



GREENFIELDS SWORDS LRD

Appropriate Assessment Screening Report

Jackie Green Construction

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1 INTRODUCTION

1.1 Background

DNV was commissioned by Jackie Green Construction to prepare an Appropriate Assessment (AA) Screening Report for a Proposed Large-Scale Residential Development (LRD), entitled 'Greenfields Swords LRD' at Greenfields, Swords Business Park, Swords, Co. Dublin, hereafter referred to as 'Proposed Development' or 'Site', when referring to the application Site area. This report contains information to enable the Competent Authority to undertake Stage 1 AA screening in respect of the Proposed Development.

1.2 Quality Assurance and Competence

DNV Biodiversity & Environmental Services (BES) is a multi-disciplinary consultancy specialising in the areas of the Environment, Waste Management and Planning. All DNV consultants carry scientific or engineering qualifications and have a wealth of experience working within the Environmental Consultancy sectors, having undergone extensive training and continued professional development.

DNV (BES) as a company remains fully briefed in European and Irish environmental policy and legislation. DNV staff members are highly qualified in their field. Professional memberships include the Chartered Institution of Wastes Management (CIWM), the Irish Environmental Law Association and Chartered Institute of Ecology and Environmental Management (CIEEM).

All surveying and reporting have been carried out by qualified and experienced ecologists and environmental consultants. CRK, ecologist with DNV undertook the field surveys and authored this report. BMC, ecologist with DNV undertook the winter bird scoping survey for the Site.

CRK is an Ecologist with a M.Sc. in Biodiversity and Conservation from Trinity College Dublin. CRK's experience as an ecologist is broad, both in the variety of ecological reports and field surveys conducted. CRK has experience in surveying habitats, birds, plants, bats, mammals and invasive species, with some experience in assessing welfare conditions of animals using behavioural repertoires as indicators. In addition, CRK has one year of experience as an Ecological Clerk of Works (ECoW), providing on-site ecological supervision and compliance support for construction projects. This role included conducting weekly badger checks, assessing stream and watercourse conditions near active construction areas, monitoring for nesting birds, and overseeing a range of smaller ecological protection works to ensure adherence to environmental regulations and best-practice mitigation measures. CRK's experience in ecological report writing extends from research associated literature reviews to Appropriate Assessment reports (Stage I and II) and Municipal District Summary reports, as well as Preliminary Ecological Appraisals (PEAs), Ecological Impact Assessments (EclAs), and Invasive Species Management Plans (ISMPs).

BMC is an Ecologist and experienced Ornithologist with 12 years of bird survey experience. Brian is a longstanding and active member of Bird Watch Ireland and has provided Ornithology survey work for ecological consultancies, e.g., vantage points surveys of gulls, terns, raptors, waders, and wildfowl; hinterland surveys of the above as well as riverine species; and breeding waders and country birds. Brian is highly experienced with all survey methodologies and with surveying all species groups of Irish birds and migrants.

1.3 Description of Proposed Development

1.3.1 Site Location

The Site of the Proposed Development is a 2.22 hectare (Ha) site in Greenfield, Swords Business Park, Swords, Co. Dublin, located approximately 140 meters (m) south of Seatown Park West, and 300m north of Swords Business Park. The Site is principally bound: to the north by an access road and ancillary car park to serve the commercial units in Swords Business Park; to the east by the M1 Motorway; to the south by Mantua Road; and to the west by the 'Total Produce PLC' warehouse.

Figure 1 shows the overall Site location for the Proposed Development.

1.3.2 Proposed Development Description

The Proposed Development consists of a mixed-use development that constitutes a 'Large-Scale Residential Development' (LRD) at this site of 2.22 Ha principally located at Swords Business Park, Swords, Co. Dublin. The site is principally bound: to the north by an access road and ancillary car park to serve Swords Business Park; to the east by the M1 Motorway; to the south by Mantua Road; and to the west by an access road to serve Swords Business Park. The application site also extends to include parts of: the access road to the north and west for footpath, landscape and foul drainage connection works; Mantua Road to the west for foul drainage connection works; and the green strip to the south at Mantua Road for a pedestrian and cyclist connection.

Permission is sought for a mixed-use development with a gross floor area of 30,358 sq m and principally comprised in 5 No. blocks (A–E), with heights ranging from 1 No. to 9 No. storeys. The proposed block heights are as follows: Block A is 6 No. to 7 No. storeys; Block B is 6 No. to 7 No. storeys; Block C is 6 No. to 7 No. storeys; Block D is 6 No. to 9 No. storeys; and Block E is 1 No. to 9 No. storeys. The development consists of: 289 No. residential apartments (60 No. 1-bed, 200 No. 2-bed and 29 No. 3-bed); retail/commercial unit (701 sq m); and crèche (418 sq m) with outdoor play area (42 sq m).

Permission is also sought for: new multi-modal site entrance to the west; minor relocation of existing northern site entrance to the east; internal road, cycle and footpath network; 132 No. car parking spaces; 13 no. motorcycle parking spaces; cycle parking; hard and soft landscaping, including public open space, communal amenity space (at-grade and as roof gardens atop Block D and Block E) and incidental open space; private amenity space as balconies and terraces facing all directions; public lighting; bin stores; plant rooms; 2 No. sub-stations; green roofs; rooftop plant, PV panels, telecommunications infrastructure, lift overruns and automatic opening vents; and all associated works above and below ground.

A Natura Impact Statement has been prepared in respect of the proposed development. The Planning Application, along with the Natura Impact Statement, may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy at the offices of the Planning Authority during its public opening hours: Fingal County Council, Fingal County Hall, Main Street, Swords, Fingal, Co. Dublin. Opening Hours 09:30 16:30, Monday–Friday. (Cash Office opening hours are 09:30–15:30.) The Planning Application, along with the Natura Impact Statement, may also be inspected online at the following website set up by the applicant: XXX

A submission or observation in relation to the Application and Natura Impact Statement may be made in writing to the Planning Authority on payment of a fee of €20, within the period of 5 weeks, beginning on the date of receipt by Fingal County Council of the Application, and such submissions or observations will be considered by the Planning Authority in making a decision on the application. The Planning Authority may grant permission subject to or without conditions, or may refuse to grant permission.

1.3.2.1 Surface water

The following information is extracted from the Engineering Infrastructure Report & Stormwater Impact Assessment (Roger, 2026).

Existing Surface Water Drainage

As per the above report, the existing site is greenfield. However, there is an existing 900mm surface water pipeline laid parallel to the eastern boundary of the Site. This pipe currently drains the Swords Business park to the south of the Proposed Development and also drains the public road (L6310) between. A remnant alignment of what was the Gaybrook watercourse remains on the Site but this has been diverted some c.30 years ago into the above noted 900mm culvert and the ditch remains "dry" with no upstream flows entering the site.

Proposed Surface Water Drainage

The surface water drainage design has been carried out in accordance with the Greater Dublin Regional Code of Practice, the GDSDS and the CIRIA Report c753 "The SuDS Manual" 2015. Attenuation and SuDS are included in the design.

It is proposed to outfall the attenuated surface water from the Proposed Development into the existing 900mm surface water pipeline located parallel to the eastern boundary of the Site (see Figure 3). From here, all surface water will be direct north to the 1350mm pipeline, before outfall into the Malahide estuary. The surface water drainage infrastructure for the Proposed Development will collect the rainfall on Site, via sustainable urban drainage systems (SuDS) proposed for the

Site, and convey the water via intensive green roofs, bioretention areas, drained tree pits, permeable paving, underground pipes, manholes and direct towards a vortex flow restricting devices, Hydrobrake or similar. The retained water will be stored in 2 no. below ground void arched system, such as the StormTech system and 2 no. detention basins. Due to the constrained nature of the Proposed Development and requirement to provide useable open space for the residents, it is proposed to use 2 no. below ground attenuation storage areas between Blocks A/B and B/C in the privately managed landscaped open space areas. Bio-retention features are contained in these areas to replicate natural drainage characteristics and fulfil the SuDS principles. 2 no. open detention basins are also provided where the Site is less constrained.

Sustainable Drainage Systems (SuDS)

The Proposed Development will incorporate the design principles of Sustainable Drainage Systems (SuDS). The SuDS elements which were found applicable to the proposed scheme design and layout include the following:

- Intensive green roofs
- Permeable paving to all parking spaces
- Tree pits
- Bio-retention areas
- Filter swales
- Silt-trap/catchpit manholes
- Hydrobrake
- Detention basin and stone lined voided arch retention storage

1.3.2.2 Foul Drainage

The following information is extracted from the Engineering Infrastructure Report & Stormwater Impact Assessment (Roger, 2026).

Existing Foul Water Drainage

There are no known public foul drainage services on the Site of the Proposed Development. There are existing private foul drainage systems in the surrounding area, but the Proposed Development intends to construct a new foul pumping station on the Site to cater for the Development with a rising main extending to the Seatown road roundabout at the R132 Dublin Road.

Proposed Foul Water Drainage

Foul water drainage at the Site is to be in accordance with the Uisce Éireann Code of Practice for Wastewater Infrastructure. Uisce Éireann have issued a Confirmation of Feasibility (CDS25000867 - 21/07/25) approval noting that connection is feasible without upgrades to the existing infrastructure. A foul pumping station is proposed to service the Site, which will pump the effluent into the 100mm diameter rising main along the L6310 "Mantua Road". From here, the networks discharge into the existing UÉ network (750mm trunk sewer) in the R132 Dublin Road roundabout approximately 630m from the pumping station location on Site (see Figure 4). The pumping station is located at the required separation distances from existing neighbouring buildings and the proposed residential blocks. It is fully below ground level with only 2 no. above ground kiosks visible. All foul water from this network will be treated at Swords Wastewater Treatment Plant (WwTP).



FIGURE 1. SITE LOCATION



FIGURE 2. PROPOSED SITE LAYOUT (MCORM, 2026).



FIGURE 3. PROPOSED SURFACE WATER DRAINAGE LAYOUT FOR THE PROPOSED DEVELOPMENT (ROGER 2025A)

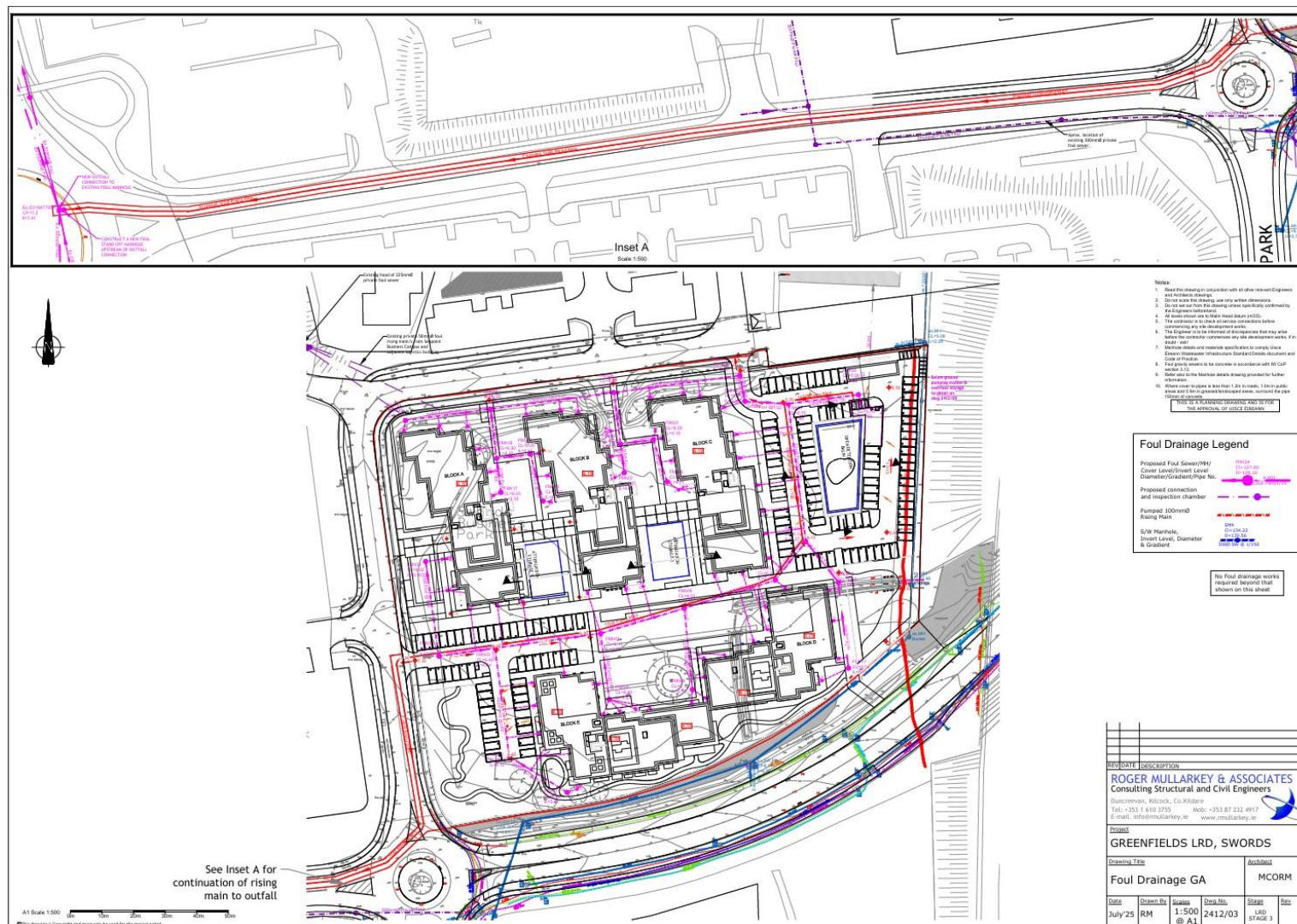


FIGURE 4. PROPOSED FOUL WATER DRAINAGE AT THE PROPOSED DEVELOPMENT (ROGER, 2025B)

2 LEGISLATIVE AND POLICY CONTEXT

2.1 Legislative Background

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of Special Areas of Conservation (SACs) and the Birds Directive (2009/147/EC) seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs). The Habitats Directive has been transposed into Irish law through the EC (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011).

It is the responsibility of each Member State to designate SPAs and SACs, both of which will form part of the Natura 2000 Network, a network of protected sites throughout the European Community. These designated sites are referred to as “Natura 2000 sites” or “European sites”. SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the Qualifying Interests (QIs) and Special Conservation Interests (SCIs) of the sites; from these the conservation objectives of the site are derived.

An AA is a required assessment to determine the likelihood of significant effects, based on best scientific knowledge, of any plans or projects on European sites. A screening for AA determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a European site, in view of its conservation objectives.

This AA Screening has been undertaken to determine the potential for significant effects on relevant European sites. The purpose of this assessment is to determine, the appropriateness, or otherwise, of the Proposed Development in the context of the conservation objectives of such sites.

2.1.1 Legislative Context

The obligations in relation to AA have been implemented in Ireland under the Planning and Development Act 2000 (as amended), and the Planning and Development Act 2024. While the 2024 Act has been signed into law, the Planning and Development Act 2000 (as amended) will continue to apply until repealed and the new provisions commenced by way of Ministerial Order. The phased commencement of the new Planning and Development Act is expected to take place up to early 2026.

The obligations in relation to AA covered within both Acts are summarised below:

- The competent authority must carry out screening for AA for all relevant plans and projects, to determine whether the plan or project, in view of best scientific knowledge, is likely to have a significant effect on any European site;
- Where potential for likely significant effects cannot be ruled out, either as a result of the plan or project alone or in-combination with other plans or projects, or where uncertainty exists, the competent authority must determine that an AA is required. In this case, a more detailed examination of the relevant European sites shall be carried out, and a Natura Impact Statement must be prepared.

For further details on both the 2000 Act (as amended) and the 2024 Act, please refer to irishstatutebook.ie

2.1.2 Relevant Case Law

According to the ruling delivered in open court in Luxembourg on 15th June 2023 regarding the interpretation of Article 6(3) of Directive 92/43, the Article must be interpreted as meaning that:

“In order to determine whether it is necessary to carry out an appropriate assessment of the implications of a plan or project for a site, account may be taken of the features of that plan or project which involve the removal of contaminants and which therefore may have the effect of reducing the harmful effects of the plan or project on that site, where those features have been incorporated into that plan or project as standard features, inherent in such a plan or project, irrespective of any effect on the site”.

As such, standardised embedded mitigation (such as the use of Sustainable Drainage Systems (SuDS) in large-scale residential developments), that are incorporated into the design of a proposal or project and which may result in a reduction of effects impacting European sites, but where the primary reason of the embedded mitigation is not to protect a European site, are permitted for consideration during the undertaking of AA.

2.2 Policy Context

2.2.1 Fingal County Development Plan 2023-2029

While the County Development Plan in its entirety is relevant to the Proposed Development and can be referred to separately, policies, principles and objectives of the Fingal County Development Plan 2023-2029 that are of relevance to this Screening Report are outlined below:

- **Policy GINHP5:** *“Develop the green infrastructure network to ensure the conservation and enhancement of biodiversity, including the protection of European Sites, the provision of accessible parks, open spaces and recreational facilities (including allotments and community gardens), the sustainable management of water, the maintenance of landscape character including historic landscape character and the protection and enhancement of archaeological and heritage landscapes.”*
- **Objective GINHO2:** *“Reduce fragmentation and enhance the resilience of Fingal’s green infrastructure network by strengthening ecological links between urban areas, Natura 2000 sites, proposed Natural Heritage Areas, parks and open spaces and the wider regional network by connecting all new developments into the wider green infrastructure network.”*
- **Policy GINHP12:** *“Protect areas designated or proposed to be designated as Natura 2000 sites (i.e., Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, and Refuges for Fauna.”*
- **Objective GINHO27:** *“Support the National Parks and Wildlife Service, in the maintenance and achievement of favourable conservation status for the habitats and species in Fingal by taking full account of the requirements of the Habitats and Birds Directives, in the performance of its functions.”*
- **Objective GINHO28:** *“Ensure that development does not have a significant adverse impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Habitat Directive Annex I sites and Annex II species contained therein, and on rare and threatened species including those protected by law and their habitats.”*
- **Policy GINHP17:** *“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 lifetime of this Plan.”*
- **Objective GINHO35:** *“In accordance with Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities 2010, any plans or projects that are likely to have a significant effect on a Natura 2000 site, either individually or in combination with other plans or projects, are subject to a screening for Appropriate Assessment unless they are directly connected with or necessary to the management of a Natura 2000 site.”*
- **Objective GINHO79:** *“Ensure that there is appropriate public access to the coast including the provision of coastal walkways and cycleways, while taking full account of the need to conserve and enhance the natural and cultural heritage of the coast and the need to avoid significant adverse impacts on European Sites and species protected by law, through Screening for Appropriate Assessment, and examine the designation of traditional walking routes thereto as public rights of way.”*

2.2.2 Fingal Biodiversity Action Plan (2023-2030)

Fingal Biodiversity Action Plan (BAP) 2023-2030 is set out to protect and improve biodiversity through six topics:

- Delivery of the Ecological Network across Fingal;
- Building for Biodiversity and Managing Open Space for Biodiversity;
- Climate change Adaption and mitigation;
- Agri Environment Schemes and Rewilding;

- Research & Monitoring; and
- Raising Awareness.

2.2.3 National Biodiversity Action Plan 2023 – 2030

The National Biodiversity Plan (NBAP) 2023-2030, the fourth such plan for Ireland, captures the objectives, targets and actions for biodiversity that will be undertaken by a wide range of government, civil society and private sectors. Actions required to achieve the strategic objectives as well as the lead and key partners responsible for their implementation are set out for each of the objectives and their outcomes.

TABLE 1. OBJECTIVES AND OUTCOMES OF THE NATIONAL BIODIVERSITY ACTION PLAN 2023 - 2030

Objective	Outcome
1: Adopt a Whole-of-Government, Whole-of-Society Approach to Biodiversity	1A: Governance structures and reporting outputs have improved.
	1B: Organisational capacity and resources for biodiversity have increased at all levels of Government.
	1C: Responsibility for biodiversity is shared across the whole of government.
	1D: Biodiversity initiatives are supported across the whole of society.
	1E: The legislative framework for biodiversity conservation is robust, clear and enforceable.
2: Meet Urgent Conservation and Restoration Needs	2A: The protection of existing designated areas and protected species is strengthened and conservation and restoration within the existing protected area network are enhanced.
	2B: Biodiversity and ecosystem services in the wider countryside are conserved and restored – agriculture & forestry.
	2C: Biodiversity and ecosystem services in the wider countryside are conserved and restored – peatlands & climate action.
	2D: Biodiversity and ecosystem services in the marine and freshwater environment are conserved and restored.
	2E: Genetic diversity of wild and domesticated species is safeguarded.
	2F: A National Restoration Plan is in place to contribute to the ambition of the EU Biodiversity Strategy 2030 and global restoration targets.
3: Secure Nature's Contribution to People	2H: Invasive alien species (IAS) are controlled and managed on an all-island basis to reduce the harmful impact they have on biodiversity and measures are undertaken to tackle the introduction and spread of new IAS to the environment.
	3A: Ireland's natural heritage and biocultural diversity is recognised, valued, enhanced and promoted in policy and practice.
	3B: The role of biodiversity in supporting wellbeing, livelihoods, enterprise and employment is recognised and enhanced.
4: Enhance the Evidence Base for Action on Biodiversity	3C: Planning and development will facilitate and secure biodiversity's contributions to people.
	4A: Research funding bodies will have an improved understanding of the research and skills required to address biodiversity research gaps.
	4B: Data relevant to biodiversity and ecosystems, including conservation needs, is widely accessible and standardised.
	4C: Long-term monitoring programmes are in place to guide conservation and restoration goals.
5: Strengthen Ireland's Contribution to International Biodiversity Initiatives	4D: Ireland has prepared national assessments of ecosystem services.
	5A: Science, policy and action on biodiversity conservation and restoration is effectively coordinated in an all-island approach.

	5B: Ireland takes action internationally to cooperate with other countries, sectors, disciplines and communities to address the biodiversity crisis.
	5C: Ireland enhances its contributions to the international biodiversity data drive.

2.3 Stages of Appropriate Assessment

This AA Screening Report (the 'Screening Report') has been prepared by DNV. It considers whether the Proposed Development is likely to have a significant effect on a European site and whether a Stage 2 AA is required.

The AA process is a four-stage process. Each stage requires different considerations, assessments and tests to ultimately arrive at the relevant conclusion for each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

The four stages of an AA, can be summarised as follows:

- **Stage 1: Screening.** The Screening for AA considers whether a plan or project is directly connected to or necessary for the management of a European site, or whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.
- **Stage 2: NIS.** Where Stage 1 determines that significant effects are likely, uncertain or unknown, the preparation of a NIS is required. The NIS must include a scientific examination of evidence and data to classify potential impacts on any European site(s) in view of their conservation objectives in the absence of mitigation. The NIS will identify appropriate mitigation to remove the potential for likely significant adverse effects on any European site(s). If the competent authority determines that the plan or project would have an adverse effect on the integrity of any European site(s) despite mitigation, it can only grant consent after proceeding through stages 3 and 4.
- **Stage 3: Assessment of alternative solutions.** If the outcome of Stage 2 is negative i.e., adverse effects to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- **Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain.** The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a European site, where no less damaging solution exists.

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. First the project should aim to avoid any negative effects on European sites by identifying possible effects early in the planning stage and designing the project to avoid such effects. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse effects on the site(s) remain. If the project is still likely to result in adverse effects, and no further practicable mitigation is possible, a refusal for planning permission may be recommended. In this case, the project will generally only be considered where no alternative solutions are identified and the project is required for IROPI, or, in the case of priority habitats, considerations of health or safety, or beneficial consequences of primary importance for the environment or to other IROPI. Then compensation measures are required for any remaining adverse effects.

3 AA Screening Methodology

3.1 Guidance

This 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;

- *Communication from the Commission on the precautionary principle* (European Commission, 2000);
- *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* Brussels, 28.9.2021 C (European Commission, 2021); and
- *Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, Office of the Planning Regulator March 2021.*

3.2 Screening Steps

Screening for AA involves the following steps:

- Establish whether the plan or project is directly connected with or necessary for the management of a European site;
- Description of the baseline existing environment at the Site of the Proposed Development;
- Identification of relevant European site(s) potentially affected;
- Identification and description of potential effects on the relevant European site(s);
- Assessment of the likely significance of the effects identified on the relevant European site(s);
- Description and characterisation of other projects or plans that in combination with the Proposed Development have the potential for having significant effects on the European site; and
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

It should be noted that any targeted ecological mitigation measures and/or measures intended or included for the purposes of avoiding adverse effects arising as a result of the Proposed Development on any European site **have not been considered** as part of this Screening Report.

3.3 Desk Study

A desktop study was carried out in April 2026 to collate and review available information, datasets and documentation sources relevant for the completion of this Screening Report. The desktop study relied on the following sources:

- Information on the network of European Sites, boundaries, QIs and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at www.npws.ie;
- Text summaries of the relevant European sites taken from the respective Standard Data Forms (available at <https://natura2000.eea.europa.eu/>) and Site Synopses (available at www.npws.ie);
- Information on waterbodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at www.gis.epa.ie;
- Information on bedrock, groundwater, aquifers and their statuses, obtained from Geological Survey Ireland (GSI) at www.gsi.ie;
- Satellite imagery and mapping obtained from various sources and dates including Google, Digital Globe, Bing and Ordnance Survey Ireland; and
- Information on the existence of permitted developments, or developments awaiting decision, in the vicinity of the Proposed Development from the Fingal County Council online planning database (<https://planning.agileapplications.ie/fingal>) and the National Planning Database (DHLGH, 2026).

For a complete list of the documents consulted as part of this assessment, see *Section 6 References*.

3.4 Field Surveys

A PEA walkover survey has been carried out at the Site to date, which involved a survey of habitats and flora (including invasive species), mammal survey, and bird scoping survey. This was carried out on 14th March 2025. No limitations to field surveys were encountered which would prevent robust conclusions being drawn as to the potential impacts of the Proposed Development. Results relevant to this Screening Report have been summarised in section 4.2.2.

TABLE 2. FIELD SURVEYS UNDERTAKEN AT THE PROPOSED DEVELOPMENT SITE.

Survey	Surveyor	Dates
Habitats and Floral Survey (incl. invasive species)	DNV (CRK & BS)	14 th March 2025
General Mammal Survey	DNV (CRK & BS)	14 th March 2025
Bird Scoping Survey	DNV (CRK & BS)	14 th March 2025
Winter Bird Scoping Survey	DNV (BMC)	26 th February 2025

3.5 Identification of Relevant European sites

The Zone of Influence (ZOI) for a project is the area over which ecological features may be affected by changes as a result of a development and associated activities. This is likely to extend beyond the development site, for example where there are ecological or hydrological links beyond the site boundaries (CIEEM, 2018). Furthermore, ZOI in relation to European sites is described as follows in the 'OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management' (OPR, 2021):

"The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework and not by arbitrary distances (such as 15 km)."

Thus, to identify the European sites that potentially lie within the ZOI of the Proposed Development, a Source-Path-Receptor (S-P-R) method was adopted, as described in OPR PN01 (OPR 2021). This note was published to provide guidance on screening for AA during the planning process, and although it focuses on the approach a planning authority should take in screening for AA, the methodology is also readily applied in the preparation of Screening Reports such as this.

The relevant European sites were identified based on the following:

- Identification of potential sources of effects based on the Proposed Development description and details, including changes to potentially suitable ex-situ habitats at the Site (i.e., habitats utilised by SCI bird species outside of their designated SPAs);
- Use of up-to-date GIS spatial datasets for European designated sites and water catchments – downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) to identify European sites which could potentially be affected by the Proposed Development; and
- Identification of potential pathways between the Site of the Proposed Development and any European sites within the ZOI of any of the identified sources of effects.
 - The catchment data were used to establish or discount potential hydrological connectivity between the Proposed Development and any European sites.
 - Groundwater, soils, and bedrock information used to establish or discount potential hydrogeological connectivity between the Proposed Development and any European sites.
 - Air and land connectivity assessed based on Proposed Development details and proximity to European sites.
 - Consideration of potential indirect pathways, e.g., impacts to flight paths, ex-situ habitats, etc.

- Defining the likely ZOI based on the identified sources of effects and potential pathways between the Proposed Development and any European sites.

3.6 Assessment of Significant Effects

The conservation objectives of the European sites identified to lie within the ZOI were reviewed and assessed in order to establish whether the construction and operation of the Proposed Development has the potential to result in likely significant effects (LSEs) on any of the QIs and/or conservation objectives listed for the site.

The assessment framework is taken from the best practice guidelines issued by the European Commission, i.e., *“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”*.

The potential for LSEs that may arise from the Proposed Development was considered through the use of key indicators:

- Habitat loss or alteration.
- Habitat/species fragmentation.
- Disturbance and/or displacement of species.
- Changes in population density.
- Changes in water quality and resource.

In addition, information pertaining to the conservation objectives of the European sites, the ecology of the designated habitats and species and known or perceived sensitivities of the habitats and species were considered.

3.7 Limitations

No limitations were encountered which would prevent robust conclusions from being drawn as to the potential impacts of the Proposed Development and therefore the likely significant effects on the European Site, in view of the Site's conservation objectives.

4 STAGE 1 SCREENING ASSESSMENT

4.1 Management of European Sites

The Proposed Development is not directly connected with or necessary to the management of European sites.

4.2 Existing Environment

4.2.1 Desk Study Results

4.2.1.1 Hydrology, Geology and Hydrogeology

The Site is located in the *Liffey and Dublin Bay* catchment (I.D.: 09), and in the *Mayne_SC_010* sub-catchment (I.D.: 09_17).

Two channels of the Gaybrook_010 (IE_EA_08G080700) watercourse, namely Greenfields and Seapoint, of the first order flows through the existing ditch at the Site and 13m north of the Site. The Greenfields channel traversing the Site is currently disused (dry) and was diverted approximately 30 years ago into the 900mm culvert running north parallel to the eastern boundary of the Site. These watercourses flows in the northeastern direction, ultimately draining into the Broadmeadow Water Estuary transitional waterbody (IE_EA_060_0100) approximately 270m downstream of the Site. This transitional waterbody flows into the Irish Sea via Malahide Bay (IE_EA_060_0000), Northwestern Irish Sea (HA 08) (IE_EA_020_0000), and Irish Sea Dublin (HA 09) (IE_EA_070_0000) coastal waterbodies. The Ward_040 (IE_EA_08W010610) watercourse of the fifth order is the closest river system to the Site, located 800m west of the Site (EPA, 2026). This watercourse also ultimately drains into the Broadmeadow Water Estuary transitional waterbody 1.3km downstream from the closest point from the Site via the Broadmeadow_040 (IE_EA_08B020800) watercourse of the sixth order.

The Site is situated on the *Dublin* (IE_EA_G_008) groundwater body, and the vulnerability to contamination of said groundwater from human activities is classified as 'Low' for the Site and the surrounding area (GSI, 2026). The aquifer type in the surrounding area is 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones' (LI) (GSI, 2026). The groundwater rock unit underlying the Site is the Malahide Formation, and is classified as 'Argillaceous bioclastic limestone, shale' (ML).

The soil underneath the Site of the Proposed Development is classified as 'Urban – soil concreted over' for the predominant area, with the eastern section of the Site classified as 'Fine loamy drift with siliceous stones'. The sub-soil underneath the Site is 'Man-made' for the predominant area where the Urban soil type is found, and the 'Limestone till (Carboniferous)' (TLs) for the eastern section of the Site (GSI, 2026). The waterbody status for the waterbodies relevant to the Site as recorded by EPA (EPA, 2026) in accordance with European Communities Regulations 2003 (SI no. 722/2003) are provided in Table 3 below.

TABLE 3. EPA MONITORING STATIONS AND ASSIGNED Q VALUES

EPA Monitoring Station name	Station Code	Location from Site	Distance from Site	Assigned value	Q
WARD - Br at SW end of Swords (Well Rd Br)	RS08W010500	Southwest	1.2km	3	"Poor"
WARD - Scotchstone Br (Watery Lane)	RS08W010600	West	0.78km	3	"Poor"
Br d/s Scotchstone Br	RS08W010610	Northwest	0.9km	3-4	"Moderate"

TABLE 4. WFD RISK AND WATER BODY STATUS

Waterbody Name	Water body; EU code	Location from Site	Distance from Site (km)	WFD water body status (2019-2024)	WFD 3 rd cycle Risk Status	Hydraulic Connection to the Site
Surface Water Bodies						
Gaybrook_010	IE_EA_08G0 80700	North and Within Site	0.01 and Within Site	Poor	Review	Upstream of Site (for Northern channel) and within Site (disused and redirected)
Ward_040	IE_EA_08W 010610	East	0.8	Moderate	At Risk	None
Broadmeadow_040	IE_EA_08B0 20800	North	0.9	Moderate	At Risk	None
Transitional Water Bodies						
Broadmeadow Water	IE_EA_060_ 0100	Northeast	0.26	Moderate	At Risk	Downstream of Gaybrooke_010, Ward_040 and Broadmeadow_040
Coastal Water Bodies						
Malahide Bay	IE_EA_060_ 0000	East	3.3	Good	Not at Risk	Downstream of Gaybrooke_010, Ward_040 and Broadmeadow_040, and connected to

Waterbody Name	Water body; EU code	Location from Site	Distance from Site (km)	WFD water body status (2019-2024)	WFD 3 rd cycle Risk Status	Hydraulic Connection to the Site
						Broadmeadow water Estuary
Northwestern Irish Sea (HA 08)	IE_EA_020_0000	East	4.5	Good	At Risk	Connected to Malahide Bay
Irish Sea Dublin (HA 09)	IE_EA_070_0000	East	4.7	Good	Not at Risk	Connected to Malahide Bay and Northwest Irish Sea (HA 08)
Groundwater Bodies						
Dublin	IE_EA_G_008	N/A	N/A	Good	Review	Underlying groundwater-body

4.2.2 Relevant Field Survey results

4.2.2.1 Habitats & Flora

The habitat types, invasive species and other ecological conditions present within the Site, as recorded during the field survey, are described in this section, and summarised below (see Figure 5).

The majority of the Site consists of dry meadows and grassy verges (GS2) habitat that consists of herb dominated plant species. This habitat transitions into the scrub (WS1) habitat along the northwestern and western boundary of the Site, where woody and often large floral species are found. The (mixed) broadleaved woodland (WD1) is found at the southwestern section of the Site, where medium-large sized tree species were recorded. The exposed sand, gravel or till (ED1) habitat was recorded at the Site access gate along the northern boundary of the Site, where its extent was largely restricted as recorded during the field survey on 14th March 2025. However, this habitat has transitioned into the recolonising bare ground (ED3) habitat since the time of the survey, where pioneer floral species typically found on recolonising ground were observed during the bat surveys conducted for the Site in the month of August 2025. Along the western and eastern boundary of the Site, treelines (WL2) habitat is found, where larger sized tree species have been recorded. The hedgerows (WL1) habitat is found along the southern boundary of the Site, where floral species typically found in hedgerows were recorded. The GS2 habitat along the hedgerow and treeline habitats consist of rudimentary plant species that are typically found along the base of linear habitats. At the southern section of the Site, a drainage ditch (FW4) is found, While the ditch was dry during the time of survey with the absence of wet habitat based flora, the ditch is a former channel of the Gaybrook_010 stream flowing though the Site. Given that the ditch was dry during the field survey, it is assumed that it would contain water during heavy rainfall events, with its flow localised to the Site.

No signs of any rare flora were observed on Site during the survey.

Invasive Plant Species

No 'High Impact' or 'Medium Impact' invasive plant species or Third Schedule listed species were recorded on Site during the field surveys.

4.2.2.2 Fauna

Mammals

No rare or protected mammals were observed during the field surveys conducted for the Site. The overall Site has very low habitat suitability for terrestrial mammals, where the scrub (WS1), dry meadows and grassy verges (GS2), woodland (WD1), treeline (WL2) and hedgerow (WL1) habitats should they be present. However, given the lack of direct sightings, or signs of mammals recorded at the Site, and the absence of larger linear green corridors connecting the Site to greater green spaces in the larger area, it is considered that the presence of

badgers or other larger mammals at the Site is very unlikely. Additionally, no riparian habitats or suitable watercourses are present within the Site, therefore, otters (*Lutra lutra*) were not observed during the survey. No signs of otters such as spraints, holts, slide tracks or footprints were observed during the field survey and the Site does not contain suitable habitat for otters.

While the woodland habitats at the southern section of the Site and the treeline along the western and eastern boundary are potential suitable habitats for pine marten (*Martes martes*), this species was not recorded during the survey conducted in 2025. Moreover, no evidence of this species such as dropping, footprints, or feeding remains were recorded during the survey conducted for the Site. Given that there are suitable habitats within the Site and along the boundaries of the Site, it is considered that the presence of pine marten at the Site is possible.

Habitats recorded at the Site may offer some cover for small mammals such as European hedgehog (*Erinaceus europaeus*), pygmy shrew (*Sorex minutus*), red squirrel (*Sciurus vulgaris*), wood mouse (*Apodemus sylvaticus*), and Irish hare (*Lepus timidus subsp. hibernicus*) should they be present. Despite this, these species were not recorded on Site and is therefore considered that the habitats on Site do not have the potential to act as suitable habitats for these terrestrial mammals.

Bird Species

While the habitats on Site have limited potential to support terrestrial mammals, bird species may utilise the various habitats on Site for breeding and/or nesting behaviours. During the Site visit on 14th March 2025, ten bird species were recorded (see Table 5 below) at the Site. Of these, only one species is amber listed and none are red listed on the most recent 'Birds of Conservation Concern Ireland' (BoCCI) (Gilbert et al. 2021). The remaining bird species are green listed bird species.

TABLE 5. BIRD SPECIES RECORDED DURING WALKOVER SURVEY ON 14TH MARCH 2025.

Species	BoCCI Status
Blackbird (<i>Turdus merula</i>)	Green
Great Tit (<i>Parus major</i>)	Green
Blue Tit (<i>Cyanistes caeruleus</i>)	Green
European Herring Gull (<i>Larus argentatus</i>)	Amber
Goldfinch (<i>Carduelis carduelis</i>)	Green
Jackdaw (<i>Coloeus monedula</i>)	Green
Magpie (<i>Pica pica</i>)	Green
Rook (<i>Corvus frugilegus</i>)	Green
Woodpigeon (<i>Columba palumbus</i>)	Green
Wren (<i>Troglodytes troglodytes</i>)	Green

Winter Bird Scoping Survey

Given the close proximity to a Special Protection Area in the vicinity of the Site, a winter bird scoping survey was conducted on 26th February 2025. In total, 15 bird species were recorded during the survey, which have been listed in Table 6 below.

TABLE 6. BIRD SPECIES RECORDED DURING THE WINTER BIRD SCOPING SURVEY ON 26TH FEBRUARY 2025.

Species	BoCCI Status	Activity
Blue Tit (<i>Cyanistes caeruleus</i>)	Green	Common in and in the vicinity of the Site.
Chaffinch (<i>Fringilla coelebs</i>)	Green	Ten individuals in the western treeline.
Dunnock (<i>Prunella modularis</i>)	Green	Common in and in the vicinity of the Site. Several calling from cover.
Goldfinch (<i>Carduelis carduelis</i>)	Green	Found in loose association with chaffinch.
Grey Wagtail (<i>Motacilla cinerea</i>)	Red	Flyover
Hooded Crow (<i>Corvus corone</i>)	Green	Flyover
Jackdaw (<i>Coloeus monedula</i>)	Green	Flyover
Magpie (<i>Pica pica</i>)	Green	Flyover
Robin (<i>Erithacus rubecula</i>)	Green	Several present on Site
Rook (<i>Corvus frugilegus</i>)	Green	Common
Siskin (<i>Spinus spinus</i>)	Green	Six individuals in the western treeline.
Song Thrush (<i>Turdus philomelos</i>)	Green	One individual flushed from scrub habitat on Site.
Starling (<i>Sturnus vulgaris</i>)	Amber	Flyover
Woodpigeon (<i>Columba palumbus</i>)	Green	Eleven individuals feeding on Site
Wren (<i>Troglodytes troglodytes</i>)	Green	Common in and in the vicinity of the Site.



FIGURE 5. BASELINE HABITATS AT THE PROPOSED DEVELOPMENT AS RECORDED ON 14TH MARCH 2025

4.3 Identification of Relevant European Sites

4.3.1 Potential Sources of Impacts

The Proposed Development is not directly connected with or necessary to the management of European sites. However, the following elements of the Proposed Development were identified and assessed for their potential to cause likely significant effects on European sites.

Construction Phase (*Estimated duration: 24 months*)

- Uncontrolled releases of dust, sediments and/or other pollutants to air due to earthworks;
- Surface water run-off containing silt, sediments and/or other pollutants into nearby waterbodies or surface water network;
- Surface water run-off containing silt, sediments and/or other pollutants into the local groundwater;
- Waste generation during the Construction Phase comprising soils and construction wastes;
- Increased noise, dust and/or vibrations as a result of construction activity;
- Increased dust and air emissions from construction traffic;
- Increased lighting in the vicinity as a result of construction activity; and
- Increased human presence and activity as a result of construction activity.

Operational Phase (*Estimated duration: Indefinite*)

- Surface water drainage from the Site of the Proposed Development;
- Foul water from the Proposed Development;
- Increased lighting at the Site and in the vicinity emitted from the Proposed Development; and
- Increased human presence and activity at the Site and in the vicinity as a result of the Proposed Development.
- Increased collision risk at the Site as a result of the high-rise buildings.

4.3.2 Potential Pathways to European Sites

For the above listed potential sources of effects to have the potential to cause likely significant effects on any European site, a pathway between the source of potential effects (i.e., the Site of the Proposed Development) and the receptor is required. Potential impact pathways are discussed in the following sections in the context of the identified impact sources as identified in section 4.3.1.

4.3.2.1 Direct Pathways

Hydrological pathways

The closest watercourses to the Site of the Proposed Development are two channels of the Gaybrook_010 watercourse, namely Greenfields and Seapoint, that flow through the existing ditch at the southern section of the Site and 13m north of the Site, respectively. The Greenfields channel traversing the Site is currently disused (dry) and was diverted approximately 30 years ago into the 900mm water culvert running north parallel to the eastern boundary of the Site. These watercourses flow in the northeastern direction and discharge into the Broadmeadow Water transitional waterbody (Malahide Estuary) located 270m downstream of the Site, which in turn drains into the Irish Sea via Malahide Bay, Northwestern Irish Sea and Irish Sea Dublin coastal waterbodies.

The Seapoint channel of Gaybrook_010 watercourse flows underground/sub surface north of the Site but above surface before it's discharge point into Broadmeadow Water transitional waterbody. Given that the stream is below surface at its closest point from the Site, hydrological connections via surface water run-off between the Site and European sites via the Seapoint channel are considered to be insignificant. The culvert parallel to the eastern boundary of the Site is located in close proximity (<20m) and is therefore hydrologically connected to the Site. European sites downstream of this channel (approximately 250m via river distance) include *Malahide Estuary SAC (000205)*, *Malahide Estuary SPA (004025)*, and *North-West Irish Sea SPA (004236)*. Therefore, there exists a significant hydrological pathway between the Proposed Project and European Sites within Malahide Estuary via surface water run-off into the 900mm culvert.

The Ward_040 watercourse (fifth order stream) is the closest river system to the Site, located approximately 800m west. This watercourse discharges into Broadmeadow_040 watercourse (sixth order stream) which subsequently flows into the Broadmeadow Water transitional waterbody at approximately 1.3km via intervening river distance. Given the urban nature of the area between this watercourse and the Site, the presence of large road networks west of the Site and the SuDS proposed that will collect and discharge all surface water from the water into the existing water drainage network, hydrological pathway via surface water runoff to this watercourse and their downstream European sites are not envisaged.

Foul water from the Operational Phase of the Proposed Development will be treated at Swords Wastewater Treatment Plant (WwTP) located approximately 400m northwest of the Site. Treated effluents from this WwTP discharges into the upper reaches of the Broadmeadow Water transitional waterbody, where the closest European sites within the depositing point of the Swords WwTP are *Malahide Estuary SAC (000205)*, *Malahide Estuary SPA (004025)*, and *North-West Irish Sea SPA (004236)*. The Swords WwTP is currently functioning within its available capacity, as indicated by its 'Green' Status (Irish Water, 2026). According to the most recent Annual Environmental Report (AER) for Swords WwTP (Irish Water, 2023), the plant's capacity is not expected to be exceeded within the next four years. Additionally, the AER confirms that discharge from the WwTP does not have an observable impact on the bathing water quality and does not have an observable negative impact on the Water Framework Directive status. Furthermore, the Appropriate Assessment (AA) Screening Report for the WwTP upgrade works concluded *"the project is not directly connected with or necessary to the management of the sites as European site(s) and as it can be excluded, on the basis of objective information and in light of the conservation objectives of the relevant European Site(s), that the project, individually or in combination with other plans and projects, would have a significant effect on a European Site"*. Upgrade works at Swords WwTP are expected to be completed in 2026, and the receiving waterbodies of Broadmeadow Water transitional waterbody have remained of the 'Moderate' status before and after the upgrade works. Based on this information, the potential for a significant hydrological pathway via foul water between the Proposed Development and the identified European sites is considered negligible and can be ruled out. By extension, any hydrological connection to European sites situated in the Irish Sea is also deemed insignificant.

Hydrogeological pathways

The Site of the Proposed Development is located within the Dublin groundwater body, which drains in an eastward direction towards the Irish Sea. The closest European sites, and ones that share the same groundwater body to the Site are, *Malahide Estuary SAC (000205)*, *Malahide Estuary SPA (004025)*, and *North-West Irish Sea SPA (004236)*, which are located approximately 210m and 5km east of the Proposed Development respectively. The vulnerability to groundwater contamination due to human activities is mapped as 'Low' for the Site and the predominant area surrounding *Malahide Estuary SAC (000205)*, and *Malahide Estuary SPA (004025)*. Given that the groundwater diffuses directly into the Irish Sea rather than Malahide Estuary, and the 'Low' vulnerability to groundwater contamination at the Site, significant hydrogeological pathways between the Site and these European sites is not envisaged and can be ruled out. By extension, any hydrogeological connection to European sites situated in the Irish Sea or further afield are also deemed insignificant.

Air and Land pathways

Dust, noise, vibration and general anthropogenic impacts may be produced as a result of the Construction Phase of the Proposed Development. 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. There are no European sites located within immediate proximity to the Proposed Development. The nearest designated sites are *Malahide Estuary SAC (000205)* and *Malahide Estuary SPA (004025)*, situated approximately 210 metres from the closest point of the Proposed Development.

According to the Institute of Air Quality Management (2016) "*95% of dust particles from mineral workings have a relatively high mass and generally deposit within 100m of the point of release, with the remainder being deposited within 200 – 500 m of source*". Given that the nearest European site lies approximately 0.2 km from the Proposed Development, this separation distance is considered sufficient to avoid significant impacts from dust or other airborne pollutants.

Furthermore, while the Site is located within 300m from *Malahide Estuary SPA (004025)*, significant impacts via air pathways to SCI species are not anticipated. This is due to the presence of physical buffering features, including the surrounding built environment, the adjacent M1 motorway, and the vegetated features surrounding both the M1 and nearby buildings, which collectively act as barriers to pollutant dispersion and noise transmission. These factors, along with the deposition characteristics of dust—where 95% settles within 100m and the remaining 5% represents a negligible amount—indicate that significant impacts via air pathways will not affect SCI species of Malahide Estuary SPA (004025).

As such, it is considered that there are no significant air or land pathways between the Proposed Development and any European site.

4.3.2.2 Indirect Pathways

Ex-Situ Foraging Habitat and Disturbance Events

The Site does not provide significant ex-situ habitat that is within foraging range of any SCI/QI species of any European site. Therefore, indirect land and air pathways via ex-situ habitat use are not envisaged and impacts via this pathway is deemed negligible.

Collision Risk and Disruption to Migratory Paths

Collision risk and disruptions to migratory pathways were considered in this AA Screening Report. Tall structures such as electrical pylons, wind farms and tall buildings can lead to fatal collisions with commuting bird species. This is particularly true for those species considered to be "poor" fliers, with relatively low manoeuvrability compared to other more agile bird species (see Eirgrid, 2012).

Some of the most at-risk groups (classified as 'medium' and 'high' collision risk species) include wader species; waterfowl such as geese, swan and duck species, and some raptor species. Gulls such as black-headed gull, herring gull and lesser black-backed gull are classed as 'low' collision risk species due to their superior manoeuvrability when flying (Eirgrid, 2012).

Large glass panes with no material variety are known to significantly increase the risk of bird collisions, as birds often cannot perceive clear or reflective glass as barriers (U.S. Fish and Wildlife Service, 2017). The Proposed Development incorporates a variety of materials and avoids expansive glass facades to mitigate this risk.

Additionally, the Proposed Development will comprise buildings with a maximum height of seven storeys. Considering the Site's location on the edge of an urban centre, the Proposed Development will not be significantly

taller than other structures, either manmade or natural, in the vicinity of the Site and so birds are not likely to have to make rapid adjustments in direction or altitude to avoid the Proposed Development. Therefore, in conjunction with the lack of suitable ex-situ habitat, indirect air and land pathways for collision risk and migratory disruptions are not envisaged and impacts via this pathway are deemed negligible.

4.3.3 Relevant European sites

A European site will only be at risk from likely significant effects where a S-P-R link exists between the Proposed Development Site and the European site. All of the European sites considered under the S-P-R method are listed in Table 7, however, only three European sites were identified to have a S-P-R link of note to the Proposed Development Site, namely ***Malahide Estuary SAC (000205)***, ***Malahide Estuary SPA (004025)***, and ***North-West Irish Sea SPA (004236)***.

These sites are highlighted in green in the table below.

TABLE 7. EUROPEAN SITES CONSIDERED WITH THE SOURCE-PATHWAY-RECEPTOR (S-P-R) METHOD TO ESTABLISH NOTABLE LINKS BETWEEN THE SOURCES OF EFFECTS ARISING FROM THE PROPOSED DEVELOPMENT, AND ANY RELEVANT EUROPEAN SITES. THOSE SITES WITH NOTABLE S-P-R LINKS ARE HIGHLIGHTED IN GREEN (IF ANY). QUALIFYING INTERESTS (QIs) TAKEN FROM THE RELEVANT CONSERVATION OBJECTIVES DOCUMENTS (AS REFERENCED) AND/OR THE STANDARD DATA FORMS (EEA, 2026)¹.

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Potential Pathways
SAC		
Malahide Estuary SAC (000205) Linear Distance to Proposed Development: approx. 210m N	As per NPWS (2013a) Habitats • Mudflats and sandflats not covered by seawater at low tide [1140] • <i>Salicornia</i> and other annuals colonising mud and sand [1310] • Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] • Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	No hydrogeological, air or land pathways have been identified. Hydrological pathways via surface water run off identified between this Site and the Site of the Proposed Works.
SPAs		
Malahide Estuary SPA (004025) Linear Distance to Proposed Development: approx. 210m N	QIs as per NPWS (2013b) • Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] • Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Pintail (<i>Anas acuta</i>) [A054] • Goldeneye (<i>Bucephala clangula</i>) [A067] • Red-breasted Merganser (<i>Mergus serrator</i>) [A069]	No hydrogeological, air or land pathways have been identified. Hydrological pathways via surface water

¹ Where applicable, the full species list included in this table is as per the latest updated information as indicated, so either the Conservation Objectives (CO) document for the site, or the latest Standard Data Form (SDF) (EEA, 2023). For SDF updates, CO are not yet available for the newly added species but are assumed, for the purposes of assessment, to follow the same format as for other feature species.

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Potential Pathways
	- Oystercatcher (<i>Haematopus ostralegus</i>) [A130] - Golden Plover (<i>Pluvialis apricaria</i>) [A140] - Grey Plover (<i>Pluvialis squatarola</i>) [A141] - Knot (<i>Calidris canutus</i>) [A143] - Dunlin (<i>Calidris alpina</i>) [A149] - Black-tailed Godwit (<i>Limosa limosa</i>) [A156] - Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] - Redshank (<i>Tringa totanus</i>) [A162] - Wetland and Waterbirds [A999]	run off identified between this Site and the Site of the Proposed Works.
North-West Irish Sea SPA (004236) Linear Distance to Proposed Development: approx. 5km E	QIs as per NPWS (2023a) - Red-throated Diver (<i>Gavia stellata</i>) [A001] - Great Northern Diver (<i>Gavia immer</i>) [A003] - Fulmar (<i>Fulmarus glacialis</i>) [A009] - Manx Shearwater (<i>Puffinus puffinus</i>) [A013] - Cormorant (<i>Phalacrocorax carbo</i>) [A017] - Shag (<i>Phalacrocorax aristotelis</i>) [A018] - Common Scoter (<i>Melanitta nigra</i>) [A065] - Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] - Common Gull (<i>Larus canus</i>) [A182] - Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] - Herring Gull (<i>Larus argentatus</i>) [A184] - Great Black-backed Gull (<i>Larus marinus</i>) [A187] - Kittiwake (<i>Rissa tridactyla</i>) [A188] - Roseate Tern (<i>Sterna dougallii</i>) [A192] - Common Tern (<i>Sterna hirundo</i>) [A193] - Arctic Tern (<i>Sterna paradisaea</i>) [A194] - Guillemot (<i>Uria aalge</i>) [A199] - Razorbill (<i>Alca torda</i>) [A200] - Puffin (<i>Fratercula arctica</i>) [A204] - Little Gull (<i>Hydrocoloeus minutus</i>) [A862] - Little Tern (<i>Sternula albifrons</i>) [A885]	No hydrogeological, air or land pathways have been identified. Hydrological pathways via surface water run off identified between this Site and the Site of the Proposed Works.

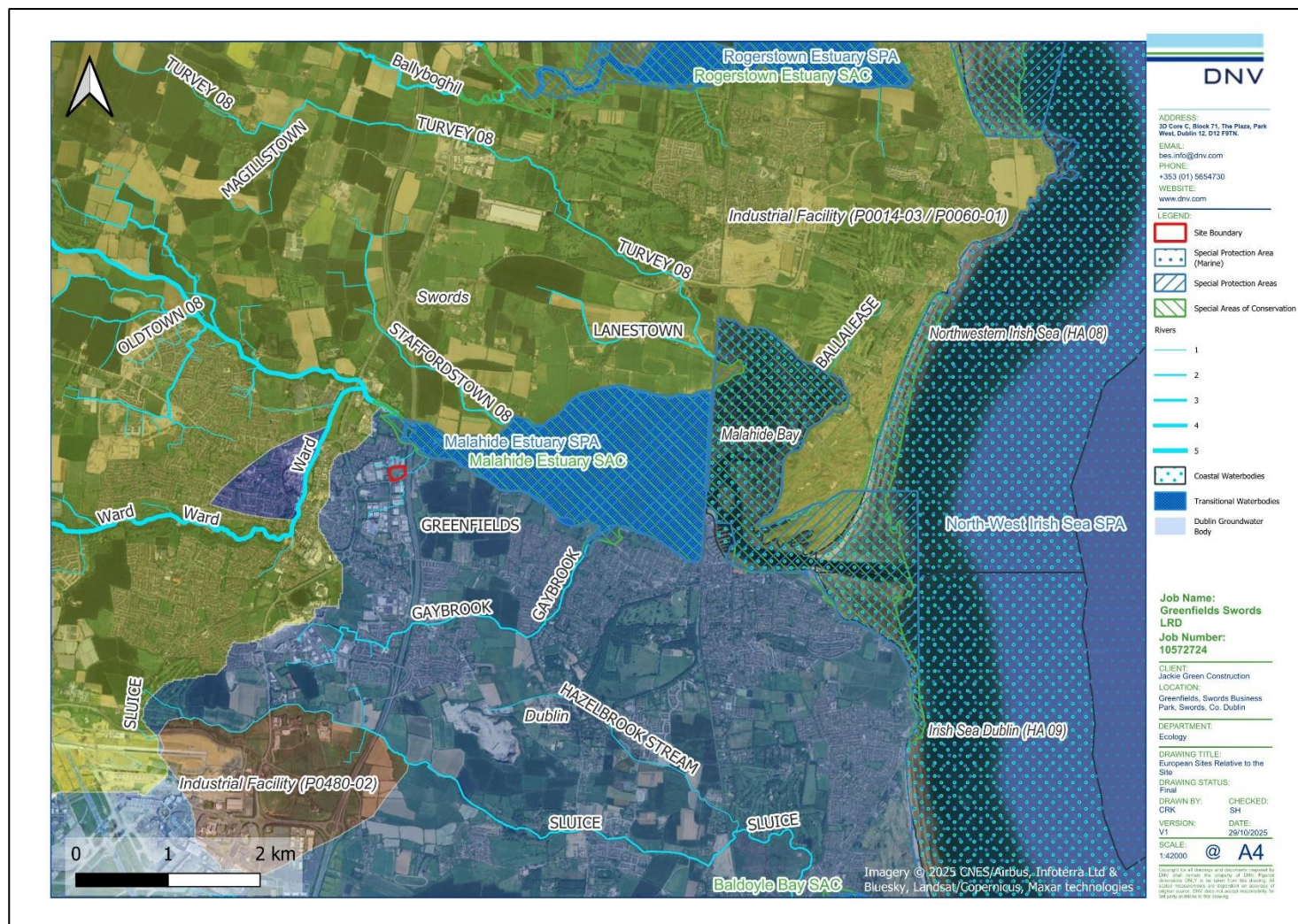


FIGURE 6. LOCATION OF EUROPEAN SITES RELATIVE TO THE PROPOSED DEVELOPMENT.

4.3.3.1 Malahide Estuary SAC (000205)

The following description of the Malahide Estuary SAC is extracted from the Site Synopsis (NPWS 2017) for the site:

“Malahide Estuary is situated immediately north of Malahide and east of Swords in Co. Dublin. It is the estuary of the River Broadmeadow. The site is divided by a railway viaduct which was built in the 1800s.

*The outer part of the estuary is mostly cut off from the sea by a large sand spit, known as ‘the island’. The outer estuary drains almost completely at low tide, exposing sand and mud flats. There is a large bed of Eelgrass (Dwarf Eelgrass, *Zostera noltii*, and Narrow-leaved Eelgrass, *Z. angustifolia*) in the north section of the outer estuary, along with Beaked Tasselweed (*Ruppia maritima*) and extensive mats of green algae (*Enteromorpha* spp., *Ulva lactuca*). Common Cord-grass (*Spartina anglica*) is also widespread in this sheltered part of the estuary.”*

*“The inner estuary does not drain at low tide apart from the extreme inner part. Here, patches of saltmarsh and salt meadows occur, with Sea Aster, Sea Plantain (*Plantago maritima*) and Sea Club-rush (*Scirpus maritimus*). Beaked Tasselweed occurs in one of the channels.*

The site includes a fine area of rocky shore south-east of Malahide and extending towards Portmarnock. This represents the only continuous section through the fossiliferous Lower Carboniferous rocks in the Dublin Basin, and is the type locality for several species of fossil coral.”

“The estuary also attracts migrant species such as Ruff, Curlew Sandpiper, Spotted Redshank and Little Stint. Breeding birds of the site include Ringed Plover, Shelduck and Mallard. Up to the 1950s there was a major tern colony at the southern end of the island and the habitat remains suitable for these birds.

The inner part of the estuary is heavily used for water sports. A section of the outer estuary has recently been infilled for a marina and housing development.

This site is a fine example of an estuarine system with all the main habitats represented. The site is important ornithologically, with a population of Brent Goose of international significance.”

4.3.3.2 Malahide Estuary SPA (004025)

The following description of Malahide Estuary SPA is extracted from the Site Synopsis Supporting (NPWS 2013c) for the site:

*“Malahide Estuary is situated in north Co. Dublin, between the towns of Malahide and Swords. The site encompasses the estuary, saltmarsh habitats and shallow subtidal areas at the mouth of the estuary. A railway viaduct, built in the 1800s, crosses the site and has led to the inner estuary becoming lagoonal in character and only partly tidal. Much of the outer part of the estuary is well-sheltered from the sea by a large sand spit, known as ‘The Island’. This spit is now mostly converted to golf-course. The outer part empties almost completely at low tide and there are extensive intertidal flats exposed. Substantial stands of eelgrass (both *Zostera noltii* and *Z. angustifolia*) occur in the sheltered part of the outer estuary, along with Tasselweed (*Ruppia maritima*). Green algae, mostly *Ulva* spp., are frequent on the sheltered flats. Common Cord-grass (*Spartina anglica*) is well established in the outer estuary and also in the innermost part of the site. The intertidal flats support a typical macroinvertebrate fauna, with polychaete worms (*Arenicola marina* and *Hediste diversicolor*), bivalves such as *Cerastoderma edule*, *Macoma balthica* and *Scrobicularia plana*, the small gastropod *Hydrobia ulvae* and the crustacean *Corophium volutator*. Salt marshes, which provide important roosts during high tide, occur in parts of the outer estuary and in the extreme inner part of the inner estuary. These are characterised by such species as Sea Purslane (*Halimione portulacoides*), Sea Aster (*Aster tripolium*), Thrift (*Armeria maritima*), Sea Arrowgrass (*Triglochin maritima*) and Common Saltmarsh-grass (*Puccinellia maritima*).”*

“This site is of high importance for wintering waterfowl and supports a particularly good diversity of species. It has internationally important populations of Lightbellied Brent Goose (1,104 individuals or 5% of the all-Ireland total) and Black-tailed Godwit (409 individuals or 2.9% of the all-Ireland total) - figures given here and below are mean peaks for the five winters 1995/96-1999/2000. Furthermore, the site supports

nationally important populations of an additional 12 species: Great Crested Grebe (63), Shelduck (439), Pintail (58), Goldeneye (215), Red-breasted Merganser (99), Oystercatcher (1,360), Golden Plover (1,843), Grey Plover (201), Knot (915), Dunlin (1,594), Bar-tailed Godwit (156) and Redshank (581). The high numbers of diving ducks reflects the lagoon-type nature of the inner estuary, and this is one of the few sites in eastern Ireland where substantial numbers of Goldeneye can be found."

"Malahide Estuary SPA is a fine example of an estuarine system, providing both feeding and roosting areas for a range of wintering waterfowl. The lagoonal nature of the inner estuary is of particular value as it increases the diversity of birds which occur. The site is of high conservation importance, with internationally important populations of Light-bellied Brent Goose and Black-tailed Godwit, and nationally important populations of a further 12 species. Two of the species which occur regularly (Golden Plover and Bar-tailed Godwit) are listed on Annex I of the E.U. Birds Directive. Malahide Estuary (also known as Broadmeadow Estuary) is a Ramsar Convention site."

4.3.3.3 North-West Irish Sea SPA (004236)

The following description of North-West Irish Sea is extracted from the Site Synopsis Supporting (NPWS 2023b) for the site:

"The North-west Irish Sea cSPA constitutes an important resource for marine birds. The estuaries and bays that open into it along with connecting coastal stretches of intertidal and shallow subtidal habitats, provide safe feeding and roosting habitats for waterbirds throughout the winter and migration periods. These areas, along with more pelagic marine waters further offshore, provide additional supporting habitats (for foraging and other maintenance behaviours) for those seabirds that breed at colonies on the north-west Irish Sea's islands and coastal headlands. These marine areas are also important for seabirds outside the breeding period.

This SPA extends offshore along the coasts of counties Louth, Meath and Dublin, and is approximately 2,333km² in area. This SPA is ecologically connected to several existing SPAs in this area.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Common Scoter, Red-throated Diver, Great Northern Diver, Fulmar, Manx Shearwater, Shag, Cormorant, Little Gull, Kittiwake, Black-headed Gull, Common Gull, Lesser Black-backed Gull, Herring Gull, Great Black-backed Gull, Little Tern, Roseate Tern, Common Tern, Arctic Tern, Puffin, Razorbill and Guillemot.

The breeding seabird species listed for those SPAs, which about the North-West Irish Sea SPA are: Fulmar (Lambay Island SPA); Cormorant (Skerries Island SPA; Ireland's Eye SPA; Lambay Island SPA); Shag (Skerries Island SPA; Lambay Island SPA); Lesser Black-backed Gull (Lambay Island SPA); Herring Gull (Skerries Island SPA; Ireland's Eye SPA; Lambay Island SPA); Kittiwake (Lambay Island SPA; Ireland's Eye SPA; Howth Head SPA); Roseate Tern (Rockabill SPA); Common Tern (Rockabill SPA); Arctic Tern (Rockabill SPA); Little Tern (Boyne Estuary SPA); Guillemot (Lambay Island SPA, Ireland's Eye SPA); Razorbill (Lambay Island SPA, Ireland's Eye SPA); and Puffin (Lambay Island SPA). The Common Tern population that is listed for the nearby South Dublin Bay and River Tolka Estuary SPA is also likely to use this SPA as a foraging resource.

Informed by two surveys of the western Irish Sea region in 2016 an estimated 120,232 and 34,626 individual marine birds occurred in this SPA during autumn and winter respectively. Those marine bird species whose estimated abundances equalled or exceeded 1% of the total estimated size of the winter assemblage are: Red-throated Diver (538), Fulmar (506), Little Gull (391), Kittiwake (944), Black-headed Gull (508), Common Gull (2,866), Herring Gull (6,893), Great Black-backed Gull (2,096), Razorbill (4,638) and Guillemot (13,914). The estimated 2016 summer abundance of Manx Shearwater in the North West Irish Sea SPA is 13,010 and is of international importance. The estimated 2016 autumn and winter abundances of Great Northern Diver in the North West Irish Sea SPA is 248 and 230 respectively and are of international importance. The estimated abundances of Common Scoter over parts of this SPA can reach significant numbers (e.g. 14,567 in December 2018) which is also of international importance."

4.3.3.4 Qualifying Interests and Conservation Objectives

The QIs/SCIs and their respective conservation objectives for each of the relevant European site(s) are detailed in Table 8 below.

TABLE 8. QUALIFYING INTERESTS (QIs) / SPECIAL CONSERVATION INTERESTS (SCIs) AND THEIR CONSERVATION OBJECTIVES FOR THE RELEVANT EUROPEAN SITES. THE CONSERVATION STATUS OF EACH QI / SCI WAS SOURCED FROM THE RELEVANT STANDARD DATA FORM(S) (SOURCE: EEA (2026)), AND THE LATEST NATIONAL STATUS IS TAKEN FROM THE LATEST ARTICLE 17 REPORT (NPWS, 2019A & 2019B) AND BOCCI² RESPECTIVELY.

QI / SCI (* = priority habitat)	Conservation Status	National Status	Conservation Objective
Malahide Estuary SAC (000205)			
1140 Mudflats and sandflats not covered by seawater at low tide	Good	Inadequate	To <u>maintain</u> the favourable conservation condition of this habitat in Malahide Estuary SAC
1310 <i>Salicornia</i> and other annuals colonising mud and sand	Good	Favourable	
1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	Good	Inadequate	To <u>restore</u> the favourable conservation condition of this habitat in Malahide Estuary SAC
1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Significant	Inadequate	To <u>maintain</u> the favourable conservation condition of this habitat in Malahide Estuary SAC
2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	Significant	Inadequate	To <u>restore</u> the favourable conservation condition of this habitat in Malahide Estuary SAC
2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)	Good	Bad	
Malahide Estuary SPA (004025)			
A005 Great Crested Grebe (<i>Podiceps cristatus</i>)	Good	Amber	To <u>maintain</u> the favourable conservation condition of this species in Malahide Estuary SPA
A046 Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)	Excellent	Amber	
A048 Shelduck (<i>Tadorna tadorna</i>)	Excellent	Amber	
A054 Pintail (<i>Anas acuta</i>)	Excellent	Amber	
A067 Goldeneye (<i>Bucephala clangula</i>)	Excellent	Red	
A069 Red-breasted Merganser (<i>Mergus serrator</i>)	Excellent	Amber	
A130 Oystercatcher (<i>Haematopus ostralegus</i>)	Excellent	Red	

² Birds of Conservation Concern in Ireland (BOCCI) 2020-2026 (Gilbert, Stanbury & Lewis, 2021). The colours represent the species designation on the various BOCCI lists.

A140 Golden Plover (<i>Pluvialis apricaria</i>)	Good	Red	To <u>maintain</u> the favourable conservation condition of this species in Malahide Estuary SPA
A141 Grey Plover (<i>Pluvialis squatarola</i>)	Excellent	Red	
A143 Knot (<i>Calidris canutus</i>)	Excellent	Red	
A149 Dunlin (<i>Calidris alpina</i>)	Excellent	Red	
A156 Black-tailed Godwit (<i>Limosa limosa</i>)	Excellent	Red	
A157 Bar-tailed Godwit (<i>Limosa lapponica</i>)	Good	Red	
A162 Redshank (<i>Tringa totanus</i>)	Excellent	Red	To <u>maintain</u> the favourable conservation condition of this habitat in Malahide Estuary SPA
A999 Wetland and Waterbirds	N/A	N/A	
North-West Irish Sea SPA (004236)			
A001 Red-throated Diver (<i>Gavia stellata</i>)	N/A	Amber	To <u>maintain</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A003 Great Northern Diver (<i>Gavia immer</i>)	N/A	Amber	
A009 Fulmar (<i>Fulmarus glacialis</i>)	N/A	Amber	To <u>restore</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A013 Manx Shearwater (<i>Puffinus puffinus</i>)	N/A	Amber	To <u>maintain</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A017 Cormorant (<i>Phalacrocorax carbo</i>)	N/A	Amber	To <u>restore</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A018 Shag (<i>Phalacrocorax aristotelis</i>)	N/A	Amber	
A065 Common Scoter (<i>Melanitta nigra</i>)	N/A	Red	To <u>maintain</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A179 Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	N/A	Amber	
A182 Common Gull (<i>Larus canus</i>)	N/A	Amber	
A183 Lesser Black-backed Gull (<i>Larus fuscus</i>)	N/A	Amber	

A184 Herring Gull (<i>Larus argentatus</i>)	N/A	Amber	To <u>restore</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A187 Great Black-backed Gull (<i>Larus marinus</i>)	N/A	Green	To <u>maintain</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A188 Kittiwake (<i>Rissa tridactyla</i>)	N/A	Red	To <u>restore</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A192 Roseate Tern (<i>Sterna dougallii</i>)	N/A	Amber	To <u>maintain</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A193 Common Tern (<i>Sterna hirundo</i>)	N/A	Amber	
A194 Arctic Tern (<i>Sterna paradisaea</i>)	N/A	Amber	
A199 Guillemot (<i>Uria aalge</i>)	N/A	Amber	
A200 Razorbill (<i>Alca torda</i>)	N/A	Red	
A204 Puffin (<i>Fratercula arctica</i>)	N/A	Red	To <u>restore</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A862 Little Gull (<i>Hydrocoloeus minutus</i>)	N/A	Amber	To <u>maintain</u> the favourable conservation condition of this species in North-West Irish Sea SPA
A195 Little Tern (<i>Sternula albifrons</i>)	N/A	Amber	



FIGURE 7. MALAHIDE ESTUARY SAC AND SPA IN THE VICINITY OF THE PROPOSED DEVELOPMENT.

4.4 Assessment of Likely Significant Effects

The following sections discuss the potential for likely significant effects on the relevant European site(s), taking into consideration the QIs, SCIs and SSCOs (where available), and assesses whether the Proposed Development has the capacity to adversely affect the integrity of this European site. Furthermore, due consideration shall be given to species not formally identified but which may be present within the relevant European site(s) and adversely effected by the Proposed Development, provided that those potential impacts are likely to affect the conservation objectives of the designated site. The potential for significant effects that may arise from the Proposed Development was considered through the use of key indicators as detailed in section 3.6.

4.4.1 Changes in Water Quality and Resource

There are hydrological pathways between the Proposed Development and three European Sites namely, *Malahide Estuary SAC (000205)*, *Malahide Estuary SPA (004025)*, and *North-West Irish Sea SPA (004236)*, via surface water run-off into the 900mm culvert parallel to the eastern boundary of the Site. While there are no existing connections to this culvert at present, a hydrological pathway will be established when the connection is made during the Construction Phase of the Proposed Development. The culvert therefore represents a clear and identifiable hydrological pathway for surface water and potential pollutants from the Site to downstream European sites.

During both the Construction and Operational Phase of the Proposed Development, surface water run-off from the Site at the culvert has the potential to carry sediments or other pollutants to the downstream receiving environment, resulting in alterations to water quality and its resources. Such changes can lead to increased turbidity, eutrophication and/or contamination of water within the European sites, inadvertently affecting the QIs of *Malahide Estuary SAC (000205)*. Degraded water quality may also directly reduce prey availability and indirectly reduce the suitability of habitats for SCI species listed for *Malahide Estuary SPA (004025)*, and *North-West Irish Sea SPA (004236)*. Therefore, in the absence of appropriate mitigation, impacts on European sites as a result of changes in water quality and resources due to the Proposed Development cannot be ruled out, and the preparation of Stage 2 of the AA process and a NIS is required.

4.4.2 Potential for In-combination Effects

The following sections outline existing granted or conditionally granted planning permissions in the vicinity of the Proposed Development and assess the potential for adverse in-combination effects on any European sites.

4.4.2.1 Existing Planning Permissions

A search of planning applications located within a 300m radius of the Site of the Proposed Development was conducted using online planning resources such as the National Planning Application Database (NPAD) (MyPlan.ie) and Fingal County Council Planning Applications online map. A 300m radius was selected for assessment of in-combination effects on the basis of the size, scale, and nature of the Proposed Development. Any planning applications listed as granted or decision pending from within the last five years were assessed for their potential to act in-combination with the Proposed Development and cause likely significant effects on the relevant European sites. Long-term developments granted outside of this time period were also considered where applicable.

It is noted that the majority of the few developments within the vicinity of the Site of the Proposed Development are applications granted for industrial parks and residential developments. The larger developments in the vicinity of the Proposed Development are outlined in Table 9.

TABLE 9. GRANTED AND PENDING DEVELOPMENT APPLICATIONS WITHIN 300 M (AND IN SOME INSTANCES BEYOND 300M) OF THE PROPOSED DEVELOPMENT. LOCATION AND DISTANCE GIVEN IS RELATIVE TO THE PROPOSED DEVELOPMENT.

Planning Reference	Planning Authority	Status	Location
F22A/0365	Fingal County Council	Granted Permission	South and west of the Proposed Development (approx. 25m away)
Development Description All in or in the vicinity of the townlands of Mainscourt, Roscall, Richardstown, Gracedieu, Brownstown, Magillstown, Skidoo, Dollards, Balheary, Newtown, broadmeadow, Balheary Demesne, Seatown West, Swords Demesne, Mantua, Greenfields, Seatown East and Mountgorry, Co. Dublin. The development of grid connection infrastructure to connect the approved solar photovoltaic ('PV') energy development on lands at Mainscourt, Ballyboghil, Co. Dublin under Register Reference F17A/0340, PL06F.249174 to the ESB Mountgorry 38kV Substation, Swords Business Park, Swords, Co. Dublin, comprising the laying of 9,470 metres of 38kV underground electricity cables in ducts and associated infrastructure substantially under public roads and beneath the Ward River Bridge, Gracedieu Bridge and the Broadmeadow river by means of horizontal directional drilling. A Natura Impact Statement (NIS) will be submitted to the Planning Authority with the planning application. Potential for In-combination effects This development shares a hydrological pathway with the Proposed Development via surface water run-off into the existing 900mm culvert running parallel to the eastern boundary of the Site. The NIS report dated 18/07/2022 concluded that the Proposed Development will not result in any adverse effects on the QIs/SCIs of European sites on the basis that the specific mitigations measures, as outlined in the NIS, will be implemented. Specifically, the proposed construction works will be undertaken to avoid impairment of water quality. As such, in-combination effects with the Proposed Development can be ruled out.			
F23A/0438	Fingal County Council	Granted Permission	Northeast of the Proposed Development (approx. 800m away)
Development Description Permission is sought for (a) internal demolition of some non-original partitions on the upper and lower levels to facilitate new layout, (b) internal demolition and removal of some parts of upper floor and lower floor slabs to provide for new simplified floor levels internally, (c) removal of internal non-original stairs, (d) knock out section of exterior wall to the south to provide for new enlarged window opening, (e) opening up some original openings to the south elevation to provide for new windows, (f) new internal building works to provide for new floors in part and new partitions, (g) renovations to the house internally and new window replacement externally, (h) new waste water treatment plant WWTP to replace existing septic tank on site. All to split level 2 storey house which is a protected structure. Potential for In-combination effects This development shares a hydrological pathway with the Proposed Development at Malahide Estuary, where the culvert running parallel to the eastern boundary of the Site discharges into. An Appropriate Assessment report dated 02/01/2024 concluded as follows- "<i>The proposed development is unlikely to give rise to any significant direct or indirect effect upon the Malahide Estuary SPA and SAC, the North-West Irish Sea SPA, the Rockabill to Dalkey Island SAC and the Lambay Island SPA and SAC. It can be concluded therefore that this proposed development will not significantly or adversely affect any the European Site comprising the Natura 2000 site network within the Zol and that a finding of no significant impact (FONSI) can be reached. The proposed development therefore is not considered to necessitate or warrant progression to Stage 2 Appropriate Assessment (Natura Impact Statement).</i>"			

As such, in-combination effects with the Proposed Development can be ruled out.

4.4.2.2 Relevant Policies and Plans

The local policies and plans detailed in section 2.2 above were reviewed and considered for possible in-combination effects with the Proposed Development. Each of these plans has undergone AA, and where potential for likely significant effects has been identified (e.g., in the case of the Fingal County Development Plan), an NIS has been prepared which identifies appropriate mitigation. As such, it is considered that the plans and policies listed will not result in in-combination effects with the Proposed Development. The Fingal County Development Plan 2023-2029 has directly addressed the protection of European sites and biodiversity through specific objectives. The above listed plans are not being relied upon to rule out potential significant effects on European sites.

TABLE 10. SUMMARY OF IMPACT ASSESSMENT ON EUROPEAN SITES AS A RESULT OF THE PROPOSED DEVELOPMENT.

Site	Habitat Loss / Alteration	Habitat Species or Fragmentation	Disturbance and/or Displacement of Species	Changes in Population Density	Changes in Water Quality and/or Resource	In-combination effects	Stage 2 AA Required
SAC							
Malahide Estuary SAC (000205)	No	No	No	None	Yes	None	YES
Malahide Estuary SPA (004025)	No	No	No	None	Yes	None	YES
North-West Irish Sea SPA (004236)	No	No	No	None	Yes	None	YES

5 APPROPRIATE ASSESSMENT SCREENING CONCLUSION

The Proposed Development at Greenfields, Swords Business Park, Swords, Co. Dublin has been assessed taking into account:

- The nature, size and location of the proposed works and possible impacts arising from the construction works.
- The QIs and conservation objectives of the European sites
- The potential for in-combination effects arising from other plans and projects.

In conclusion, upon the examination, analysis and evaluation of the relevant information and applying the precautionary principle, it is concluded by the authors of this report that the possibility **cannot be excluded** that the Proposed Development will have a significant effect on any of the European sites listed below:

- *Malahide Estuary SAC (000205),*
- *Malahide Estuary SPA (004025),*
- *North-West Irish Sea SPA (004236).*

In carrying out this AA screening, any targeted ecological mitigation measures and/or measures intended or included for the purposes of avoiding adverse effects arising as a result of the Proposed Development on any European site have not been taken into account.

On the basis of the screening exercise carried out above, it can be concluded, on the basis of the best scientific knowledge available and objective information, that the possibility of any significant effects on the above listed European sites, whether arising from the project itself or in combination with other plans and projects, **cannot be excluded** in light of the above listed European sites' conservation objectives. Thus, there is **a requirement** to proceed to Stage 2 of the Appropriate Assessment process; and a **NIS has been prepared** and accompanies this submission under separate cover.

6 REFERENCES

- DEHLG. (2010). Department of the Environment, Heritage and Local Government. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. DEHLG, Dublin. (Rev. Feb 2010).
- DHLGH. (2026). Department of Housing, Local Government and Heritage. Available at: <https://housinggov.ie/maps.arcgis.com/home/index.html/>. [Accessed April 2026].
- EEA (2026). European Environmental Agency. Natura 2000 [Online Map] Viewer. Available at: <https://natura2000.eea.europa.eu/> [Accessed April 2026]
- EPA. (2026). Environmental Protection Agency Online Mapping [ONLINE] Available at: <http://www.epa.ie/> [Accessed April 2026].
- European Commission. (2000). *Communication from the Commission on the precautionary principle*. Commission of the European Communities, Brussels.
- European Commission. (2001). Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Communities, Luxembourg.
- European Commission. (2019). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1555085968125&uri=CELEX:52019XC0125\(07\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1555085968125&uri=CELEX:52019XC0125(07))
- European Commission. (2021). Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC Brussels, 28.9.2021
- Fossitt, J. (2000). *A Guide to Habitats in Ireland*. The Heritage Council, Kilkenny.
- Franklin, A. N. (2002). What is Habitat Fragmentation? *Studies in Avian Biology*, 20-29.
- GSI. (2026). Geological Survey of Ireland website [ONLINE] Available at: <http://www.gsi.ie/> accessed [Accessed April 2026].
- Irish Water. (2026). Wastewater Treatment Capacity Register for Fingal. [ONLINE] Available at: [Fingal | Wastewater Treatment Capacity Register | Uisce Éireann \(formerly Irish Water\)](#) [Accessed April 2026].
- Irish Water. (2023). Annual Environmental Report 2023 for Swords D0024-01. [ONLINE] Available at: [D0024-01_2023_AER.pdf](#) [Accessed April 2026].
- MCORM (2026). Site Plan for Greenfields Swords LRD. MCORM Architecture and Urban Design, No. 1 Grantham Street, Dublin 8, D08A49Y. Drawing No. SWO-MCORM-AR-00-DR-P4-1004.
- NPWS. (2010). Circular NPW 1/10 & PSSP 2/10. Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.
- NPWS (2013a) Conservation Objectives: Malahide Estuary SAC 000205. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2017) Site Synopsis: Malahide Estuary SAC 000205. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2013b) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2013c) Site Synopsis: Malahide Estuary SPA 004025. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2023a) Conservation Objectives: North-west Irish Sea SPA 004236. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.



NPWS (2023b) Site Synopsis: North-west Irish Sea SPA 004236. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

Office of the Planning Regulator (2021). Appropriate Assessment Screening for Development Management, OPR Practice Note PN01

Roger (2026). Engineering Infrastructure Report & Stormwater Impact Assessment for a Mixed-Used Development at Greenfields, Mantua Rd.(L6310), Swords, Co. Dublin. Roger Mullarkey & Associates, Duncreevan, Kilcock, Co. Kildare.

Roger (2025a). Surface Water Drainage at Greenfields LRD, Swords. Roger Mullarkey & Associates, Duncreevan, Kilcock, Co. Kildare. Drawing No. 2412/02.

Roger (2025b). Foul Drainage GA at Greenfields LRD, Swords. Roger Mullarkey & Associates, Duncreevan, Kilcock, Co. Kildare. Drawing No. 2412/03.



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