

Appropriate Assessment Screening Report

prepared for Delphi Design

on behalf of Sordino Ltd. and Durkan Estates Ireland Ltd.

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This report has been prepared by Scott Cawley Ltd. in accordance with the particular instructions and requirements of our agreement with the Client, the project's budgetary and time constraints and in line with best industry standards. The methodology adopted and the sources of information used by Scott Cawley Ltd. in providing its services are outlined in this report. The scope of this report and the services are defined by these circumstances.

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The conclusions presented in this report represent Scott Cawley Ltd.'s best professional judgement based on review of site conditions observed during the site visit (if applicable) and the relevant information available at the time of writing. Scott Cawley Ltd. has used reasonable skill, care and diligence in compiling this report.



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1 Introduction

- 1 This report, which contains information required for the competent authority (in this instance An Bord Pleanála) to undertake a screening for Appropriate Assessment (AA), has been prepared by Scott Cawley Ltd. on behalf of the applicant. It provides information on, and assesses the potential for, the proposed development to impact on the Natura 2000 network (hereafter referred to as European sites)¹. The proposed development consists of 655 no. residential units and c. 680m² of creche space and the associated ancillary roads, drainage pumping and services infrastructure. The residential units will consist of semi-detached and terraced houses, duplex apartments and 6 no. apartment blocks.
- 2 An AA is required if significant effects on European sites arising from a proposed development cannot be ruled out at the screening stage, either alone or in combination with other plans or projects. It is the responsibility of the competent authority to make a decision as to whether or not the proposed development is likely to have significant effects on European sites, either individually or in combination with other plans or projects².

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

2 Methodology

2.1 Author Statement

Síofra Quigley is a Consultant Ecologist with Scott Cawley. She obtained an honours degree in Zoology, from National University of Ireland Galway, and a Masters in Wildlife Biology and Conservation from Edinburgh Napier University. She has four years' professional experience working in the UK and Ireland on large to small scale infrastructure projects, with governmental and private clients. Síofra is experienced in carrying out field surveys in several protected species including bat, otter, badger, red squirrel, reptile, pine marten and mountain hare. She has also been involved in radio tracking mountain hares and bats, bat call analysis, badger bait marking, acting as an Ecological Clerk of Works, Phase 1 habitat surveys and reports (Joint Nature Conservation Committee, 2010), Fossitt (2000) habitat assessments, and desk top studies. Since joining Scott Cawley, Síofra's work involves the preparation of reports, including Ecological Impact

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

The Habitats Directive (92/43/EEC) and the associated Birds Directive (2009/147/EC) are transposed into Irish legislation by Part XAB of the 2000 Act and the Birds and Natural Habitats Regulations 2011. The legislative provisions for appropriate assessment screening for planning applications are set out in Section 177U of the 2000 Act.'

In Ireland these sites are designed as European sites - defined under the Planning Acts and/or the Birds and Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (d) a special area of conservation, (e) a candidate special protection area, or (f) a special protection area. They are commonly referred to in Ireland as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

² Under Section 177U of the Planning and Development Act 2000 (as amended) (the "Planning Acts"), planning authorities and An Bord Pleanála cannot grant planning permission for development without first screening out the likelihood for significant effects to arise to a European site. If likely significant effects to a European site cannot be screened out, the decision maker must proceed to carry out a full Appropriate Assessment of the proposal in accordance with Section 177V of the Planning Acts.

Assessment and Appropriate Assessment reports for residential, commercial, and infrastructural projects across Ireland.

- 4 Maeve Maher-McWilliams is a Principal Ecologist with Scott Cawley. She holds an honours degree in Biological Sciences from Queens University Belfast and attained a distinction in her Masters in Evolutionary and Behavioural Ecology from University of Exeter. She is an Associate member of CIEEM. She has worked in ecological consultancy for over nine years and has worked on a range of large to small scale projects across Ireland and the UK. Maeve's primary technical specialism is ornithology, however her skills extend to protected mammal and habitat surveys. Her involvement extends from inception to post planning compliance, survey completion, project and survey management, carrying out of Ecological Impact Assessment, and authoring of EIAR Chapters, Appropriate Assessment Screening reports and Natura Impact Statements. She regularly undertakes surveys and prepares AA Screening, NIS and EcIA reports.
- 5 Ashling Cronin is a Technical Director with Scott Cawley Ltd. She holds a Masters in Ecological Assessment, an honours degree in Applied Ecology from University College Cork and an Advanced Diploma in Planning and Environmental Law in Kings Inns. She has over eleven years' experience in environmental management and environmental and ecological assessment across both the private and public sector. Ashling has a keen interest in both national and international environmental legislation and has extensive experience in the Appropriate Assessment (AA) process. She has been the lead ecologist for the preparation of a number of Natura Impact Statements for a range of development types and national level plans, as well Natura Impact Reports for a range of land use and non-land use plans. Ashling also provides technical review and due diligence of Appropriate Assessment documentation for public and local authorities to aid their decisionmaking process as well as peer review of AA documentation prior to lodgement of planning applications.

2.2 Guidance

- 6 This Appropriate Assessment Screening Report has been prepared with regard to the following guidance documents, as relevant:
 - OPR Practice Note PN01. Appropriate Assessment Screening for Development Management (Office of the Planning Regulator, 2021)
 - Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 revision)
 - Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10
 - Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission, 2001)
 - Communication from the Commission on the precautionary principle (European Commission, 2000), and
 - Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (European Commission, 2019)

2.3 Assessment Methodology

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

- 8 Significant effects on a European site are those that would undermine the conservation objectives supporting the favourable conservation condition of the Qualifying Interest (QI) habitats and/or the QI/Special Conservation Interest (SCI) species of a European site(s).
- 9 Screening for Appropriate Assessment involves the following steps:



- 10 When screening for AA, 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. This was confirmed by the European Court in Case C-323/17, People Over Wind v Coillte.
- 11 If the conclusions at the end of screening are that there is no likelihood of significant effects occurring on any European sites as a result of the proposed plan or project, either alone or in combination with other plans and projects, then there is no requirement to undertake an Appropriate Assessment.

- 12 In establishing which European sites are potentially at risk (in the absence of mitigation) from the proposed development, a source-pathway-receptor approach was applied. In order for an impact to occur, there must be a risk enabled by having a source (e.g. water abstraction or construction works), a receptor (e.g. a European site or its QI(s) or SCI(s)³), and a pathway between the source and the receptor (e.g. pathway by air for airborne pollution, or a pathway by a watercourse for mobilisation of pollution). For an impact to occur, all three elements must exist; the absence or removal of one of the elements means there is no possibility for the impact to occur.
- 13 The identification of source-pathway-receptor connection(s) between the proposed development and European sites essentially is the process of identifying which European sites are within the Zone of Influence (ZoI) of the proposed development, and therefore potentially at risk of significant effects. The ZoI is the area over which the proposed development could affect the receiving environment such that it could potentially have significant effects on the QI habitats or QI/SCI species of a European site, or on the achievement of their conservation objectives⁴.
- 14 The identification of a source-pathway-receptor link does not automatically mean that significant effects will arise. The likelihood for significant effects will depend upon the characteristics of the source (e.g. extent and duration of construction works), the characteristics of the pathway (e.g. direction and strength of prevailing winds for airborne pollution) and the characteristics of the receptor (e.g. the sensitivities of the European site and its QIs/SCIs). Where uncertainty exists, the precautionary principle⁵ is applied.

2.4 Desktop Data Review

- 15 The desktop data sources used to inform the assessment presented in this report are as follows (accessed in June 2021):
 - Online data available on European sites and protected habitats/species as held by the National Parks and Wildlife Service (NPWS) from <u>www.npws.ie⁶</u>, including conservation objectives documents
 - Online data available on protected species as held by the National Biodiversity Data Centre (NBDC) from <u>www.biodiversityireland.ie</u>
 - Information on the surface water network and surface water quality in the area available from www.epa.ie

³ The term qualifying interest is used when referring to the habitats or species for which an SAC is designated; the term special conservation interest is used when referring to the bird species (or wetland habitats) for which an SPA is designated.

⁴ As defined in the *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM, 2018)

 $^{^{5}}$ The precautionary principle is a guiding principle that derives from Article 191 of the Treaty on the Functioning of the European Union and has been developed in the case law of the European Court of Justice (e.g. ECJ case C-127/02 – Waddenzee, Netherlands).

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

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

⁶ The following SAC and SPA GIS boundary datasets are the most recently available at the time of writing: SAC_ITM_2019_12 and SPA_ITM_2019_12.

- Information on groundwater resources and groundwater quality in the area available from <u>www.epa.ie</u> and <u>www.gsi.ie</u>
- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie
- Information on the location, nature and design of the proposed development supplied by the applicant's design team
- Hydrological & Hydrogeological Qualitative Risk Assessment for Proposed Residential Development at Boherboy, Saggart, Co. Dublin (AWN, 2020).

2.5 Baseline Surveys

- 16 This section describes the ecological surveys carried out to inform the assessment of likely significant effects on European sites.
- 17 Winter bird surveys were carried out on the 25th February 2020 by Caroline Kelly BSc (Hons) MSc and on the 19th and 23rd March 2020, 17th Feb 2021, and 18th March 2021 by Shane Brien BSc (Hons) MSc, both of Scott Cawley Ltd. Habitat and flora surveys, terrestrial fauna surveys, and ground-level assessments of trees and structures were undertaken on the 29th June 2020 by Síofra Quigley BSc (Hons) MSc of Scott Cawley Ltd, with additional mammal surveys carried out on the 15th March 2021 by Siofra Quigley and Shane Brien. Breeding bird surveys were undertaken on the 15th and 26th June 2020 by Brian Porter, an independent ornithologist, and on the 27th May and 18th June 2021 by Síofra Quigley.
- ¹⁸ Bat surveys were undertaken on the 25th June 2020 by Niall McHugh BSc (Hons) of Scott Cawley and on the 9th July 2020 by Kevin Delahunty BSc (Hons) MSc, an independent bat surveyor.

2.5.1 Habitats and Flora Survey

A habitat survey was undertaken of the proposed development site on the 29th June 2020 by Síofra Quigley following the methodology described in *Best Practice Guidance for Habitat Survey and Mapping*⁷. All habitat types were classified using the *Guide to Habitats in Ireland*⁸, recording the indicator species and abundance using the DAFOR scale⁹ and recording any species of conservation interest. Vascular and bryophyte plant nomenclature generally follow that of *The National Vegetation Database*¹⁰, having regard to more recent taxonomic changes to species names after the *New Flora of the British Isles*¹¹ and the British Bryological Society's *Mosses and Liverworts of Britain and Ireland: A Field Guide*¹².

⁷ Smith, G.F., O'Donoghue, P., O'Hora, K. & Delaney, E. (2011) *Best Practice Guidance for Habitat Survey and Mapping*. The Heritage Council Church Lane, Kilkenny, Ireland.

⁸ Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. Heritage Council, Kilkenny.

⁹ The DAFOR scale is an ordinal or semi-quantitative scale for recording the relative abundance of plant species. The name DAFOR is an acronym for the abundance levels recorded: Dominant, Abundant, Frequent, Occasional and Rare.

¹⁰ Weekes, L.C. & FitzPatrick, Ú. (2010) The National Vegetation Database: Guidelines and Standards for the Collection and Storage of Vegetation Data in Ireland. Version 1.0. Irish Wildlife Manuals, No. 49. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.

¹¹ Stace, C. (2019) *New Flora of the British Isles.* 4th Edition. C&M Floristics.

¹² Atherton, I., Bosanquet, S. & Lawley, M. (2010) *Mosses and Liverworts of Britain and Ireland: A Field Guide*. Latimer Trend & Co., Plymouth.



2.5.2 Fauna Surveys

2.5.2.1 Terrestrial Mammals (excl. Bats)

19 A terrestrial fauna survey (excluding bats) was undertaken on the 29th June 2020 and 1st March 2021 by Siofra Quigley, and Shane Brien. The presence/absence of terrestrial fauna species were surveyed through the detection of field signs such as tracks, markings, feeding signs, and droppings, as well as by direct observation. The habitats on site were assessed for signs of usage by protected/red-listed fauna species, and their potential to support these species. Surveys to check for the presence of badger setts and otter holts within the study area, and to record any evidence of use, were undertaken. A camera trap was also set up to confirm presence or absence of badgers within the site.

2.5.2.2 Breeding Birds

20 Breeding bird surveys were undertaken on the 15th and 26th June 2020 by Brian Porter, an independent ornithologist, and on the 27th May and 18th June 2021 by Siofra Quigley, using a methodology adapted from the *Bird Monitoring Methods - A Manual of Techniques for Key UK Species*¹³. Lands within the study area were slowly walked in a manner allowing the surveyor to come within 50m of all habitat features. Birds were identified by sight and song, and general location and activity were recorded using the British Trust for Ornithology (BTO) species and activity codes.

2.5.2.3 Wintering Birds

21 Wintering bird surveys were undertaken on the 25th February 2020 by Caroline Kelly, and on the 19th and 23rd March 2020, 17th Feb 2021, and 16th March 2021 by Shane Brien using a methodology based on the *Bird Monitoring Methods - A Manual of Techniques for Key UK Species*. The study area covered the lands within the proposed development site. Lands were initially surveyed visually using binoculars/scope from two vantage points at the edge of the study area followed by a walkover of the area to identify birds which may not be visible from a distance (e.g. waders) and evidence of usage by wildfowl such as swans or geese (e.g. droppings). Birds were identified by sight and general location and activity were recorded using the British Trust for Ornithology (BTO) species and activity codes.

3 Provision of Information for Screening for Appropriate Assessment

- 22 The following sections provide information to facilitate the Appropriate Assessment screening of the proposed development to be undertaken by the competent authority.
- 23 A description of the proposed development and the receiving environment is provided to identify the potential ecological impacts. The environmental baseline conditions are discussed, as relevant to the assessment of ecological impacts where they may highlight potential pathways for impacts associated with the proposed development to affect the receiving ecological environment (e.g. hydrogeological and hydrological data).
- 24 The potential impacts are examined in order to define the potential zone of influence of the proposed development on the receiving environment. This then informs the assessment of whether the proposed development will result in significant effects on any European sites; i.e. affect the conservation objectives supporting the favourable conservation condition of the European site's QIs or SCIs.

3.1 Description of the Proposed Development

25 Kelland Homes Ltd and Durkan Estates Ireland Ltd are applying to An Bord Pleanála for permission for a strategic housing development at a site at Boherboy, Saggart, County Dublin. To the immediate north of

¹³ Gilbert, G., Gibbons, D.W. & Evans, J. (1998) *Bird Monitoring Methods - A Manual of Techniques for Key UK Species*. RSPB: Sandy

the site is the Carrigmore residential estate, to the west are agricultural lands and a single dwelling, to the east is the Corbally residential estate while to the south is the Boherboy Road. The proposed application represents the development of the entire Boherboy Neighbourhood as identified within the Fortunestown Local Area Plan (2012).

- The development will consist of 655 no. dwellings, comprised of 257 no. 2, 3 & 4 bed, 2 & 3 storey detached, semi-detached & terraced houses, 152 no. 1, 2 & 3 bed duplex units in 12 no. 2 & 3 storey blocks, and 246 no. 1, 2 & 3 bed apartments in 9 no. buildings ranging in height from 2, 3-5, 4-5 and 5 storeys, and a 2 storey crèche (693m²). Access to the development will be via one no. vehicular access point from the Boherboy Road, along with proposed upgrade works to Boherboy Road to include the provision of a roadside footpath along the front of the site at the Boherboy Road, continuing eastwards to the junction with the N81 Blessington Road (for an overall distance of c.370m). The proposed development also provides for pedestrian and cyclist connectivity to the adjoining District Park to the north-east, and vehicular connections to adjoining developments at Corbally Heath to the east and Carrigmore Green to the north.
- 27 The proposed development includes for all associated site development works, public open spaces, including alongside the Corbally Stream, which will accommodate the provision of pedestrian / cyclist links to the District Park to the north-east, hard and soft landscaping, undercroft & surface car parking, bicycle parking, bin storage, public lighting, ESB sub-stations. Surface water will be attenuated within the site, with outfall to existing watercourses, with foul sewer connected to a proposed new pumping station located at the northern end of the site, on an overall application site area of 18.3ha. In accordance with the Fortunestown Local Area Plan (2012) an area of approx. 1.44ha is reserved for a school site.
- 28 The surface water drainage design has been carried out in accordance with the Greater Dublin Regional Code of Practice (GDSDS). The internal drainage system has been designed as a completely separate foul and surface water system. The surface water drainage infrastructure for the proposed development has been separated into 10 no. drainage catchments, four of which outfall attenuated flows into the Corbally Stream along the eastern boundary and the other six indirectly along the northern boundary in two outfall locations to the Corbally Stream. Each outfall location includes a standard wing-wall outfall detail, and a non-return flap valve is to be included at each outfall location to prevent backflow in the event of a swamped outfall condition. The surface water run-off via roadside swales, tree pits, bio-retention area, rear garden filter drains, gullies, underground pipes, manholes, catchpit manholes and direct the flows via void arched attenuation systems towards Hydrobrakes and petrol interceptors before out falling to the existing on site open watercourses.
- For the foul drainage, it is proposed to service the subject lands by providing a new gravity foul sewer in the south east of the site, connecting into the existing foul infrastructure in Verschoyle Green. A foul water pumping station is proposed as part of the application to drain the apartment blocks from the lower north east corner of the site into the gravity sewer to be constructed connecting into Verschoyle Green. The minimum public sewer diameter is to be 225mm. The proposed foul pumping station is to be in accordance with the Irish Water Code of Practice for Wastewater Infrastructure 2017 Part 5 Pumping Stations. Peak wastewater discharge is calculated at an average wastewater discharge of 19.27 litres/sec. This network will then carry the foul water to the Ringsend Wastewater Treatment Plant (WWTP) prior to its discharge into the Liffey Estuary/Dublin Bay. These SuDS measures have no impact on the screening assessment and determination offered herein. It is our professional assessment that even if these measures weren't embedded in the project design, and the project proceeded without these best practice design measures, the screening determination herein would not be affected.

- ³⁰ While the layout of the development is broadly cognisant of fluvial flood risk, elements of the proposed development at the northern boundary encroach on the flood risk zones¹⁴. This creates the potential for the proposed development to displace floodplain storage and thereby increase flood risk elsewhere. To prevent this, it is necessary to provide compensatory storage within the Site in accordance with the Flood Risk Management Guidelines. Compensatory storage is provided by reducing the existing ground level immediately adjacent to the stream to create a basin. More details on the compensatory storage area can be found in the Site-Specific Flood Risk Assessment (SSFRA) (Kilgallen & Partners, 2021).
- 31 The duration of construction activities is expected to last 5 years (+/-), completed in three phases. There will be no piling or blasting of the site, and there is no contaminated land present on site.

3.2 Overview of the Receiving Environment

3.2.1 European sites

- 32 There are six European sites located within the vicinity of the proposed development. The proposed development does not overlap with any European sites. The nearest European site is Glenasmole Valley SAC, located c. 4.1km to the south-east of the proposed development site in the Dublin Mountains.
- 33 The Corbally Stream runs from south to north along the eastern boundary of the proposed development site. It then flows along the northern boundary westwards where two drainage ditches within the site, the Cooldown and the Coldwater, flow into the Corbally. The Corbally then merges into the Camac River c. 2.5km, before joining the River Liffey c. 9.6km northeast of the proposed development and discharging into the Dublin Bay, therefore hydrologically linking the proposed development to European sites therein, including; South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, and North Bull Island SPA.
- 34 All of the European sites present in the vicinity of the proposed development are shown on Figure 1 below. The QIs/SCIs of the European sites in the vicinity of the proposed development are provided in Appendix I.

¹⁴ Report on Site-Specific Flood Risk Assessment, Residential Development, Boherboy, Saggart, Co. Dublin. Kilgallen & Partners Consulting Engineers, 2021.





Figure 1 European sites in the vicinity of the proposed development

3.2.2 Habitats

- 35 The proposed development site is located in the 10km Grid Square O02 at O 04798 26372 to the west of Dublin City. The lands comprise of two agricultural grassland fields separated by hedgerows and a drainage ditch, with hedgerows and treelines surrounding the lands. Cattle graze regularly on these fields, with an open cow shed in the south of the site, adjacent to the entrance. The land is bound by the Boherboy Road (L2008) to the south, agricultural fields to the west, and residential areas to the east. The Corbally Stream runs along the eastern and southern boundary, the Coldwater flows along the western boundary, and the Cooldown is noted along the middle boundary in the site, however is a mostly dry drainage ditch in actuality. The following habitat types (and mosaics of these), assigned using the Heritage Council Classification System⁸, were identified within the proposed development site:
 - Buildings and artificial surfaces (BL3)
 - Depositing/lowland rivers (FW2)
 - Drainage ditches (FW4)
 - Dry meadows and grassy verges (GS2)
 - Hedgerows (WL1)
 - Improved agricultural grassland (GA1)
 - Recolonising bare ground (ED3)
 - Refuse and other waste (ED5)
 - Spoil and bare ground (ED2)
 - Treelines (WL2)



- Scattered trees and parkland (WD5)
- Wet grassland (GS4)
- 36 The habitat types are described in greater detail in Chapter 7: *Biodiversity* of the Environmental Impact Assessment Report (EIAR) (Scott Cawley Ltd., 2021).

3.2.3 Flora and Fauna Species

- 37 No protected plant species contained within the Flora (Protection) Order, 2015, rare plant species contained within Ireland Red List No. 10 Vascular Plants (Wyse Jackson et al., 2016), or species listed on Irelands Red List No. 8: Bryophytes (Lockhart et al., 2012) were identified within the proposed development site during habitat surveys. There was one record of a species on the Red List No. 10 Vascular Plants, *Lamiastrum galeobdolon*, within c. 2km of the proposed development from a NBDC data search. This species is of Least Concern (due to its widespread and abundant distribution in Ireland), and was not identified within the proposed development site.
- 38 No non-native, invasive plant species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 were recorded within the proposed development site. One record of *Fallopia japonica* (2019) was identified within c. 2km of the proposed development site from a NBDC data search. This record was from 2019 and located c. 1.2km north of the site in Citywest.
- 39 The NBDC desktop study found records for one QI species, otter *Lutra lutra*, within c. 2km of the proposed development for which European sites within c. 15km of the proposed development are designated. The most recent record for the species is from within the same grid square, O02, in which the proposed development site is located in, from 2014.
- 40 The NBDC holds records for four SCI bird species, greylag goose *Anser anser*, lesser black-backed gull *Larus fuscus*, merlin *Falco columbarius* and peregrine *Peregrinus falco* within c. 2km of the proposed development for which European sites within c. 15km are designated. There are six records for greylag goose. The most recent record for the species is from c. 700m to the east of the proposed development, recorded for the Bird Atlas in 2007-2011. There are 11 records for lesser black-backed gull. The most recent record for the species is from c. 650m to the east of the proposed development, recorded for the Bird Atlas in 2007-2011. There are three records for merlin and peregrine and the most recent records are from the same grid square, O02, in which the proposed development site is located in, recorded for the Bird Atlas in 2007-2011. Merlin, peregrine and lesser black-backed gull can be occasionally found foraging and nesting in urban and semi-urban habitats. Merlin and peregrine were not identified during breeding or wintering bird surveys carried out in 2020 and 2021. The only SCI species present at the time of field surveys was lesser black-backed gull. Two individuals were recorded flying across the site during breeding bird surveys, however they did not land within the site.
- 41 There is no suitable habitat for light-bellied Brent goose *Branta bernicla hrota*, greylag goose and/or other SCI wintering bird species such as waders onsite. Light-bellied Brent geese and wintering waders regularly use Dublin's amenity parks and sports grounds for foraging. The nearest known light-bellied Brent goose site is c. 6.1km north-east the proposed development site at Tymon Park (Scott Cawley Ltd., 2017¹⁵). Given that there is no suitable foraging habitat, i.e. open amenity grassland onsite, the proposed development site is unsuitable for light-bellied Brent goose, and other SCI wintering bird species that use similar habitat for foraging within County Dublin. Greylag goose is a SCI species of the Poulaphouca Reservoir SPA located c. 11.3km south west of the proposed development, and was not identified within the proposed development site during wintering bird surveys.

¹⁵ Scott Cawley (2017). Natura Impact Statement- Information for Stage 2 Appropriate Assessment. Proposed Residential Development, St. Paul's College, Sybil Hill Road, Raheny, Dublin 5.



- 42 With regards to non-native invasive species, the NBDC database search returned records for grey squirrel *Sciurus carolinensis* and sika deer *Cervus nippon* which are listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011. Grey squirrel was recorded adjacent to St. Thomas' National School, Jobstown, Tallaght, Dublin 24, c. 1.2km north-east of the proposed development in 2007. Two sika deer were identified within the proposed development site during the first breeding bird survey in June 2020, grey squirrel were not identified within the proposed development site during surveys.
- 43 No protected and/or rare flora were recorded in the proposed development site.
- 44 There were no signs or tracks of QI species, of any European sites present onsite.

3.2.4 Hydrology

- The Corbally, Cooldown and Coldwater Streams all flow through the proposed development site (Figure 2). The Corbally Stream flows in a northerly direction along the eastern boundary of the site, then flowing along the northern boundary westwards where the Cooldown and Coldwater Streams flow into the Corbally. Surveys on site confirmed the Cooldown and Coldwater Streams are drainage ditches in actuality, and both partially dry. All of these watercourses have a 'Moderate' WFD status and are listed as 'At risk' waterbody by the EPA. The Corbally Stream merges into the Camac River *c*. 2.5km downstream. The nearest water quality monitoring station downstream of the proposed development site is located along the Camac River. The most recent Q-value status for the Camac river is 'Moderate'. The Camac River joins the River Liffey c. 9.3km north-east of the proposed development, before draining to the Dublin Bay via the Lower Liffey Estuary waterbody. The River Liffey and the Lower Liffey waterbody are listed as 'At risk' by the EPA, with a 'Good' WFD status. The Dublin Bay is considered to be 'Unpolluted' with a 'Good' WFD status and belongs to the 'Not at risk' category.
- ⁴⁶ The site is located within the Liffey sub-catchment in the Liffey and Dublin Bay catchment. The site falls within the Camac sub-basin, which drains to Dublin Bay.



Figure 2 Waterbodies in the vicinity of the proposed development.

3.2.5 Hydrogeology

- 47 Geological Survey of Ireland (GSI) data indicates that the site is underlain by a Poor Aquifer (PI), bedrock which is generally unproductive except for local zones. The site is partially located in an area of 'Moderate' vulnerability, and partially located in an area of 'Low' vulnerability in relation to the underlying aquifer.
- 48 The Groundwater Body (GWB) underlying most of the site is the Kilcullen GWB, which is currently classified by the EPA as having 'Good Status' and 'Not at risk'. The Kilcullen GWB overlaps only one European site with groundwater dependent terrestrial habitats, Glenasmole Valley SAC, located c. 4.2km to the southeast of the proposed development site.
- 49 A portion of the north of the site is located in the Dublin GWB, which is also currently classified as having 'Good Status' and 'Not at risk'. The Dublin GWB overlaps with one European site with groundwater dependent terrestrial habitats, the Rye water Valley/Carton SAC, located c. 10.3km north west of the proposed development.

3.3 Assessment of Effects on European Sites

- 50 This section identifies all the potential impacts associated with the proposed development, examines whether there are any European sites within the ZoI of effects from the proposed development, and assesses whether there is any risk of the proposed development resulting in a significant effect on any European site, either alone or in combination with other plans or projects. The guidance document published by the Department of Housing, Planning and Local Government (then DEHLG) 'Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities' (2009) recommends a distance of 15km as the precautionary Zone of Influence for a plan or project being assessed for likely significant effects on European Sites. However this should be evaluated on a case-by-case basis, with sites outside 15km assessed if likely impacts could not be excluded bearing in mind the precautionary principle (e.g. where there is a hydrological pathway it may be necessary to assess sites outside the 15km limit). For the purpose of this assessment, a 15km range has been used as the ZoI, and there are no viable pathways outside of this range confirmed under respective headings below.
- 51 In assessing the potential for the proposed development to result in a significant effect on any European sites, any measures intended to avoid or reduce the harmful effects of the project on European sites are not taken into account.

3.3.1 Habitat loss and fragmentation

- 52 The proposed development does not overlap with the boundary of any European site. Therefore, there are no European sites at risk of direct habitat loss impacts.
- 53 As the proposed development does not traverse any European sites there is no potential for habitat fragmentation to occur.
- 54 The proposed development site does not support populations of any fauna species linked with the QI/SCI populations of any European site(s).
- 55 As the proposed development will not result in habitat loss or habitat fragmentation within any European site, there is no potential for any in combination effects to occur in that regard.

3.3.2 Habitat degradation as a result of hydrological impacts

56 There are no known public drainage services on the subject lands, and therefore the proposed surface water outfall will be into the existing Corbally Stream boundary the site. There is no foul water sewer located on the subject lands. Therefore is it proposed to service the subject lands by providing a new gravity foul sewer across the SDCC park to the south east of the site connecting into the existing SDCC/IW foul infrastructure in Verschoyle Green. Foul waters from the proposed development will then be discharged to Ringsend WWTP for treatment, prior to discharge into the Liffey Estuary/Dublin Bay. Therefore, the Zol of potential effects on water quality from the proposed development could extend to Dublin Bay.

Surface Water

57 Surface water run-off and discharges from the proposed development will enter the downstream receiving environment via a new surface water outfall into the existing Corbally Stream bounding the site.

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

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

A hydrological and hydrogeological qualitative risk assessment report was prepared for the proposed development by AWN Consulting¹⁶(AWN, 2020). The assessment was carried out using a conceptual site model (CSM) which was based on a good understanding of the hydrological and hydrogeological environment, plausible sources of impact and knowledge of receptor requirements. This allows possible source-pathway-receptor linkages to be identified. Potential sources of impacts during construction and operation are considered in the CSM and all potential sources of contamination are considered without taking account of any measures intended to avoid or reduce harmful effects of the proposed development (mitigation measures) i.e. a worst-case scenario.

Results of the CSM carried out by AWN and which inform this AA screening report, indicate that surface run-off from the proposed development, during both construction and operational phases respectively, will not result in any perceptible impact on water quality in downstream receiving waters in Dublin Bay (and thus in the European sites therein). This is in light of the presence of a direct open-water pathway to Dublin Bay, attenuation and dilution within the Camac River and storm sewers and low potential chemical loading between the proposed development site and Dublin Bay. The CSM also considered in-combination effects and concluded that there would be no perceptible impact on water quality as a result of the proposed development in-combination with surface water arising from other developments.

In line with good practice, effective measures have been included in the construction design, management of construction programme and during the operational phase of the proposed development. However, it must be noted that these are included in the design, not for the purposes of avoiding or reducing any potential harmful effects to any European sites, but are required for new developments under the objectives of the Greater Dublin Strategic Drainage Study and Dublin City Council Development Plan and in line with good construction practice. As stated, the CSM prepared by AWN was done so in the absence of consideration of any of these measures i.e. the CSM was based on a worst case scenario, and even without these measures in place, there will be no impact on downstream European sites as a result of the proposed development.

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

Foul Water

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

¹⁶ AWN Consulting (2020) Hydrological & Hydrogeological Qualitative Risk Assessment for Proposed Residential Development at Boherboy, Saggart, Co. Dublin .

WWTP operates under a discharge licence from the EPA (D0034-01) and must comply with the licence conditions.

Despite the capacity issues associated with the Ringsend WWTP, Dublin Bay is currently classified by the EPA as being of "Unpolluted" water quality status¹⁷. The Liffey Estuary Lower is currently classified by the EPA as being of "Intermediate" water quality status and the Tolka Estuary as "Eutrophic". The pollutant content of future foul water discharges to Dublin Bay is considered likely to decrease in the long-term for the following reasons:

- An Bord Pleanála granted planning permission for an upgrade to the Ringsend WWTP in April 2019¹⁸, which will increase capacity at the plant, and
- There is a commitment in the National Development Plan 2018-2027¹⁹ to invest in and progress the Greater Dublin Drainage Project which will involve the provision of a new regional wastewater treatment plant at a site in the northern part of the Greater Dublin Area and the provision of a new Orbital Drainage Sewer linking the new plant to the existing regional sewer network, which will enable future connections for identified areas of development within the catchment area. The provision of the Greater Dublin Drainage Project will augment the waste water treatment capacity currently provided by Ringsend WWTP across the Greater Dublin Area.

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

According to AWN (2020), in relation to the proposed development "peak wastewater discharge is calculated at an average wastewater discharge of 19.27 litres/sec. The sewage discharge will be licensed by Irish Water, collected in the public sewer and treated at Irish Water's WWTP at Ringsend prior to discharge to Dublin Bay. This WWTP is required to operate under an EPA licence (D0034-01) and to meet environmental legislative requirements. The plant has received planning (2019) and will be upgraded with increased treatment capacity over the next five years. The peak foul discharge calculated for the proposed amendment is well within the capacity of the WWTP. Even without treatment at the Ringsend WWTP, the peak effluent discharge, calculated for the proposed amendment as 19.27 litres/sec (which would equate to 0.174% of the licensed discharge at Ringsend WWTP [peak hydraulic capacity]), would not impact on the overall water quality within Dublin Bay and therefore would not have an impact on the current Water Body Status (as defined within the Water Framework Directive). This assessment is supported by hydrodynamic and chemical modelling within Dublin Bay which has shown that there is significant dilution for contaminants of concern (DIN and MRP) available guite close to the outfall for the treatment plant (WWTP 2012 EIS, WWTP 2018 EIAR)". The AWN report also concludes that the cumulative or in-combination effects of effluent arising from the proposed development with that of other developments discharging to Ringsend WWTP will not be significant having regard to the size of the calculated discharge from the proposal.

¹⁷ Transitional and Coastal Surface Water Quality data (2018-2020) accessed from the EPA Envision Mapviewer <u>www.gis.epa.ie/Envision</u> (accessed July 2021)

¹⁸ An Bord Pleanála Case Reference PL29S.301798 – 10-year permission for development of the Ringsend wastewater treatment plant upgrade project including a regional bio solids storage facility, Available online at www.pleanala.ie/casenum/301798.htm.

¹⁹ Government of Ireland (2018) *Project Ireland 2040, National Development Plan 2018-2027.*

Considering the above, it is concluded that the proposed development will not impact on the overall water quality status of Dublin Bay. There is no evidence that operations from the over capacity of the WWTP is affecting the conservation objectives of the European sites in Dublin Bay.

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

In Combination

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

The *Regional Planning Guidelines for the Greater Dublin Area 2010-2022* (The Regional Planning Guidelines Office, 2010) include the following policy objectives relevant to the protection of European sites and the protection of water quality in Dublin Bay, to which the relevant planning authorities must have regard to in the preparation and adoption of their development plans:

Strategic Policy GIP2: To protect and conserve the natural environment, including in particular nationally important and EU designated sites such as Special Protection Areas, Candidate Special Areas of Conservation and proposed Natural Heritage Areas, protected habitats and species, and habitats and species of local biodiversity value. This policy also includes new or extended ecological sites that are notified or designated in the lifetime of the RPGs. Appropriate measures to protect Natura 2000 sites should be identified at the initial stages of all planning processes and included as a material consideration in order to inform future development.

Strategic Recommendation SR6: Plans and projects associated with zoned expansions needed to meet Economic Development and satisfy the Settlement Strategy that have the potential to negatively impact on Natura 2000 sites will be subject to HDA according to Article 6 of the Habitats Directive and in accordance with best practice and guidance.

Strategic Recommendation PIR15: Seek continued investment in Waste Water Treatment facilities and networks to meet the needs of the River Basin Management Plans and to achieve the targets for good water status for river, coastal and transitional waters in the Water Framework Directive.

Strategic Recommendation PIR16: Ensure that future capacity is provided in growth towns through expansion and upgrading of facilities where necessary and/or exploration of alternatives such as connecting to adjoining drainage systems or changes to catchments to enable growth towns to provide for the population growth envisaged in the settlement strategy and thus enable a more sustainable settlement pattern to be supported.

Strategic Recommendation PIR17: Identification and development of a suitable site for the Greater Dublin Regional Drainage Project - Regional Waste Water Treatment, Marine Outfall and Orbital Drainage System in the north coast of the GDA to enable the continued population and economic growth and the physical consolidation of the metropolitan area, by reducing the catchment size for Ringsend and providing new treatment capacity through network connections.

Strategic Recommendation PIR18: The management of land use and policies of Development Plans, Local Area Plans and Development Management decisions shall ensure that the scale of development is managed to achieve compliance with the waste water discharge licences of waste water treatment facilities. Breach of compliance is now a criminal offence under the EU Directives 2006/11/EC and 2000/60/EC given effect in the Waste Water Discharge Regulations 2007.

Strategic Recommendation PIR19: Plans and projects associated with all waste water and/or surface water treatments that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.

The planning authority for the proposed development is South Dublin County Council (SDCC). Plans and developments within South Dublin County must comply with the following policy objectives of the South Dublin County Development Plan 2016 - 2022 relevant to the protection of European sites and the protection of water quality within the County and in Dublin Bay:

HCL12 Objective 1: To prevent development that would adversely affect the integrity of any Natura 2000 site located within and immediately adjacent to the County and promote favourable conservation status of habitats and protected species including those listed under the Birds Directive, the Wildlife Acts and the Habitats Directive.

HCL12 Objective 2: To ensure that projects that give rise to significant direct, indirect or secondary impacts on Natura 2000 sites, either individually or in combination with other plans of projects, will not be permitted unless the following is robustly demonstrated in accordance with Article 6(4) of the Habitats Directive and S.177AA of the Planning and Development Act (2000-2010) or any superseding legislation:

- 1. There are no less damaging alternative solutions available; and
- 2. There are imperative reasons of overriding public interest (as defined in the Habitats Directive) requiring the project to proceed; and
- 3. Adequate compensatory measures have been identified that can be put in place.

HCL13 Objective 1: To ensure that any proposal for development within or adjacent to a proposed Natural Heritage Area (pNHA) is designed and sited to minimise its impact on the biodiversity, ecological, geological and landscape value of the pNHA particularly plant and animal species listed under the Wildlife Acts and the Habitats and Birds Directive including their habitats.

HCL15 Objective 1: To ensure that development does not have a significant adverse impact on rare and threatened species, including those protected under the Wildlife Acts 1976 and 2000, the Birds Directive 1979 and the Habitats Directive 1992.

HCL15 Objective 2: To ensure that, where evidence of species that are protected under the Wildlife Acts 1976 and 2000, the Birds Directive 1979 and the Habitats Directive 1992 exists, appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment.

IE2 Objective 1: To maintain, improve and enhance the environmental and ecological quality of our surface waters and groundwater by implementing the programme of measures set out in the Eastern River Basing District River Basing Management Plan.

IE2 Objective 2: To protect the regionally and locally important aquifers within the County from risk of pollution and ensure the satisfactory implementation of the South Dublin Groundwater Protection Scheme 2011, and groundwater source protection zones, where data has been made available by the Geological Survey of Ireland.

IE2 Objective 3: To maintain and enhance existing surface water drainage systems in the County and promote and facilitate the development of Sustainable Urban Drainage Systems (SUDS), including integrated constructed wetlands, at a local, district and County level, to control surface water outfall and protect water quality.

IE2 Objective 4: To incorporate Sustainable Urban Drainage Systems (SUDS) as part of Local Area Plans, Planning Schemes, Framework Plans and Design Statements to address the potential for Sustainable Urban Drainage at a site and/or district scale, including the potential for wetland facilities.

IE2 Objective 5: To limit surface water run-off from new developments through the use of Sustainable Urban Drainage Systems (SUDS) and avoid the use of underground attenuation and storage tanks.

Plans and developments within the other local authority areas which could influence conditions in Dublin Bay via rivers and other surface water features, also must comply with the policies and objectives relevant to the protection of European sites and water quality. These include the *Dun Laoghaire Rathdown Development Plan 2016-2022 (Dun Laoghaire-Rathdown Council, 2016),* the *Fingal Development Plan 2017-2023,* and the *Wicklow County Development Plan 2016-2022* (Wicklow County Council, 2016). The relevant policies and objectives in those plans for the protection of European sites and water quality are included in Appendix II.

In conclusion, there are a number of projects referred to above which will upgrade the capacity of Ringsend WWTP which will, over time, address the capacity issues at Ringsend WWTP referred to above.

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

Therefore, and having regard to the policies and objectives referred to under the relevant development plans, it is concluded that the possibility of any other plans or projects acting in combination with the proposed development to give rise to significant effects on any European site in, or associated with, Dublin Bay can be excluded.

3.3.3 Habitat degradation as a result of hydrogeological impacts

An accidental pollution event during construction has the potential to affect groundwater quality locally. Whilst this is a possibility, this would be very localised and would not result in the degradation of existing groundwater conditions. Furthermore, there are no groundwater dependent habitats or species associated with the European sites in Dublin Bay.

The nearest European site, which supports groundwater dependent terrestrial habitats and species is Glenasmole Valley SAC, located c. 4.2km south-east of the proposed development. It is partially located in the same GWB as the proposed development site. Based on information published by Geological Survey Ireland (GSI) on the Kilcullen GWB²⁰, 'The majority of groundwater flow in this aquifer will take place in the upper 3m of the rocks. This will be lateral flow towards discharge point such rivers and streams. Regional groundwater flow paths are not considered to develop, as the rocks do not have sufficient transmissivity to transport water over long distances. Typical groundwater flow paths will be in the order of a couple of hundred metres, with discharge occurring to the closest surface water feature'. The proposed development will not interact directly with the underlying groundwater body. As it lies down gradient c. 4.2km of the Glenasmole Valley SAC with a number of surface waterbodies located between the proposed development site and the SAC, it cannot influence groundwater conditions in the European site.

The next nearest European site with groundwater dependent terrestrial habitats is Rye Water Valley/Carton SAC, c. 10.3km north-west of the proposed development, however, it is partially located in a different GWB than the proposed development site, and is located a significant distance away. Based on information published by Geological Survey Ireland (GSI) on the Dublin GWB²¹, 'The general groundwater flow direction in this aquifer is towards the coast and also towards the River Liffey and Dublin City'. As the proposed development will not interact directly with the underlying groundwater body, and lies down gradient of the Rye Water Valley/Carton SAC, it cannot influence groundwater conditions in the European site.

²⁰ https://secure.dccae.gov.ie/GSI_DOWNLOAD/Groundwater/Reports/GWB/KilcullenGWB.pdf

²¹ https://secure.dccae.gov.ie/GSI_DOWNLOAD/Groundwater/Reports/GWB/DublinGWB.pdf

Therefore, there is no possibility of the proposed development undermining the conservation objectives of any of the qualifying interests or special conservation interests of any European sites, either alone or in combination with any other pans or projects, as a result of hydrogeological effects.

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

There are no species listed on the Third Schedule of the *European Communities (Birds and Natural Habitats) Regulations, 2011* on the proposed development site. The proposed development site is hydrologically connected to European sites in Dublin Bay, however, due to the absence of Third Schedule non-native invasive species within the proposed development site, there is no risk of non-native invasive species spreading from the proposed development site to any European site.

3.3.5 Disturbance and displacement impacts

Construction-related disturbance and displacement of fauna species could potentially occur within the vicinity of the proposed development. For mammal species such as otter, disturbance effects would not be expected to extend beyond 150m²². For birds, disturbance effects would not be expected to extend beyond a distance of c.300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance.²³ There are no European sites within the disturbance ZoI; the next nearest European site to the proposed development is c. 4.2km away.

There are also no habitat areas within the disturbance ZoI of the proposed development that support populations of qualifying/special conservation interest species of any European site²⁴. As the proposed development will not result in the disturbance/displacement of the qualifying/special conservation interest species of any European site, there is no potential for any in combination effects to occur in that regard. The nearest SAC designated for otter is the Wicklow Mountains SAC, c. 5.3km south-east of the proposed development. The Corbally Stream is a small order Stream located in a different sub-catchment than the Wicklow Mountains SAC. Considering the size of otter territories in Ireland²⁵, and its location relative to the Wicklow Mountains SAC, any otters potentially using the Corbally Stream do not form part of or support any SAC population. Therefore, as the proposed development will not result in the disturbance/displacement of the qualifying/special conservation interest species of any European site, there is no potential for any in combination effects to occur in that regard.

²² This is consistent with Transport Infrastructure Ireland (TII) guidance (Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes and Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes) documents. This is a precautionary distance, and likely to be moderated by the screening effect provided by surrounding vegetation and buildings, with the actual ZoI of construction related disturbance likely to be much less in reality.

²³ The disturbance zone of influence for waterbirds is based on the relationship between the noise levels generated by general construction traffic/works (BS 5228:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1 Noise) and the proximity of those noise levels to birds – as assessed in Cutts, N. Phelps, A. & Burdon, D. (2009) *Construction and Waterfowl: Defining Sensitivity, Response, Impacts and Guidance*, and Wright, M., Goodman, P & Cameron, T. (2010) Exploring Behavioural Responses of Shorebirds to Impulsive Noise. *Wildfowl* (2010) 60: 150–167. At 300m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold below which no disturbance or displacement effects would arise.

²⁴There is a need to consider use of habitat areas outside of an SPA by SCI bird species where they support the SCI populations and the site's conservation objectives. These habitat areas can comprise alternative roosting sites, foraging areas, staging grounds or migration routes and can, but not necessarily exclusively, be situated within the immediate hinterland of the SPA, or in areas ecologically connected to it.

²⁵ Reid, N., Hayden, B., Lundy, M.G., Pietravalle, S., McDonald, R.A. & Montgomery, W.I. (2013) National Otter Survey of Ireland 2010/12. Irish Wildlife Manuals No. 76. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

3.3.6 Summary

- 58 The potential impacts associated with the proposed development do not have the potential to affect the receiving environment and, consequently, do not have the potential to affect the conservation objectives supporting the qualifying interest/special conservation interests of any European sites. Therefore, the proposed development is not likely to have significant effects on any European sites.
- 59 As the proposed development itself will not have any effects on the QIs/SCIs or conservation objectives of any European sites, and taking into account the policies and objectives of the statutory plans referred to above, it is concluded that there is no potential for any other plan or project to act in combination with it to result in significant effects on any European sites.
- 60 The potential impacts of the proposed development on the receiving environment, their Zol, and the European sites at risk of significant effects are summarised in Table 1 below. In assessing the potential for the proposed development to result in a significant effect on any European sites, any measures intended to avoid or reduce the harmful effects of the project on European sites are not taken into account.

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

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

4 Conclusions of Screening Assessment Process

61 In carrying out this AA screening, mitigation measures have not been taken into account. Standard best practice construction measures and SuDS measures which could have the effect of mitigating any effects on any European sites have similarly not been taken into account. Following an examination, analysis and evaluation of the best available information, and applying the precautionary principle, it can be concluded

that the possibility of any significant effects on any European sites, whether arising from the project alone or in combination with other plans and projects, can be excluded beyond a reasonable scientific doubt on the basis of the best scientific knowledge available, for the reasons set out in Section 3.3 above. In reaching this conclusion, the nature of the project and its potential relationship with all European sites within the zone of influence, and their conservation objectives, have been fully considered.

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



Appendix I

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

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site	Location Relative to Ringsend WWTP outfall location
Special Area of Conservation (SAC)		
Glenasmole Valley SAC [001209] 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) 6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) 7220 Petrifying springs with tufa formation (<i>Cratoneurion</i>)* NPWS (2021) <i>Conservation objectives for Glenasmole Valley SAC [001209].</i> Generic Version 8.0. Department of Culture, Heritage and the Gaeltacht.	Located 4.1km south east of the proposed development.	c. 15km south west of the outfall
 Wicklow Mountains SAC [002122] 3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) 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 <i>Calaminarian</i> grasslands of the <i>Violetalia calaminariae</i> 6230 Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) 7130 Blanket bogs (* if active bog) 8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) 8210 Calcareous rocky slopes with chasmophytic vegetation 91A0 Old sessile oak woods with <i>Ilex</i> and Blechnum in the British Isles 1355 <i>Lutra lutra</i> (Otter) NPWS (2017) <i>Conservation Objectives: Wicklow Mountains SAC 002122.</i> Version 1. National Parks and Wildlife Service, Department of Arts, 	Located 5.3km south east of the proposed development.	c. 13km south west of the outfall
Rye Water Valley/Carton SAC [001398] [7220] Petrifying springs with tufa formation (Cratoneurion) [1014] Narrow-mouthed Whorl Snail Vertigo angustior [1016] Desmoulin's Whorl Snail Vertigo moulinsiana	Located 10km north west of the proposed development	c. 20km west of the outfall



European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site	Location Relative to Ringsend WWTP outfall location
NPWS (2021) Conservation objectives for Rye Water Valley/Carton SAC [001398]. Generic Version 8.0. Department of Culture, Heritage and the Gaeltacht.		
Red Bog, Kildare SAC [000397]	Located 10.9km south	c. 27.8km
[7140] Transition mires and quaking bogs	west of the proposed development	south west of the
NPWS (2019) Conservation Objectives: Red Bog, Kildare SAC 000397. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.		outrail
South Dublin Bay SAC [000210]	Located 15.5km north	c. 537m
1140 Mudflats and sandflats not covered by seawater at low tide	east of the proposed	south of the
1210 Annual vegetation of drift lines		outian
1310 Salicornia and other annuals colonising mud and sand		
2110 Embryonic shifting dunes		
NPWS (2013) <i>Conservation Objectives: South Dublin Bay SAC 000210.</i> Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.		
North Dublin Bay SAC [000206]	Located c. 18.6km	c. 2.3km
1140 Mudflats and sandflats not covered by seawater at low tide	north east of the	north east
1210 Annual vegetation of drift lines	development.	orthe
1310 Salicornia and other annuals colonising mud and sand		
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)		
1395 Petalwort Petalophyllum ralfsii		
1410 Mediterranean salt meadows (Juncetalia maritimi)		
2110 Embryonic shifting dunes		
2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes)		
2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)		
2190 Humid dune slacks		
NPWS (2013) <i>Conservation Objectives: North Dublin Bay SAC 000206.</i> Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.		
Special Protection Area (SPA)		
Wicklow Mountains SPA [004040]	Located 8.7km south	c. 14km
A098 Merlin Falco columbarius	east of the proposed	south west
A103 Peregrine Falco peregrinus	development.	outfall.



European Site Name [Code] and its	Location Relative to	Location	
Qualifying interest(s) / Special Conservation Interest(s)	the Proposed	Relative to	
(*Priority Annex I Habitats)	Development Site	WWTP	
		outfall	
		location	
NPWS (2021) Conservation objectives for Wicklow Mountains SPA [004040]. Generic Version 8.0. Department of Culture, Heritage and the Gaeltacht.			
Poulaphouca Reservoir SPA [004063]	Located 11km south	c. 27km	
[A043] Greylag Goose (Anser anser)	west of the proposed	south west	
[A183] Lesser Black-backed Gull (Larus fuscus)	development	orthe	
NPWS (2021) Conservation objectives for Poulaphouca Reservoir SPA [004063]. Generic Version 8.0. Department of Culture, Heritage and the Gaeltacht.			
South Dublin Bay and River Tolka Estuary SPA [004024]	Located 15.6km north	<i>c.</i> 450m	
A046 Light-bellied Brent Goose Branta bernicla hrota	east of the proposed	north of the	
A130 Oystercatcher Haematopus ostralegus	development	outfall	
A137 Ringed Plover Charadrius hiaticula			
A141 Grey Plover Pluvialis squatarola			
A143 Knot Calidris canutus			
A144 Sanderling Calidris alba			
A149 Dunlin Calidris alpina			
A157 Bar-tailed Godwit Limosa lapponica			
A162 Redshank Tringa totanus			
A179 Black-headed Gull Croicocephalus ridibundus			
A192 Roseate Tern Sterna dougallii			
A193 Common Tern Sterna hirundo			
A194 Arctic Tern Sterna paradisaea			
A999 Wetland and Waterbirds			
NPWS (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.			
North Bull Island SPA [004006]	Located 18.6km north	c. 469m	
A046 Light-bellied Brent Goose Branta bernicla hrota	west of the proposed	north of the	
A048 Shelduck Tadorna tadorna	development.	outfall	
A052 Teal Anas crecca			
A054 Pintail Anas acuta			
A056 Shoveler Anas clypeata			
A130 Oystercatcher Haematopus ostralegus			
A140 Golden Plover Pluvialis apricaria			
A141 Grey Plover Pluvialis squatarola			
A143 Knot Calidris canutus			
A144 Sanderling Calidris alba			
A149 Dunlin Calidris alpina			
A156 Black-tailed Godwit Limosa limosa			



European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site	Location Relative to Ringsend WWTP outfall location
A157 Bar-tailed Godwit Limosa lapponica		
A160 Curlew Numenius arquata		
A162 Redshank Tringa totanus		
A169 Turnstone Arenaria interpres		
A179 Black-headed Gull Croicocephalus ridibundus		
A999 Wetlands & Waterbirds		
NPWS (2015) <i>Conservation Objectives: North Bull Island SPA 004006.</i> Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.		



Appendix II

Land use plan polices/objectives relating to the protection of European sites and water quality

Eastern & Midland Regional Assembly, Regional Spatial & Economic Strategy 2019-2031

Regional Policy Objective 3.4

Ensure that all plans, projects and activities requiring consent arising from the Regional Spatial and Economic Strategy are subject to the relevant environmental assessment requirements including SEA, EIA and AA as appropriate. In addition the future strategic development of settlements throughout the Region will have full cognisance of the legal requirements pertaining to sites of International Nature Conservation Interest.

Regional Policy Objective 7.2

To achieve and maintain 'Good Environmental Status' for marine waters and to ensure the sustainable use of shared marine resources in the Region, and to promote the development of a cross-boundary and cross-border strategic management and stakeholder engagement framework to protect the marine environment.

Regional Policy Objective 7.10

Support the implementation of the Water Framework Directive in achieving and maintaining at least good environmental status for all water bodies in the Region and to ensure alignment between the core objectives of the Water Framework Directive and other relevant Directives, River Basin Management plans and local authority land use plans.

Regional Policy Objective 7.11

For water bodies with 'high ecological status' objectives in the Region, local authorities shall incorporate measures for both their continued protection and to restore those water bodies that have fallen below high ecological status and areas 'At Risk' into the development of local planning policy and decision making any measures for the continued protection of areas with high ecological status in the Region and for mitigation of threats to waterbodies identified as 'At Risk' as part of a catchment based approach in consultation with the relevant agencies. This shall include recognition of the need to deliver efficient wastewater facilities with sufficient capacity and thus contribute to improved water quality in the Region.

Regional Policy Objective 7.12

Future statutory land use plans shall include Strategic Flood Risk Assessment (SFRA) and seek to avoid inappropriate land use zonings and development in areas at risk of flooding and to integrate sustainable water management solutions (such as SuDS, nonporous surfacing and green roofs) to create safe places in accordance with the Planning System and Flood Risk Assessment Guidelines for Local Authorities.

Regional Policy Objective 7.15

Local authorities shall take opportunities to enhance biodiversity and amenities and to ensure the protection of environmentally sensitive sites and habitats, including where flood risk management measures are planned.

Regional Policy Objective 7.16

Support the implementation of the Habitats Directives in achieving an improvement in the conservation status of protected species and habitats in the Region and to ensure alignment between the core objectives of the EU Birds and Habitats Directives and local authority development plans.

Regional Policy Objective 7.22

Local authority development plan and local area plans, shall identify, protect, enhance, provide and manage Green Infrastructure in an integrated and coherent manner and should also have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks and protected species.

Regional Policy Objective 10.6

Delivery and phasing of services shall be subject to the required appraisal, planning and environmental assessment processes and shall avoid adverse impacts on the integrity of the Natura 2000 network.

Regional Policy Objective 10.7

Local authority core strategies shall demonstrate compliance with DHPLG Water Services Guidelines for local authorities and demonstrate phased infrastructure – led growth that is commensurate with the



carrying capacity of water services and prevent adverse impacts on the integrity of water dependent habitats and species within the Natura 2000 network.

Regional Policy Objective 10.10

Support Irish Water and the relevant local authorities in the Region to eliminate untreated discharges from settlements in the short term, while planning strategically for long term growth in tandem with Project Ireland 2040 and in increasing compliance with the requirements of the Urban Waste Water Treatment Directive from 39% today to 90% by the end of 2021, to 99% by 2027 and to 100% by 2040.

Regional Policy Objective 10.11

EMRA supports the delivery of the waste water infrastructure set out in Table 10.2, subject to appropriate environmental assessment and the planning process.²⁶

Regional Policy Objective 10.12

Development plans shall support strategic wastewater treatment infrastructure investment and provide for the separation of foul and surface water networks to accommodate the future growth of the Region.

Regional Policy Objective 10.15

Support the relevant local authorities (and Irish Water where relevant) in the Region to improve storm water infrastructure to improve sustainable drainage and reduce the risk of flooding in the urban environment and in the development and provision at a local level of Sustainable Urban Drainage solutions.

Regional Policy Objective 10.16

Implement policies contained in the Greater Dublin Strategic Drainage Study (GDSDS), including SuDS.

Regional Policy Objective 10.18

Local authorities shall ensure adequate surface water drainage systems are in place which meet the requirements of the Water Framework Directive and the associated River Basin Management Plans.

South Dublin County Council Development Plan 2016-2022

HCL12 Objective 1

To prevent development that would adversely affect the integrity of any Natura 2000 site located within and immediately adjacent to the County and promote favourable conservation status of habitats and protected species including those listed under the Birds Directive, the Wildlife Acts and the Habitats Directive.

HCL12 Objective 2

To ensure that projects that give rise to significant direct, indirect or secondary impacts on Natura 2000 sites, either individually or in combination with other plans or projects, will not be permitted unless the following is robustly demonstrated in accordance with Article 6(4) of the Habitats Directive and S.177AA of the Planning and Development Act (2000 – 2010) or any superseding legislation:

1. There are no less damaging alternative solutions available; and

2. There are imperative reasons of overriding public interest (as defined in the Habitats Directive) requiring the project to proceed; and

3. Adequate compensatory measures have been identified that can be put in place.

IE Policy 1 Water & Wastewater

It is the policy of the Council to work in conjunction with Irish Water to protect existing water and drainage infrastructure and to promote investment in the water and drainage network to support environmental protection and facilitate the sustainable growth of the County.

IE1 Objective 1

To work in conjunction with Irish Water to protect, manage and optimise water supply and foul drainage networks in the County.

IE1 Objective 2

²⁶ The Greater Dublin Drainage Project, the Ringsend Wastewater Treatment Plant Project, the Athlone Main Drainage Project and the Upper Liffey Valley Sewerage Scheme

To work in conjunction with Irish Water to facilitate the timely delivery of ongoing upgrades and the expansion of water supply and wastewater services to meet the future needs of the County and the Region.

IE Policy 2 Surface Water & Groundwater

It is the policy of the Council to manage surface water and to protect and enhance ground and surface water quality to meet the requirements of the EU Water Framework Directive.

IE2 Objective 1

To maintain, improve and enhance the environmental and ecological quality of our surface waters and groundwater by implementing the programme of measures set out in the Eastern River Basin District River Basin Management Plan.

IE2 Objective 3

To maintain and enhance existing surface water drainage systems in the County and promote and facilitate the development of Sustainable Urban Drainage Systems (SUDS), including integrated constructed wetlands, at a local, district and County level, to control surface water outfall and protect water quality.

IE2 Objective 4

To incorporate Sustainable Urban Drainage Systems (SUDS) as part of Local Area Plans, Planning Schemes, Framework Plans and Design Statements to address the potential for Sustainable Urban Drainage at a site and/or district scale, including the potential for wetland facilities.

IE2 Objective 5

To limit surface water run-off from new developments through the use of Sustainable Urban Drainage Systems (SUDS) and avoid the use of underground attenuation and storage tanks.

IE2 Objective 6

To promote and support the retrofitting of Sustainable Urban Drainage Systems (SUDS) in established urban areas, including integrated constructed wetlands.

Dún Laoghaire-Rathdown County Development Plan 2016-2022

Policy LHB19: Protection of Natural Heritage and the Environment

It is Council policy to protect and conserve the environment including, in particular, the natural heritage of the County and to conserve and manage Nationally and Internationally important and EU designated sites - such as Special Protection Areas, candidate Special Areas of Conservation, proposed Natural Heritage Areas and Ramsar sites - as well as non-designated areas of high nature conservation value which serve as 'Stepping Stones' for the purposes of Article 10 of the Habitats Directive.

Policy LHB20: Habitats Directive

It is Council policy to ensure the protection of natural heritage and biodiversity, including European sites that form part of the Natura 2000 network, in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines.

Policy LHB22: Designated Sites

It is Council policy to protect and preserve areas designated as proposed Natural Heritage Areas, candidate Special Areas of Conservation, and Special Protection Areas. It is Council policy to promote the maintenance and as appropriate, delivery of 'favourable' conservation status of habitats and species within these areas.

Policy EI2: Wastewater Treatment and Appropriate Assessment

It is Council policy to provide adequate wastewater treatment facilities to serve the existing and future population of the County, subject to complying with the Water Framework Directive and the associated River Basin Management Plan or any updated version of this document, 'Water Quality in Ireland 2007-2009' (EPA 2011) or any updated version of the document, Pollution Reduction Programmes for Designated Shellfish Areas, the Urban Waste Water Treatment Directive and the Habitats Directive.

Policy El3: Surface Water Drainage and Appropriate Assessment

It is Council policy to require that a Sustainable Drainage System (SuDS) is applied to any development and that site specific solutions to surface water drainage systems are developed, which meet the requirements of the Water Framework Directive and the associated River Basin Management Plans and 'Water Quality in Ireland 2007-2009' (EPA 2011) or any updated version of the document.

Fingal Development Plan 2017-2023

Objective NH10

Ensure that the Council takes full account of the requirements of the Habitats and Birds Directives, as they apply both within and without European Sites in the performance of its functions.

Objective NH11

Ensure that the Council, in the performance of its functions, takes full account of the objectives and management practices proposed in any management or related plans for European Sites in and adjacent to Fingal published by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

Objective NH15

Strictly protect areas designated or proposed to be designated as Natura 2000 sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); also known as European sites) including any areas that may be proposed for designation or designated during the period of this Plan.

Objective SW04

Require the use of sustainable drainage systems (SuDS) to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage techniques where appropriate, for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flooding risks.

Objective WQ01

Strive to achieve 'good status' in all waterbodies in compliance with the Water Framework Directive, the Eastern River Basin District Management Plan 2009-2015 and the associated Programme of Measures (first cycle) and to cooperate with the development and implementation of the second cycle national River Basin Management Plan 2017-2021.

Objective WQ04

Protect existing riverine wetland and coastal habitats and where possible create new habitats to maintain naturally functioning ecosystems whilst ensuring they do not impact negatively on the conservation objectives of any European Sites.

Objective WT01

Liaise with and work in conjunction with Irish Water during the lifetime of the plan for the provision, extension and upgrading of waste water collection and treatment systems in all towns and villages of the County to serve existing populations and facilitate sustainable development of the County, in accordance with the requirements of the Settlement Strategy and associated Core Strategy.

Objective WT02

Liaise with Irish Water to ensure the provision of wastewater treatment systems in order to ensure compliance with existing licences, EU Water Framework Directive, River Basin Management Plans, the Urban Waste Water Directive and the EU Habitats Directive.

Wicklow County Development Plan 2016-2022

NH2

No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects).

Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place.

NH3

To contribute, as appropriate, towards the protection of designated ecological sites including candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs); Wildlife Sites (including proposed Natural Heritage Areas); Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs). To contribute towards

compliance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including the following and any updated/superseding documents:

- EU Directives, including the Habitats Directive (92/43/EEC, as amended)7, the Birds Directive (2009/147/EC)8, the Environmental Liability Directive (2004/35/EC)9, the Environmental Impact Assessment Directive (85/337/EEC, as amended), the Water Framework Directive (2000/60/EC) and the Strategic Environmental Assessment Directive (2001/42/EC).
- National legislation, including the Wildlife Act 197610, the European Communities (Environmental Impact Assessment) Regulations 1989 (SI No. 349 of 1989) (as amended), the Wildlife (Amendment) Act 2000, the European Union (Water Policy) Regulations 2003 (as amended), the Planning and Development Act 2000 (as amended), the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011) and the European Communities (Environmental Liability) Regulations 200811.
- National policy guidelines (including any clarifying Circulars or superseding versions of same), including the Landscape and Landscape Assessment Draft Guidelines 2000, the Environmental Impact Assessment Sub-Threshold Development Guidelines 2003, Strategic Environmental Assessment Guidelines 2004 and the Appropriate Assessment Guidance 2010.
- Catchment and water resource management Plans, including Eastern and South Eastern River Basin Management Plan 2009-2015 (including any superseding versions of same).
- Biodiversity Plans and guidelines, including Actions for Biodiversity 2011-2016: Ireland's 2nd National Biodiversity Plan (including any superseding version of same).
- Ireland's Environment 2014 (EPA, 2014, including any superseding versions of same), and to make provision where appropriate to address the report's goals and challenges.

NH4

All projects and plans arising from this plan12 (including any associated improvement works or associated infrastructure) will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:

1) The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or

2) The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type and / or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or

3) The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.

NH5

To maintain the conservation value of all proposed and future Natural Heritage Areas (NHAs) and to protect other designated ecological sites in Wicklow.

Along with cSACs, SPAs and pNHA these include Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs). **WI2**

To protect existing and potential water resources of the County, in accordance with the EU Water Framework Directive, the River Basin Management Plans, the Groundwater Protection Scheme and source protection plans for public water supplies.

WI12

Ensure the implementation of Sustainable Urban Drainage Systems (SUDS) and in particular, to ensure that all surface water generated in a new development is disposed of on-site or is attenuated and treated prior to discharge to an approved surface water system.

WI6

In order to fulfil the objectives of the Core Strategy, Wicklow County Council will work alongside and facilitate the delivery of Irish Water's Water Services Investment Programme, to ensure that all lands zoned for development are serviced by an adequate wastewater collection and treatment system and in particular, to endeavour to secure the delivery of regional and strategic wastewater schemes. In particular, to support and facilitate the development of a WWTP in Arklow, at an optimal location following detailed technical and environmental assessment and public consultation.

WI7

Permission will be considered for private wastewater treatment plants for single rural houses where:

- the specific ground conditions have been shown to be suitable for the construction of a treatment plant and any associated percolation area;
- the system will not give rise to unacceptable adverse impacts on ground waters / aquifers and the type of treatment proposed has been drawn up in accordance with the appropriate groundwater protection response set out in the Wicklow Groundwater Protection Scheme (2003);
- the proposed method of treatment and disposal complies with Wicklow County Council's Policy for Wastewater Treatment & Disposal Systems for Single Houses (PE ≤ 10) and the Environmental Protection Agency "Waste Water Treatment Manuals"; and
- in all cases the protection of ground and surface water quality shall remain the overriding priority and proposals must definitively demonstrate that the proposed development will not have an adverse impact on water quality standards and requirements set out in EU and national legislation and guidance documents.

WI9

Private wastewater treatment plants for commercial / employment generating development will only be considered where:

- Irish Water has confirmed the site is due to be connected to a future public system in the area6 or Irish Water have confirmed there are no plans for a public system in the area;
- it can clearly demonstrated that the proposed system can meet all EPA / Local Authority environmental criteria; and
- an annually renewed contract for the management and maintenance of the system is contracted with a reputable company / person, details of which shall be provided to the Local Authority.