Screening Report for Appropriate Assessment of a proposed amendment to a permitted Largescale Residential Development at Old Golf Links Road and Tuite's Lane, Blackrock, Dundalk, Co. Louth

Compiled by OPENFIELD Ecological Services

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July 2025

Introduction

Biodiversity is a contraction of the words 'biological diversity' and describes the enormous variability in species, habitats and genes that exist on Earth. It provides food, building materials, fuel and clothing while maintaining clean air, water, soil fertility and the pollination of crops. A study by the Department of Environment, Heritage and Local Government placed the economic value of biodiversity to Ireland at €2.6 billion annually (Bullock et al., 2008) for these 'ecosystem services'.

All life depends on biodiversity and its current global decline is a major challenge facing humanity. In 1992, at the Rio Earth Summit, this challenge was recognised by the United Nations through the Convention on Biological Diversity which has since been ratified by 193 countries, including Ireland. Its goal to significantly slow down the rate of biodiversity loss on Earth has been echoed by the European Union, which set a target date of 2010 for halting the decline, however this was not achieved. In 2010 in Nagoya, Japan, governments from around the world set about redoubling their efforts and issued a strategy for 2020 called 'Living in Harmony with Nature' however none of these targets were achieved. In December 2022, the Kunming-Montreal Global biodiversity framework was agreed with the headline of 'living in harmony with nature'. This has set ambitious goals to not only protect, but restore, nature, including by protecting 30% of land and sea by 2030.

In 2024 the fourth national biodiversity action plan was published to incorporate the goals set out in this framework, along with its commitments to the conservation of biodiversity under national and EU law.

The main legislation for conserving biodiversity in Ireland have been the Directive 2009/147//EC of the European Parliament and of the Council of November 2009 on the conservation of wild birds (Birds Directive) and Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive). Among other things, these require member states to designate areas of their territory that contain important bird populations in the case of the former; or a representative sample of important or endangered habitats and species in the case of the latter. These areas are known as Special Protection Areas (SPA) and Special Areas of Conservation (SAC) respectively. Collectively they form a network of sites across the European Union known as Natura 2000. The Birds and Habitats Directives have been transposed into Irish legislation by the European Communities (Birds and Natural Habitats) Regulations 2011-2015. A report into the economic benefits of the Natura 2000 network concluded that "there is a new evidence base that conserving and investing in our biodiversity makes sense for climate challenges, for saving money, for jobs, for food, water and physical security, for cultural identity, health, science and learning, and of course for biodiversity itself" (EU, 2013).

Unlike traditional nature reserves or national parks, Natura 2000 sites are not 'fenced-off' from human activity and are frequently in private ownership. It is the responsibility of the competent national authority to ensure that 'good

conservation status' exists for their SPAs and SACs and specifically that Article 6(3) of the Habitats Directive is met. Article 6(3) states:

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

Sections 177U and 177V of the Planning and Development Act 2000 sets out the purpose of AA Screening is as follows:

A screening for appropriate assessment shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

The test at stage 1 AA Screening is that:

The competent authority shall determine that an appropriate assessment of a proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

The test at stage 2 (Appropriate Assessment) is:

Whether or not the proposed development, individually or in-combination with other plans or projects would adversely affect the integrity of a European site.

However, where this is not the case, a preliminary screening must first be carried out to determine whether or not a full AA is required. This screening is carried out by Louth County Council.

<u>The Purpose of this document</u>

This document provides for the screening of a proposed application to amend a permitted development at Old Golf Links Road and Tuite's Lane, Blackrock, Dundalk, Co. Louth, and its potential effects in relation to Natura 2000 sites (SACs and SPAs).

This document will assess whether effects to the Natura 2000 network are likely to occur in accordance with Article 6(3) of the Habitats Directive and the Planning and Development (Amendment) Act, 2010.

About OPENFIELD Ecological Services

OPENFIELD Ecological Services is headed by Pádraic Fogarty who has worked for 25 years in the environmental field and in 2007 was awarded an MSc from Sligo Institute of Technology for research into Ecological Impact Assessment (EcIA) in Ireland. Since its inception in 2007 OPENFIELD has carried out numerous EcIAs for Environmental Impact Assessment (EIA), Appropriate Assessment in accordance with the EU Habitats Directive, as well as individual planning applications. Pádraic is a full member of the Institute of Environmental Management and Assessment (IEMA).

Guidance

This AA Screening Report has been undertaken in accordance with the following guidance:

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

Methodology

The methodology for this screening statement is clearly set out in a document prepared for the Environment DG of the European Commission entitled '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' (Oxford Brookes University, 2001). Chapter 3, part 1, of this document deals specifically with screening while Annex 2 provides the template for the screening/finding of no significant effects report matrices to be used.

In accordance with this guidance, the following methodology has been used to produce this screening statement:

Step 1: Management of the Site
This determines whether the project is necessary for the conservation management of the site in question.

Step 2: Description of the Project
This step describes the aspects of the project that may have an impact on the Natura 2000 site.

Step 3: Characteristics of the Site
This process identifies the conservation aspects of the site and determines whether negative impacts can be expected as a result of the plan. This is done through a literature survey and consultation with relevant stakeholders – particularly the National Parks and Wildlife Service (NPWS). All potential effects are identified including those that may act alone or in combination with other projects or plans.

Using the precautionary principle, and through consultation and a review of published data, it is normally possible to conclude at this point whether potential impacts are likely. Deficiencies in available data are also highlighted at this stage.

Step 4: Assessment of Significance
Assessing whether an effect is significant or not must be measured against the conservation objectives for the Natura area in question.

If this analysis shows that significant effects are likely then a full AA will be required.

The steps are compiled into a screening matrix, a template of which is provided in Appendix II of the EU methodology.

Mitigation measures cannot be taken into account in an AA screening assessment.

A full list of literature sources that have been consulted for this study is given in the References section to this report while individual references are cited within the text where relevant.

<u>Screening Template as per Annex 2 of EU methodology:</u>

This plan is not necessary for the management of any SAC or SPA and so Step 1 as outlined above is not relevant.

Brief description of the proposed project

The permitted development was granted permission by An Bord Pleanála in 2019 (ABP Ref.: 303253). This was for 166 no. residential units, creche, completion of street network and link roads and associated site works. The applicant has since then commenced construction on site with a number of houses constructed and some completed and now occupied.

During the construction of the development, archaeological monitoring took place which uncovered an extensive amount of archaeological material in close proximity to the adjacent graveyard. This resulted in the loss of four units on site.

The applicant is now applying for permission to amend the development under the LRD system in order to relocate these four units.

The development site is located north of Blackrock and to the south of Dundalk in Co Louth and is close to transport arteries as well as new and established residential developments.

The main phases of the permitted project include:

- site preparation.
- A construction phase using standard building materials.
- Construction will include connection to existing water drainage, electricity and wastewater networks.
- An operation phase whereby the development will be occupied.

The proposed amendments to the permitted development will not materially alter these phases.

The application for the now permitted development was accompanied by a Natura Impact Statement, prepared by Doherty Environmental Consultants Ltd in 2018. This highlighted the presence of the Blackrock Stream flowing through the site, stating:

This is a minor first order stream that discharges directly to the Inner Dundalk Bay approximately 1.2km to the south of the project site. The section of the stream flowing through the site is characterised by a narrow width (circa 0.5m). The stream substrate is muddy and the stream channel is high choked with vegetation throughout. A number of gated culverts occur along the channel and these form barriers to the movement of fish and other large aquatic fauna along the channel.

It concluded that:

The hydrological pathway along the Blackrock stream will have the potential to convey polluting material from the project site to the Dundalk Bay European

Sites, in the event of a pollution incident at the project site during the construction or operation phase.

The NIS therefore made recommendations for mitigation measures to be implemented to ensure that no adverse effects to the integrity of Natura 2000 sites could arise. In granting permission for the development, and in carrying out the AA, ABP accepted the conclusion of the NIS.

The mitigation measures from this NIS have been implemented in full as part of the site management measures.

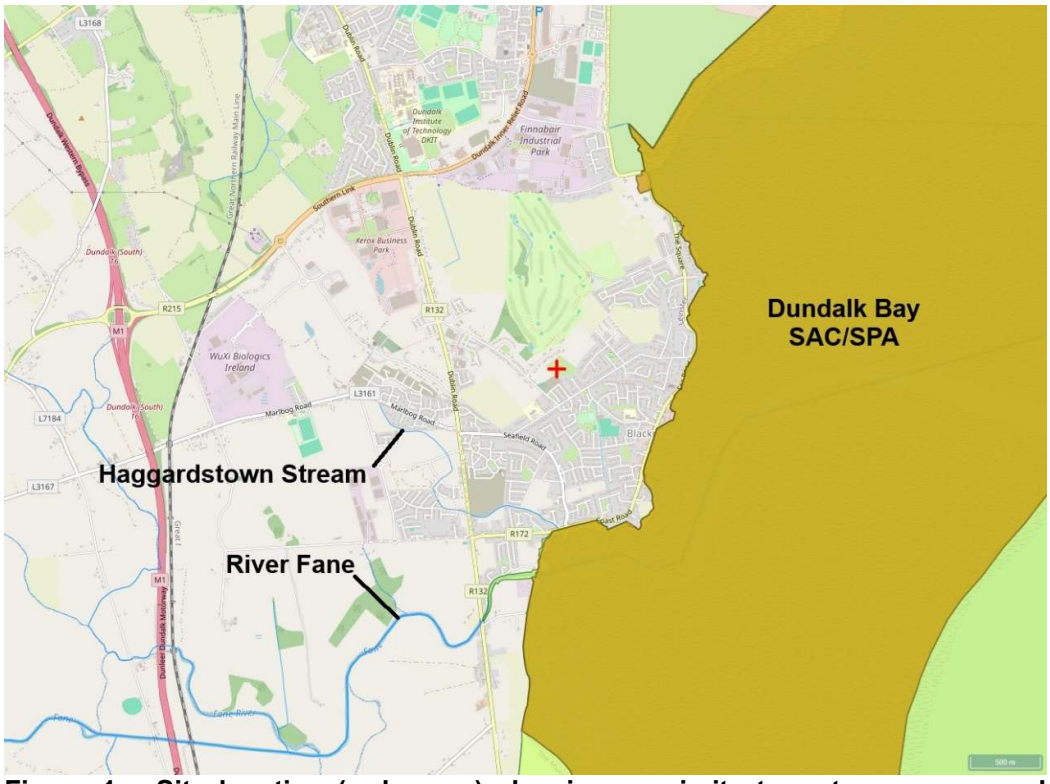

Figure 1 – Site location (red cross) showing proximity to water courses and Natura 2000 sites (from www.epa.ie)

Environmental Protection Agency (EPA) maps show no water courses flowing in this vicinity. The Haggardstown Stream can be found c.1km to the south and the water course leads to Dundalk Bay which is subject to a number of Natura 2000 designations. The Blackrock Stream, as identified in the planning stage NIS, is not marked as a water course by the EPA.

The development site is now entirely composed of buildings and artificial surfaces and other highly modified habitats.

Any inert construction and demolition waste will be removed by a licenced contractor and disposed of in accordance with the Waste Management Act.

The project will see no change to the extent of hard surfaces and so there can be no negative change to the pattern of surface water run-off. A permitted

surface water drainage system is to be installed in accordance with SUDS principles.

SUDS are standard measures in all new developments and are not included here to avoid or reduce an effect to a Natura 2000 site. This is confirmed in the judgment recently issued from the ECJU (Case C-721/21, Eco Advocacy CLG v An Bord Pleanála) which confirms that where standard measures are included in the application they cannot be considered as mitigation in an AA context.

The proposed amendment will result in no substantial change to the permitted surface water configuration.

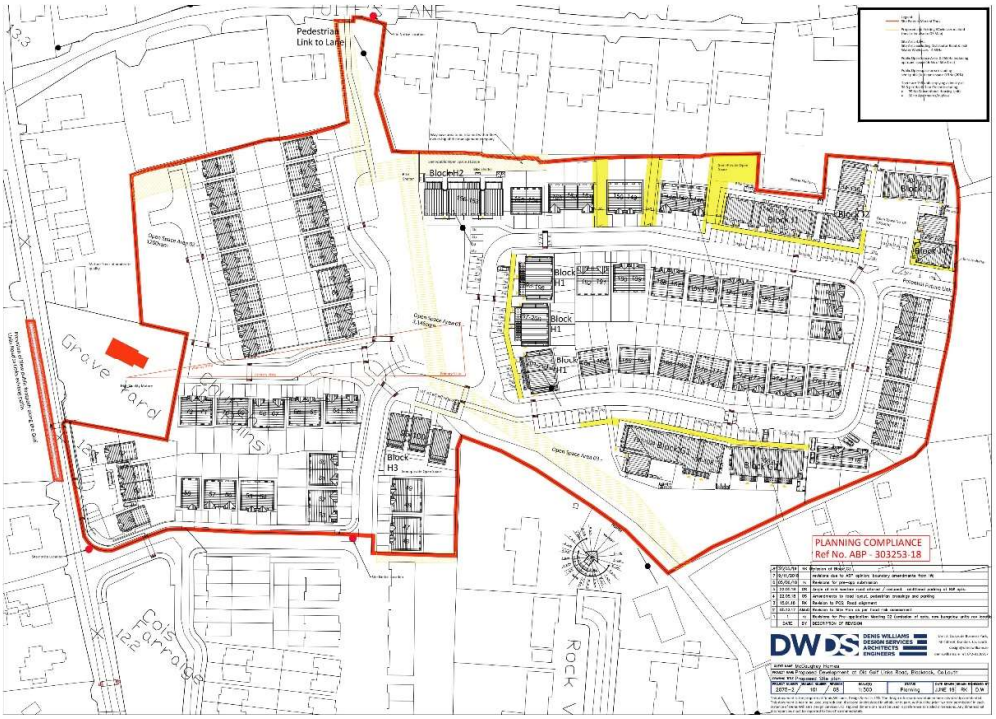

Figure 2 – Development site boundary and permitted layout

Foul effluent from the development will be sent to the wastewater treatment plant for Dundalk which discharges to Dundalk Bay. The Dundalk plant is licenced to discharge treated effluent by the EPA (licence number D0053-01) and is managed by Uisce Éireann. It treats effluent for a population equivalent (P.E.) on average of 61,000 and the annual max loading is within this limit. Emissions from the plant are currently not in compliance with the Urban Wastewater Treatment Directive.

The Annual Environmental Report for 2023, the most recent available, indicated that there were a number of exceedences of the emission limit values set under the Urban Wastewater Treatment Directive and these have been attributed to inadequate operational procedures/training, plant or equipment breakdown, broken sewer pipe and tank overflows. Monitoring of the receiving waters is undertaken and the AER states that “A deterioration in water quality has been identified […] however it is not known if it or is not caused directly by the WWTP.

Based on the above, and the effluent compliance results, the discharge from the wastewater treatment plant may be having an observable negative impact on the water quality and the WFD status of the Castletown Estuary and Inner Dundalk Bay." Nevertheless, the treatment plant is operating within its capacity and according to the AER this is not expected to be exceeded within the next three years (i.e. from 2023).

Figure 3 – Proposed site plan showing amended layout

The proposed amendment will result in no net change to the total number of units over and above what is permitted and so there is no change arising to the loading to the foul sewer. There are no other discharges from this operation.

Fresh water supply for the development will be via a mains supply. This does not originate from any Natura 2000 site.

There are no point air emissions from the site while some dust and noise can be expected during the construction phase.

Pathway Analysis

The development site is not within or adjacent to any Natura 2000 site. There is no pathway for direct habitat loss or disturbance within any Natura 2000 site.

The Blackrock Stream provides direct, natural, hydrological connection between the development site and Natura 2000 sites. There is an indirect pathway to Dundalk Bay via foul sewers and the municipal wastewater

treatment plant as well as surface sewers. There are consequently pathways to the Dundalk Bay SAC and SPA.

There are no pathways to any other Natura 2000 site.

Brief description of Natura 2000 sites

In assessing the zone of influence of this project upon Natura 2000 sites the following factors must be considered:

- Potential impacts arising from the project
- The location and nature of Natura 2000 sites
- Pathways between the development and the Natura 2000 network

This is referred to as the source-pathway-receptor model. Following the pathway analysis, the following Natura 2000 sites are assessed in greater detail:

The **Dundalk Bay SAC** (side code: 0455) is concentrated on the intertidal area that stretches from the southern shore of the Cooley Peninsula to south of Annagassan. The reasons why it is an SAC are set out in its qualifying interests, which are set out in table 1.

Table 1 – Qualifying interests for the Dundalk Bay SAC

Habitat/Species	Status[1]
Mudflats and sandflats not covered by seawater at low tide	Inadequate
Salicornia and other annuals colonizing mud and sand	Favourable
Atlantic salt meadows	Inadequate
Mediterranean salt meadows	Inadequate
Perennial vegetation of stony banks	Inadequate
Estuaries	Inadequate

- **Estuary (1130)**: This is the portion of a river that is influenced by the tide but retaining a significant freshwater influence. Substrates can range from rocks and boulders, to expanses of fine mud and sand. They are an important resource for birds and other fauna and many estuaries have twin designations (i.e. both SAC and SPA). It considered that the majority of estuary habitat is in good condition however approximately a quarter is negatively affected by excess nutrient input and damaging fishing practices.
- **Tidal mudflats (1140)**. This is an intertidal habitat characterised by fine silt and sediment. Most of the area in Ireland is of favourable status however water quality and fishing activity, including aquaculture, are negatively affecting some areas.

[1] NPWS. 2019. *The Status of EU Protected Habitats and Species in Ireland.* Habitat Assessments Volume 1.0 Summary Overview, National Parks & Wildlife Services.

- **Perennial vegetation of stony banks (1220)** is a habitat of the high tide line characterised by loose stones and shingle. It is a highly dynamic feature, being continually reshaped by tides and waves. It can be home to very rare plants and a number of coastal nesting birds
- **Salicornia mudflats (1310)**: This is a pioneer saltmarsh community and so is associated with intertidal areas. It is dependent upon a supply of fresh, bare mud and can be promoted by damage to other salt marsh habitats. It is chiefly threatened by the advance of the alien invasive Cordgrass *Spartina anglica.* Erosion can be destructive but in many cases this is a natural process.
- **Atlantic and Mediterranean salt meadows (1330 & 1410)**: these are intertidal habitats that differ somewhat in their vegetation composition. They are dynamic habitats that depend upon processes of erosion, sedimentation and colonisation by a typical suite of salt-tolerant organisms. The main pressures are invasion by the non-native *Spartina anglica* and overgrazing by cattle and sheep.

The **Dundalk Bay SPA** (side code: 4026) is largely coincident with the SAC boundary although it extends beyond the low tide line, approximately in a straight line from the Cooley peninsula to the headland at Dunaney. The largest congregations of wintering birds in Ireland assemble in this area and table 2 lists the features of interest for this SPA.

Table 2 – Features of interest for the Dundalk Bay SPA in (EU code in square parenthesis)

Species		Status[2]
Brent Goose	*Branta bernicla* [A046]	Amber (Wintering)
Oystercatcher	*Haematopus ostralegus* [A130]	Red (Breeding & Wintering)
Ringed Plover	*Charadrius hiaticula* [A137]	Amber (Breeding & Wintering)
Grey Plover	*Pluvialis squatarola* [A140]	Red (Wintering)
Golden Plover	*Pluvialis apricaria* [A140]	Red (Breeding & Wintering)
Knot	*Calidris canutus* [A143]	Red (Wintering)
Great-crested Grebe	*Podiceps cristatus* [A005]	Amber (Breeding & Wintering)
Dunlin	*Calidris alpina* [A149]	Red (Breeding & Wintering)
Bar-tailed Godwit	*Limosa lapponica* [A157]	Red (Wintering)
Black-tailed Godwit	*Limosa lapponica* [A157]	Red (Wintering)
Curlew	*Numenius arquata* [A160]	Red (Breeding & Wintering)
Redshank	*Tringa totanus* [A162]	Red (Breeding & Wintering)
Black-headed Gull	*Croicocephalus ridibundus* [A179]	Amber (Breeding & Wintering)

[2] Gilbert et al., 2021. *Birds of Conservation Concern in Ireland 2020-2026*

Common Gull	*Larus canis* [A182]	Amber (Breeding & Wintering)
Herring Gull	*Larus argentatus* [A184]	Amber (Breeding & Wintering)
Greylag Goose	*Anser anser* [A043]	Amber (Wintering)
Shelduck	*Tadorna tadorna* [A048]	Amber (Breeding & Wintering)
Mallard	*Anas platyrhynchos* [A053]	Amber (Breeding & Wintering)
Teal	*Anas crecca* [A052]	Amber (Breeding & Wintering)
Pintail	*Anas acuta* [A054]	Red (Wintering)
Common Scoter	*Melanitta nigra* [A065]	Red (Breeding & Wintering)
Red-breasted Merganser	*Mergus serrator* [A069]	Amber (Breeding & Wintering)
Lapwing	*Vanellus vanellus* [A142]	Red (Breeding & Wintering)
	Wetlands & Waterbirds [A999]	

- **Light-bellied Brent Goose.** There has been a 67% increase in the distribution of this goose which winters throughout the Irish coast. The light-bellied subspecies found in Ireland breeds predominantly in the Canadian Arctic.
- **Sanderling.** This small bird breeds in the high Arctic and winters in Ireland along sandy beaches and sandbars. Its wintering distribution has increased by 21% in the previous 30 years.
- **Dunlin.** Although widespread and stable in number during the winter season, the Irish breeding population has collapsed by nearly 70% in 40 years. Breeding is now confined to just seven sites in the north and west as habitat in former nesting areas has been degraded.
- **Knot.** These small wading birds do not breed in Ireland but gather in coastal wetlands in winter. Their numbers have increased dramatically since the mid-1990s although the reasons for this are unclear.
- **Black-headed Gull.** Widespread and abundant in winter these gulls are nevertheless considered to be in decline. The reasons behind this are unclear but may relate to the loss of safe nesting sites, drainage, food depletion and increase predation.
- **Ringed Plover.** This bird is a common sight around the Irish coast where it is resident. They breed on stony beaches but also, more recently, on cut-away bog in the midlands.
- **Oystercatcher.** Predominantly coastal in habit Oystercatchers are resident birds whose numbers continue to expand in Ireland.
- **Bar-tailed Godwit.** These wetland wading birds do not breed in Ireland but are found throughout the littoral zone during winter months. They prefer estuaries where there are areas of soft mud and sediments on which to feed.
- **Grey Plover.** These birds do not breed in Ireland but winter throughout coastal estuaries and wetlands. Its population and distribution is considered to be stable.

- **Roseate Tern.** This tern breeds at only a few stations along Ireland's east coast. Most of these are in decline although at Dublin their colony is increasing.
- **Common Tern.** This summer visitor nests along the coast and on islands in the largest lakes. Its breeding range has halved in Ireland since the 1968-1972 period.
- **Arctic Tern.** These long-distance travellers predominantly breed in coastal areas of Ireland. They have suffered from predation by invasive mink and are declining in much of their range.
- **Redshank.** Once common breeders throughout the peatlands and wet grasslands of the midlands Redshanks have undergone a 55% decline in distribution in the past 40 years. Agricultural intensification, drainage of wetlands and predation are the chief drivers of this change.
- **Pintail**. Dabbling duck wintering on grazing marshes, river floodplains, sheltered coasts and estuaries. It is a localised species and has suffered a small decline in distribution in Ireland for unknown reasons.
- **Teal**. In winter this duck is widespread throughout the country. Land use change and drainage however have contributed to a massive decline in its breeding range over the past 40 years.
- **Shoveler**. Favoured wintering sites for this duck are inland wetlands and coastal estuaries. While there have been local shifts in population and distribution, overall their status is stable in Ireland.
- **Mallard.** This is one of the most widespread and well known ducks although there has been a reduction in the wintering population. It found is in all wetland areas and is only absent from the most remote mountain areas.
- **Greylag Goose.** Wintering Greylag Geese are very scattered in Ireland and occur on both coastal in inland sites. Their population has expanded greatly in their more northerly ranges (Iceland and Scotland) and this has coincided with losses elsewhere.
- **Common Gull.** Breeding sites for this gull in Ireland are confined to coastal locations, and mostly in the north and west. Their population is boosted by winter arrivals but again, there is a distinct coastal bias in their distribution.
- **Herring Gull.** This large gull breeds predominantly around the Irish coast and only occasionally inland. Numbers at these colonies have fallen by 60% since 1969, a decline which is attributed to a number of sources including a reduction in available food at landfill, botulism and predation.
- **Black-tailed Godwit.** Breeding in Iceland these waders winter in selected sites around the Irish coast, but predominantly to the east and southern halves. Their range here has increase substantially of late.
- **Common Scoter.** While a familiar winter visitor this duck breeds only in small numbers in lakes of Counties Galway, Mayo, Fermanagh and Sligo. A significant decline in numbers is evident and is attributed to pollution, predation by the invasive American Mink and the introduction of non-native coarse fish.
- **Red-breasted Merganser.** A widely distributed duck in winter Red-breasted Mergansers also breed in Ireland at certain coastal and inlands locations to the north and west. They have suffered small declines in both

their wintering and breeding ranges and possible reasons have been cited as predation by American Mink and shooting.

- **Curlew.** Still a common sight during winter at coastal and inland areas around the country it breeding population here has effectively collapsed. Their habitat has been affected by the destruction of peat bogs, afforestation, farmland intensification and land abandonment. Their wintering distribution also appears to be in decline.
- **Golden Plover.** In winter these birds are recorded across the midlands and coastal regions. They breed only in suitable upland habitat in the north-west. Wintering abundance in Ireland has changed little in recent years although it is estimated that half of its breeding range has been lost in the last 40 years.
- **Great-crested Grebe.** These birds breed predominantly on freshwater sites north of the River Shannon while coastal areas along the east and south are used for wintering. Numbers in Ireland have decline by over 30% since the 1990s.
- **Shelduck.** The largest of our ducks, Shelduck both breed and winter around the coasts with some isolate stations inland. Its population and range is considered stable.
- **Lapwing.** Although still one of the most widespread of the breeding waders Lapwing populations have declined by over 50% in the past 40 years. This has been driven by changes in agricultural practices and possibly increased predation.

Dundalk Bay is recognised as an internationally important site for water birds as it supports over 20,000 individuals (Crowe et al., 2012).

Whether significant effects are likely to occur to either the SAC or SPA must be measured against their 'conservation objectives'. Specific conservation objectives have been set for these areas (NPWS, 2011a). For the Dundalk Bay SAC the objectives relate to habitat area, community extent, community structure and community distribution within the qualifying interest. There is no objective in relation to water quality.

For the Dundalk Bay SPA the conservations objectives for each bird species relates to maintaining a population trend that is stable or increasing, and maintaining the current distribution in time and space.

Data collected to carry out the assessment

The EU's Water Framework Directive (WFD) stipulates that all water bodies were to attain 'good ecological status' by 2015. This includes estuarine and transitional waters and Dundalk Bay was originally located within the Neagh-Bann International River Basin District. In 2009 the first River Basin Management Plan (RBMP) was published to address pollution issues and includes a 'programme of measures' which was to be completed.

In 2018 a second RBMP was published which identified 190 'priority areas for action' where resources are to be focussed over the 2018-21 period. The

catchments of the Castletown and Glyde Rivers are among these areas. A third RBMP was published in 2024.

Estuaries are among the most productive habitats in the world and rely on large amounts of sediment which are deposited by rivers or wave action (Little, 2000).

In terms of its status under the WFD, the Haggardstown Stream (water body code: IE_NB_06H080570) is assessed as 'poor' for the most recent 2016-2021 reporting period. Inner Dundalk Bay (water body code: IE_NB_040_0100) is 'moderate' while Outer Dundalk Bay (water body code: IE_NB_040_0000) is 'high'.

The status of non-breeding birds in Dundalk Bay was assessed by the NPWS (NPWS. 2011b). Of the 23 bird species for which the bay is designated, 14 were assessed as 'favourable'; 3 were assessed as 'intermediate – unfavourable'; while the remaining 6 were assessed as 'moderate – unfavourable'. While declines in some species are clearly in evidence, no species was seen to be declining locally but is stable or increasing nationally (implying that specific factors in Dundalk Bay are not responsible for observed declines). Threats to the birds are assessed and are predominantly associated with disturbance effects from recreational activity to various commercial and small-scale fishing pressure (including extraction of shellfish). Pollution is not identified as a threat to the status of wintering birds.

Coastal habitats are also assessed in this way (NPWS, 2011). Salt marsh habitats are assessed as 'favourable' while Salicornia mudflats are 'unfavourable – inadequate'. A supporting document for marine habitats is available but does not assess the habitats in this way. This document does not highlight water quality as a threat to the status of habitats however excessive pollution, resulting in algal blooms and depleting dissolved oxygen levels can disrupt entire benthic (i.e. bottom-dwelling) food chains.

Tidally exposed habitats below the high tide mark can be assumed to be of value to wading birds, particularly during the winter months when populations of birds are significantly higher than during the summer.

The following conservation objectives are relevant to this study:

Estuaries (code: 1130)
Permanent habitat area stable or increasing (estimated at 2,799 hectares); Conserve the following community types in a natural condition: Intertidal sand to mixed sediment with polychaetes, molluscs and crustaceans community complex; Estuarine subtidal muddy sand to mixed sediment with gammarids community complex; Subtidal sand to mixed sediment with *Nucula nucleus* community complex; Subtidal sand to mixed sediment with *Nephtys spp*. community complex; Fucoid-dominated intertidal reef community complex; Faunal turf-dominated subtidal reef community; and Anemone-dominated subtidal reef community

Mudflats (code 1140)
Permanent habitat area stable or increasing (estimated at 4,375 hectares); Conserve the following community types in a natural condition: Intertidal sand with *Scolelepis squamata* and *Pontocrates spp*. community; and Intertidal sand to mixed sediment with polychaetes, molluscs and crustaceans community complex.

Perennial vegetation of stony bank (code: 1220)
Habitat areas stable or increasing subject to natural variation; no decline in habitat distribution; maintain physical and vegetation structure without any physical obstructions, maintain vegetation structure and composition subject to natural variations.

Salicornia mudflats (1310)
Maintain habitat area and distribution including physical structure (sediment supply, creeks and pans, flooding regime). Maintain vegetation structure as measured by vegetation height, vegetation cover, typical species and sub-communities. Absences of the invasive *Spartina anglica.*

Atlantic/Mediterranean Salt Meadows (1330/1410)
Maintain habitat area and distribution including physical structure (sediment supply, creeks and pans, flooding regime). Maintain vegetation structure as measured by vegetation height, vegetation cover, typical species and sub-communities. Absences of the invasive *Spartina anglica.*

Dundalk Bay is important for roosting and feeding wetland/wading birds. The conservation objective for all species is similar and can be summarised as:

Birds (similar for all species)
Long term population trend stable or increasing; there should be no significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation.

Wetlands
The permanent area occupied by the wetland habitat is stable and not significantly less than the areas of 8136, 4374 and 649 hectares respectively for subtidal, intertidal, and supratidal habitats, other than that occurring from natural patterns of variation.

The Assessment of Significance of Effects

Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.

In order for an effect to occur there must be a pathway between the source (the development site) and the receptor (the SAC or SPA). Where a pathway does not exist an impact cannot occur.

Habitat loss
At its closest point the development site is approximately 750m (as the crow flies) from the boundary of the Dundalk Bay SPA and SAC. Because of this distance separating these areas there is no pathway for loss or disturbance of species or habitats which are qualifying interests of the Natura 2000 sites.

There are no likely significant effects to Natura 2000 sites arising from this source.

Disturbance to birds/Ex-situ effects
The development site is too far from bird roosting areas in Dundalk Bay to result in impacts from noise or other forms of human disturbance. The development site itself does not contain habitat which is suitable for roosting or foraging birds which are qualifying interests of the Dundalk Bay SPA.

No significant effects to Natura 2000 sites are likely to arise from this source.

Light and noise
The project is too far from Natura 2000 sites to result in any measurable impact from increasing lighting and noise. No significant effects to Natura 2000 sites are likely to arise from this source.

Pollution
There is a pathway from the development site via surface and wastewater water flows to Dundalk Bay via the surface water sewer and the Dundalk wastewater treatment plant respectively.

A. Pollution from wastewater
Emissions from the wastewater treatment plant are currently not in compliance with licence standards while the discharge may be having an effect on the WFD status.

Sufficient loading exists at the wastewater treatment plant for the permitted loading from this project (remaining capacity as per the 2023 AER was 6,960 P.E.). Non-compliance issues at this facility are not related to treatment capacity. Therefore, the additional loading will have no effect on the quality of the discharge from the wastewater treatment plant.

Since the proposed amendment will not alter the loading to the foul sewer, this project is not likely to have significant effects on Natura 2000 sites.

B. Pollution from surface water
SUDS measures have been incorporated into this project. SUDS are not mitigation measures in an AA context. These standard measures will ensure that no negative effects to surface water quality or quantity will arise from this source. The proposed amendment will have no effect on the permitted surface water configuration.

No significant effects to Natura 2000 sites are likely to arise from this source.

C. Pollution during construction
Pollutants arising from surface water run-off typically comprise of sediment and small quantities of hydrocarbon residues. During construction projects this can also include cement and other substances which are toxic to aquatic life. In this case the risk of pollution from this source is very low as there are no pathways for pollutants to reach water courses or Natura 2000 sites.

The permitted development was subject to AA by the competent authority which concluded that with the implementation of mitigation measures set out in the NIS, no adverse effect to Natura 2000 sites would arise.

The proposed new configuration of the four units will have no effect on pollution risk and no changes to the mitigation measures from are proposed. The proposed development does not affect the treatment of the Blackrock Stream.

Therefore, in the absence of any mitigation measures, significant effects to Natura 2000 sites are not likely to arise from this aspect of the proposed development.

Abstraction
There is no evidence that abstraction is affecting the conservation objectives of any SAC or SPA within the zone of influence of this project. The proposed amendments will have no effect on the freshwater demand for the development.

No significant effects to Natura 2000 sites are likely to arise from this source.

Are there other projects or plans that together with the project or plan being assessed could affect the site?

Individual impacts from one-off developments or plans may not in themselves be significant. However, these may become significant when combined with similar, multiple impacts elsewhere. These are sometimes known as cumulative impacts but in AA terminology are referred to as ‘in combination’ effects.

The EU’s Water Framework Directive requires that all water bodies were to attain ‘good ecological status’ by 2015 (with some exceptions). The status of the Haggardstown Stream and Inner Dundalk Bay is currently unsatisfactory and a target of 2021 was set to achieve good status, however this has not been achieved.

Rainwater run-off from paved and impermeable surfaces can carry hydrocarbons and particulate matter into surface waters. These features can also accelerate the discharge of rainwater off land and so accentuate the effects of flash flooding (Mason, 1996). This impact is particularly pronounced in urban locations where significant areas can be paved or built on. As such, incremental increases in hard surfaces, such as when land use changes from agriculture to housing, can result in cumulative effects to water quality. In this case no impact from surface water is expected to occur due to SUDS measures.

The development can be seen in combination with other, similar residential in-fill schemes, which are either proposed, planned or underway. This includes the permitted LRD which is under construction. In combination, these developments will increase loading to the wastewater network and chance land use that could affect the pattern of surface run-off. However, these effects are addressed in this report and it has been concluded that significant effects are not likely to arise thereof.

Given that negative effects are not considered likely to arise, there are no projects, which acting in combination with the current proposal, can result in significant effects to Nature 2000 sites.

Conclusion and Finding of No Significant Effects

No significant effects are likely to arise from this project to Natura 2000 sites in Dundalk Bay: the Dundalk Bay SAC or Dundalk Bay SPA.

In carrying out this AA screening, mitigation measures have not been taken into account. Standard best practice construction measures which could have the effect of mitigating any effects on any European Sites have similarly not been taken into account.

On the basis of the screening exercise carried out above, it can be concluded that the possibility of any significant impacts on any European Sites, whether arising from the project itself 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.

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