BOG KILDARE SAC
000725	SAC	KNOCKSINK WOOD SAC
001209	SAC	GLENASMOLE VALLEY SAC
001398	SAC	RYE WATER VALLEY/CARTON SAC
002122	SAC	WICKLOW MOUNTAINS SAC
004006	SPA	NORTH BULL ISLAND SPA
004024	SPA	SOUTH DUBLIN BAY AND RIVER TOLKA ESTUARY SPA
004040	SPA	WICKLOW MOUNTAINS SPA
004060	SPA	POULAPHOUCA RESERVOIR SPA

Table 2: Natura 2000 sites within 15km of the proposed development



Figure 10: SACs within 15 km of proposed development



Figure 11: SPAs within 15 km of proposed development

2.5 Summary of Natura 2000 sites potentially impacted upon by the proposed development

There are 11 Natura 2000 sites within 15 km of the proposed development. Seven of these sites are SACs and 4 are SPAs A summary of the qualifying interests, availability of detailed conservation objectives, general conservation objectives and whether or not the Natura 2000 site is within 5 km of the proposed development is presented in Table 3.

Table 3: Summary of Natura 2000 sites within 15000 km

SITE CODE	SITE NAME	QUALIFYING INTEREST(S)	DETAILED CONSERVATION OBJECTIVES DOCUMENT	CONSERVATION OBJECTIVES (GENERIC)	WITHIN 5 KM OF THE PROPOSED DEVELOPMENT
000206	North Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide (1140). Annual vegetation drift lines (1210) Salicornia and other annuals colonizing mud and sand (1310) Atlantic salt meadow (<i>Glauco pucinellietalia maritimae</i> (1330) Petalwort <i>Petalophyllum ralfsii</i> (1395) Mediterranean salt meadows <i>Juncetalia maritimi</i> (1410) Embryonic shifting dunes (2110) Shifting dunes allowing the shoreline with <i>Ammophila</i> <i>arenaria</i> (white dunes) (2120) Fixed dunes with herbaceous vegetation (grey dunes) (2130) Humid dune slacks (2190)	Yes	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	No
00210	South Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide (1140)	Yes	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	No
001398	Rye Water Valley/Carton SAC	Petrifying springs with tufa formation (Cratoneurion) (7220) Narrow mouthed Whorl Snail (1014 Desmoulin's Whorl Snail (1016)	No Generic conservation objectives only	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	No
001209	Glenasmole Valley SAC	Semi natural grassland and scrubland on calcareous substrates <i>Festuco brometalia</i> important Orchid sites [6210]*. <i>Molinia</i> Meadows, on calcareous, peaty or clayey silt laden soils, Molinion <i>caeruleae</i> [6410] Petrifying springs with tufa formation (Cratoneurion)* [7220]	No Generic conservation objective only	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	Yes
002122	Wicklow Mountains SAC	1355 Otter Lutra lutra 3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and /or the Isoeto-Nanojuncetea	Yes	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	No

SITE CODE	SITE NAME	QUALIFYING INTEREST(S)	DETAILED CONSERVATION OBJECTIVES DOCUMENT	CONSERVATION OBJECTIVES (GENERIC)	WITHIN 5 KM OF THE PROPOSED DEVELOPMENT
		 3160 Natural dystrophic lakes and ponds 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> 4030 European dry heaths 4060 Alpine and Boreal Heaths 6130 Calaminarian grasslands of the Violiatalia calaminariae 6230 Species rich Nardus grasslands on siliceous substrates in mountain areas (and submoutain areas in continental areas)* 7130 Blanket bogs (* if active) 8110 Siliceous scree of the montane to snow levels. (Androsacetalia alpinae and Galeopsietalia ladani) 8210 Calcareous rocky slopes with chasmophytic vegetation. 8220 Siliceous rocky slopes with chasmophytic vegetation 91AO Old sessile Oak woodlands with <i>Ilex</i> and <i>Blechnum</i> in the British Iles 			
000725	Knocksink Wood SAC	7220 Petrifying springs with tufa formation (Cratoneurion) * 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* * denotes a priority habitat	No Generic Conservation objectives	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	No
000397	Red Bog SAC	7140 Transition mires and quaking bogs	Yes		No
004024	South Dublin Bay and River Tolka Estuary SPA	A046 Brent Goose Branta bernicla hrota A130 Oystercatcher Haematopus ostralegus A137 Ringed Plover Charadrius hiaticula A141 Grey Plover Pluvialis squatarola A143 Knot Calidris canutus A144 Sanderling Calidris alba A149 Dunlin Calidris alpina alpina A157 Bar-tailed Godwit Limosa lapponica A162 Redshank Tringa totanus A179 Black-headed Gull Chroicocephalus ridibundus A192 Roseate Tern Sterna dougallii A193 Common Tern Sterna hirundo	Yes	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	No

SITE CODE	SITE NAME	QUALIFYING INTEREST(S)	DETAILED CONSERVATION OBJECTIVES DOCUMENT	CONSERVATION OBJECTIVES (GENERIC)	WITHIN 5 KM OF THE PROPOSED DEVELOPMENT
		A194 Arctic Tern <i>Sterna paradisaea</i> A999 Wetlands			
004006	North Bull Island SPA	A046 Brent Goose Branta bernicla hrota A048 Shelduck Tadorna tadorna A052 Teal Anas crecca Pintail Anas acuta (A054) Shoveler Anas clypeata (A056) Oystercatcher Haematopus ostralegus(A140) Golden Plover Pluvialis apricaria (A130) Grey Plover Pluvialis aquitarola (A141) Knot Calidris canutus (A143) Sanderling Calidris alba (A144) Dunlin Calidris alpina (A149) Black-tailed Godwit Limosa limosa (A156) Bar-tailed Godwit Limosa lapponica (A157) Curlew Numenius arquata (A160) Redshank Tringa totanus (A162) Turnstone Arenaria interpres (A169) Black-headed Gull Chroicocephalus ridibundus (A179) Wetlands(A999)	Yes	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	No
004063	Poulaphouca Reservoir SPA	A043 Greylag Goose Anser anser A183 Lesser Black-backed Gull Larus fuscus	No Generic Conservation objectives only	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	No
004040	Wicklow Mountains SPA	A098 Merlin Falco columbarius A103 Peregrine Falco peregrinus	No Generic conservation objectives only		No

2.6 Identification and evaluation of likely significant effect

2.6.1 Description of source-pathway-receptor linkages and identification of "Zone of Influence"

The basis for identifying potential impacts/significance thereof and defining the zone of influence is the "Source-Pathway-Receptor" (S-P-R) model. This model underpins all water-protection schemes in Ireland, as well as the EU Water Framework Directive on which both surface water and groundwater regulations are based. When examining S-P-R relationships in regard to impacts on Natura 2000 sites, the main questions to be considered are:

- Source characterisation Identification of potential source(s) of the impact(s);
- Pathways analysis Identification of means through which potential impacts could take place, for example is there a hydrogeological or hydrological link that can deliver a pollutant source to a nearby receptor; and
- Receptor identification identification of Natura 2000 sites/qualifying interests potentially affected.

Therefore, the key questions to be considered are:

- Is there any source(s) of impact(s) on water quality associated with the proposed development?
- Is there a pathway present between the source of impact and a Natura 2000 site?; and
- What are the Natura 2000 sites/qualifying interests potentially impacted upon?

2.6.2 Sources of potential impacts

Given the nature and location of the proposed development the primary sources of potential impacts concern:

- Impacts on the water quality associated with contamination of surface and/or ground water during construction.
- Impacts on the water quality associated with contamination of surface and/or ground water during operation.

2.6.3 Presence of pathway and receptor

The proposed development will be connected to existing services, and assuming the capacity of the existing services (a matter for the Competent Authority) is sufficient to handle the extra load, there is no direct pathway or receptor as regards significant impacts on surface/ground water (such as untreated discharge). There is no pathway between the proposed development and any of the 11 Natura 2000 within the 15 km buffer zone.

2.6.4 Natura 2000 site(s) with potential to be impacted upon and Zone of Influence

In the absence of a source-pathway-receptor linkage, there is no potential for negative impacts associated with the proposed development on any Natura 2000 site.

2.6.5 Sources of potential Direct, Indirect or Secondary Impacts

2.6.5.1 Direct Impacts

No habitat for which any Natura 2000 sites are designated will be lost through land-take, etc. There is, therefore, no direct impact associated with the proposed development foreseen.

2.6.5.2 Indirect Impacts

The proposed development will be connected to existing services. Assuming that the existing services are sufficient as regards the extra loading associated with the proposed development, there is no significant potential for impacts on ground/surface waters owing to operational activities.

There is, therefore, no indirect negative impact of the proposed development on the Natura 2000 network foreseen.

2.6.5.3 Secondary Impacts

In the absence of any significant direct or indirect negative impacts, no secondary impacts are foreseen.

Of note, in terms of climate change, virtually all construction activity now has the potential to impact on climate change. Integral to every construction project should be measures (such as planting of roadside trees/pollinator friendly shrubs etc.) designed to mitigate against the contribution of the project to climate change.

A summary of the potential for primary impacts upon Natura 2000 sites within the zone of influence of the proposed development is summarized in Table 4. The potential for impacts upon the Natura 2000 sites identified in the event of negative impacts is summarized in Table 5. There are no potential impacts foreseen on the qualifying interests of identified Natura 2000 sites.

Site Name Direct Indirect/ Impacts Secondary Impacts		Secondary	Resource requirements (water abstraction etc.)	Emissions (to land, water, or air)	Excavation requirements	Duration of construction, operation, and decommissioning
Wicklow Mountains SPA	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Poulaphouca Reservoir SPA	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
North Bull Island SPA	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
South Dublin Bay and River Tolka Estuary SPA	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Red Bog SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
North Dublin Bay SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
South Dublin Bay SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Rye Water Valley/Carton SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Glenasmole Valley SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Wicklow Mountains SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Knocksink Wood SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen

Table 4: Summary of the potential for impacts upon Natura 2000 sites.

Site Name	Reduction of habitat area	Disturbance to key species	Habitat/species fragmentation	Reduction in species density	Changes in Key Indicators of Conservation Value	Climate change
Wicklow Mountains SPA	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Poulaphouca Reservoir SPA	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
North Bull Island SPA	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
South Dublin Bay and River Tolka Estuary SPA	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Red Bog SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
North Dublin Bay SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
South Dublin Bay SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Rye Water Valley/Carton SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Glenasmole Valley SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Wicklow Mountains SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen
Knocksink Wood SAC	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen	None foreseen

Table 5: Summary of the potential for changes to Natura 2000 sites.

2.6.6 Potential cumulative impacts in association with other plans

Article 6(3) of the Habitats Directive requires an assessment of a plan/project to consider other plans/projects that might, in combination with the proposed plan/project, have the potential to adversely impact upon Natura 2000 sites.

EU Water framework DirectiveMaintain and enhance water quality within the EUNone predictedEU Freshwater Fish DirectiveProtect freshwater bodies within the EU suitable for sustaining fish populationsNone predictedEU Groundwater DirectiveMaintain and enhance the quality of groundwater within the EUNone predictedEU Floods DirectiveThe Floods Directive applies to river basins and coastal areas at risk ofNone predicted
EU Freshwater Fish DirectiveProtect freshwater bodies within the EU suitable for sustaining fish populationsNone predictedEU Groundwater DirectiveMaintain and enhance the quality of groundwater within the EUNone predictedEU Floods DirectiveThe Floods Directive applies to riverNone predicted
EU suitable for sustaining fish populations EU Groundwater Directive Maintain and enhance the quality of groundwater within the EU EU Floods Directive The Floods Directive applies to river
populations EU Groundwater Directive Maintain and enhance the quality of groundwater within the EU EU Floods Directive The Floods Directive applies to river None predicted
EU Groundwater Directive Maintain and enhance the quality of groundwater within the EU None predicted EU Floods Directive The Floods Directive applies to river None predicted
groundwater within the EU EU Floods Directive The Floods Directive applies to river None predicted
EU Floods Directive The Floods Directive applies to river None predicted
basins and coastal areas at risk of
flooding
Nitrates Directive Reducing water pollution within the None predicted
EU
Urban Waste-water treatment Protecting the environment from None predicted
Directive adverse impacts of waste-water
discharge
Sewage Sludge Directive Regulate the use of sewage sludge None predicted
The IPPC Directive To achieve a high level of None predicted
environmental protection
National Development Plan To promote more balanced spatial None predicted
and economic development
National Spatial Strategy To achieve a better balance of social, None predicted
economic and physical development
across Ireland
Eastern Catchment Flood Risk To meet the requirements of the None predicted
Assessment and Management Study Floods Directive
South Dublin Co. Council Sustainable development of South None predicted
Development Plans Dublin Co. Council
Future phases of flood defence Repairing flood defences None predicted
repairs

Table 6: Potential cumulative impacts.

Plan	Purpose	Cumulative impact
Local Area Development Plans	Various	None predicted
Quarrying activities, water	Various	None predicted
abstraction, discharge, etc		
Current and future planning	There do not appear to be any	None predicted
permissions –	pending or granted planning	
	permissions in the immediate vicinity	
South Dublin Co. Council Part 8's	Various	An Appropriate Assessment Screening
		exercise of any Part 8 would be
		undertaken
Land spreading of organic waste by	Fertilising land, disposing of organic	None predicted
farmers in the locality	waste	

It is assumed in this Appropriate Assessment screening that the services are sufficient to handle the increased loading (water run-off, foul waste, etc.) associated with the proposed development. A query of the South Dublin Co. Council Planning website (see Figure 12) indicates there are no currently outstanding planning applications in the immediate *environs* of the proposed development area. Assuming no hydrological impacts, there is, therefore, no cumulative impact of the proposed development foreseen.



Figure 12: Excerpt from South Dublin County Council planning website

2.6.7 "Do nothing" scenario

No negative impacts are foreseen. The "Do Nothing" scenario is, therefore, not significantly different.

2.6.8 Gauging of Impacts on Natura 2000 sites – Integrity of site checklist

The potential impacts of the proposed development on Natura 2000 sites are gauged using a checklist, which aids in determining the potential of development to have a significant negative impact on any Natura 2000 site. This checklist consists of a number of pertinent questions as set out in Table 7.

Table 7: Potential	of the	proposed	development	to	impact	on	Natura	2000	sites	in	the	absence	of	suitable
mitigation/preventative measures														

Does the Plan have the potential to:	Yes/No
Cause delays in progress towards achieving the conservation	No
objectives of the Natura 2000 site?	
Interrupt progress toward achieving the conservation objectives of	No
the Natura 2000 site?	
Disrupt those factors helping to maintain the favourable conditions	No
at the Natura 2000 site?	
Interfere with the balance, distribution and density of key species	No
that are the indicators of the favourable condition of the Natura	
Cause changes to the vital defining aspects (e.g. nutrient balance)	No
that determine how the Natura 2000 site functions as a habitat or	
Change the dynamics of the relationships (between, for example,	No
soil and water or plants and animals) that define the structure	
Interfere with predicted or expected natural changes to the Natura	No
2000 site (such as water dynamics or chemical composition)?	
Reduce the area of key habitats within the Natura 2000 site?	No
Reduce the population of key species of the Natura 2000 site?	No
Alter the balance between key species of the Natura 2000 site?	No
Reduce the biodiversity of the Natura 2000 site?	No
Result in disturbance that could affect population size or density or	No
the balance between key species within the Natura 2000 site?	
Result in fragmentation?	No
Result in the loss or reduction of key features of Natura 2000 sites?	No

2.7 Conclusions of screening

According to the guidance published by the NPWS (DoEHLG, 2009), Screening for Appropriate Assessment can either identify that a Natura Impact Statement (NIS) is not required where:

- A project/proposal is directly related to the management of the site; or
- There is no potential for significant impacts affecting the Natura 2000 network

Where the screening process identifies that significant impacts are certain, likely or uncertain the project must either proceed to Stage II Appropriate Assessment or be rejected.

The potential impacts that will arise from the proposed development have been examined in the context of a number of factors that could potentially impact upon the integrity of the Natura 2000 network. On the basis of the findings of this Screening for Appropriate Assessment, it is concluded that the development:

- Is not directly connected with or necessary to the management of any Natura 2000 site, within 15 Km; and
- Will not have any significant negative impacts upon the Natura 2000 network.

Following an examination, analysis and evaluation of the relevant information and the potential for significant effects on the conservation objectives of Natura 2000 sites within the *environs* of the proposed development, and applying the Precautionary Principle, it is possible to say with scientific certainty that (on the basis of objective information and in the absence of specific prescribed precautionary/mitigation measures) the proposed development, individually or in combination with other plans or projects, does not have the potential to have significant negative impacts on any SPA/SAC within 15Km of the site.

No potential significant negative impacts of the proposed development upon the Natura 2000 network were identified during the screening process. In accordance with Article 6(3) of the Habitats Directive, a Stage 2 Appropriate Assessment is not required, i.e., *"The consideration that there will be no impact of the project or plan on the integrity of any Natura 2000 Site, either alone or in combination with other projects or plans to the sites' structure and function and its conservation objectives.*

3 References and Bibliography

Environmental Protection Agency (1995) Advice notes on current practice in the preparation of Environmental Impact Statements. EPA, Wexford, Ireland.

Environmental Protection Agency (1997) Draft Guidelines to be contained in the information to be contained in Environmental Impact Statements. EPA, Wexford, Ireland.

European Commission (2000) Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive. Luxembourg: Office for Official Publications of the European Communities

Fossitt, J. (2001) A Guideline to Habitats in Ireland. The Heritage Council, Kilkenny, Ireland.

European Commission (2002) 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. Luxembourg: Office for Official Publications of the European Communities

European Commission (2007) European Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC; Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the Commission.

DEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities. DEHLG

DEHLG (2011) European Communities (Birds and Natural Habitats) Regulations 2011. DEHLG.

DAHG (2013). The Status of EU Protected Habitats and Species in Ireland 2013. DAHG.

Environmental Protection Agency. (2017) Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR). EPA, Wexford, Ireland.

Commission notice "Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", Brussels, 21.11.2018 C(2018) 7621 final.

www.sdcc.ie - official website of South Dublin Co. Council

www.npws.ie – website of the National Parks and Wildlife Service, source of information for data regarding Natura 2000 sites and Article 17 Conservation Assessments.

www.europa.eu – official website of the European Union, source of information on EU Directives.