

HEARSE ROAD BEND REALIGNMENT

Screening for Appropriate Assessment

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Assessment
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REPORT

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1 INTRODUCTION

This report comprises information to inform the screening for Appropriate Assessment (AA) in line with the requirements of Article 6(3) of the EU Habitats Directive (EC 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora; the Planning and Development (Amendment) Act 2010; and the European Union (Birds and Natural Habitats) Regulations 2011 as amended, for the proposed realignment of a section of the R126 Hearse Road in North County Dublin (hereafter referred to as the proposed development).

1.1 Site Location

Located in North County Dublin, the proposed development is located alongside the R126 or Hearse Road that commences at the M1/ R132 interchange (M1 Junction 4), north of Lissenhall and continues in an easterly direction to Donabate and Portrane. The R126 retains much of its rural heritage and winds its way through agricultural lands alongside Newbridge Demesne before arriving in the outskirts of Donabate (**Figure 1**). The proposed development is located in large arable fields alongside the R126.

1.2 Legislative Context

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as the “Habitats Directive” provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as European sites. These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC) as codified by Directive 2009/147/EC.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites (Annex 1.1). Article 6(3) establishes the requirement for AA:

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

Article 6(4) states:

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

The Habitats Directive has been transposed into Irish law by the Planning and Development Act 2000 (as amended) and the European Union (Birds and Natural Habitats) Regulations 2011 as amended. The governing legislation requires that a Competent Authority must take appropriate steps to avoid the deterioration of natural habitats and the habitats of species as well as the disturbance of species for which the site has been designated, in so far as such disturbance could be significant in relation to the objectives of the Habitats Directive.

1.3 Role of the Competent Authority

The Competent Authority is obliged to examine the likely significant effects individually or in combination, of the proposed works on European sites in light of their specific Species of Conservation Interests (SCIs) (i.e.

birds for which SPAs are designated, and wetland habitats), Qualifying Interest (QI) species (i.e. flora and fauna for which SACs are designated), and Conservation objectives (COs). If Screening for AA determines that there will likely be significant effects on a European site, then AA must be carried out for the proposed works, including the compilation of a Natura Impact Statement (NIS) to inform the decision making.

1.4 Stages of the Appropriate Assessment Process

The AA process progresses through four stages.

- Stage 1 – Screening of the proposed plan or project for AA;
- Stage 2 – An AA of the proposed plan or project;
- Stage 3 – Assessment of alternative solutions; and
- Stage 4 – Imperative Reasons of Overriding Public Interest (IROPI)/ Derogation.

Stages 1 and 2 relate to Article 6(3) of the Habitats Directive; and Stages 3 and 4 to Article 6(4).

Stage 1: Screening for AA

The aim of screening is to assess firstly if the plan or project is directly connected with or necessary to the management of European site(s); or in view of best scientific knowledge, if the plan or project, individually or in combination with other plans or projects, is likely to have a significant effect on a European site. This is done by examining the proposed plan or project and the COs of any European sites that might potentially be affected. If screening determines that there is potential for significant effects or there is uncertainty regarding the significance of effects, then it will be recommended that the plan or project is brought forward to the next stage of the AA process.

Stage 2: Appropriate Assessment

The aim of Stage 2 of the AA process is to identify any adverse impacts that the plan or project might have on the integrity of relevant European sites. As part of the assessment, a key consideration is 'in combination' effects with other plans or projects. Where adverse impacts are identified, mitigation measures can be proposed that would avoid, reduce or remedy any such negative impacts and the plan or project should then be amended accordingly, thereby avoiding the need to progress to Stage 3.

Stage 3: Assessment of Alternative Solutions

If it is not possible during Stage 2 of the AA process to conclude that there will be no adverse effects on site integrity, Stage 3 of the process must be undertaken, which is to objectively assess whether alternative solutions exist by which the objectives of the plan or project can be achieved. Explicitly, this means alternative solutions that do not have adverse impacts on the integrity of a European site. It should also be noted that Council Directive 92/43/EEC on this stage of the process states that, '*other assessment criteria, such as economic criteria, cannot be seen as overruling ecological criteria*'. In other words, if alternative solutions exist that do not have adverse impacts on European sites; they should be adopted regardless of economic considerations. This stage of the AA process should result in the identification of the least damaging options for the plan or project.

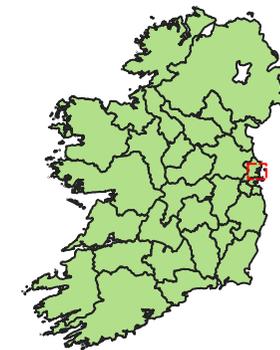
Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)/Derogation

This stage of the AA process is undertaken when it has been determined that a plan or project will have adverse effects on the integrity of a European site, but that no alternatives exist. At this stage of the AA process, it is the characteristics of the plan or project itself that will determine whether or not the competent authority can allow it to progress. This is the determination of 'over-riding public interest'.

It is important to note that in the case of European sites that include in their qualifying features 'priority' habitats or species, as defined in Annex I and II of the Directive, the demonstration of 'over-riding public interest' is not sufficient and it must be demonstrated that the plan or project is necessary for 'human health or safety considerations'. Where plans or projects meet these criteria, they can be allowed, provided adequate compensatory measures are proposed. Stage 4 of the process defines and describes these compensation measures.



Legend



- Proposed development
- River waterbodies

Client

Comhairle Contae
Fhine Gall
Fingal County
Council



Project

Hearse Road Bend Realignment

Title

Figure 1 Proposed
Development Location



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2 PROPOSED DEVELOPMENT

The R126 Hearse Road is the primary transport route into Donabate and Portrane. The proposed development is in the townland of Lanestown at a dangerous bend on the R126. There is an accident history at the bend, with eastbound vehicles frequently striking an existing boundary wall located on the outside of the bend. Fingal County Council propose to realign a section of the road; approximately 500m in length; at the dangerous bend.

The proposed realignment will provide a single carriageway road to an improved horizontal geometry design standard. There are no bridges, culverts etc., although roadside drainage in the form of french drains forms part of the design.

Overall the proposed development will entail a number of elements which it is estimated could be completed in 3 months. The main elements of the proposed development include:

- Construction of new realigned section of road including tie-in to existing R126 at southern and north-eastern end;
- Installation of SuDS road drainage (filter drain);
- Break-up of the redundant existing pavement;
- Construction of one new field accesses and tie-in to three existing access points;
- Provision of post and rail fence along boundary;
- Transfer of traffic from old section of road to newly realigned section of road; and
- Landscaping.

2.1 Construction Phase

Elements of the construction process may overlap or they may be out of sequence depending on the final scheme. Nonetheless, the bulk of the construction elements will be carried out before the newly realigned section of road becomes operational.

2.1.1 Advance works

The advance works will entail:

- Utility identification and relocation as necessary - This will likely be undertaken by utility contractors, e.g. EIR rather than the main works contractor.
- Temporary Compound – Given the limited extent of the project, it is expected that portable welfare facilities will be used by the appointed contractor with most stores brought onsite as needed, or temporarily stored in a secured portacabin.
- Site clearance – The bulk of the realigned road is proposed to be constructed in arable land running alongside the existing R126. There will be some clearance of the managed roadside verge along the southern side of the existing R126.

2.1.2 Road construction

The construction of the road will follow conventional construction standards. Two pavement types are proposed. Pavement type 1 comprises new pavement construction and is proposed for the central part of the scheme. Pavement type 2 is proposed for either end of the road realignment where the tie-in to the existing R126 road is planned (**Appendix A**).

During the preparation of the various road surfaces, roadside drainage designed to SuDS will be implemented. This includes the installation of a french drain (225mm diameter perforated pipe surrounded by filter stone and geotextile membrane), buried in an excavated trench of no more than 1.5metres depth. The flow for the proposed new drainage is to drain from the eastern end of the proposed realigned road (Cobbles' lane end)

towards the western (Swords) end of the scheme (**Appendix A**) The newly installed drainage will tie in with an existing manhole, where the surface water will be directed away from the road in an south westerly direction.

It is proposed that two new field access be provided to facilitate safe access to arable field along the southern section of the proposed development. A further tie in to an existing field access is also proposed along the northern side of the realignment. These access points will be set back from the main carriageway.

As the sequencing of the newly realigned road allows for or when traffic is diverted off the old section of the R126, the existing pavement will be broken up and the widened verges will be topsoiled and planted with grass seed.

Timber post and rail fence will be constructed along the site boundary.

2.2 Operation Phase

The transfer of traffic to the newly realigned road may partially occur along parts of the newly constructed road, to facilitate safe access to the construction areas. Depending on the timing of the works, it is likely that the fully realigned road will be opened to traffic before all landscaping is completed. Any landscaping works will likely be subject to a contractual management period of at least 2 years post construction to ensure successful implementation of the landscape design. Thereafter the operation of the road will continue as normal and be managed by the Local Authority.

3 METHODOLOGY

3.1 Guidance Documents on Appropriate Assessment

EU and national guidance exists in relation to Member States' fulfilling their requirements under the EU Habitats Directive, with particular reference to Article 6(3) and 6(4) of that Directive. The methodology followed in relation to this AA has had regard to the following guidance:

- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government (DoEHLG, 2010);
- Communication from the Commission on the Precautionary Principle (EC, 2000);
- Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (known as MN2000), Office for Official Publications of the European Communities, Luxembourg (EC, 2018);
- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Brussels (EC, 2001);
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the Commission (EC, 2007);
- Nature and biodiversity cases: Ruling of the European Court of Justice (EC, 2006);
- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission (EC, 2013); and
- Article 6 of the Habitats Directive: Rulings of the European Court of Justice (EC, 2014).

EC (2000) notes that the implementation of an approach based on the precautionary principle should start with a scientific evaluation, as complete as possible, and where possible, identifying at each stage the degree of scientific uncertainty, and also that decisions taken based on the precautionary principle should be maintained so long as scientific information is incomplete or inconclusive. EC (2001) notes also that predicting the response of a receptor to a disturbance effect can be difficult and, in the absence of firm scientific information, a precautionary approach is required.

3.2 Guiding Principles and Case Law

Over time legal interpretation has been sought on the practical application of the legislation concerning AA as some terminology has been found to be unclear. European and national case law has clarified a number of issues and some aspects of the published guidance documents have been superseded by case law. The following case law has been considered in the preparation of this report:

- When considering whether a European site can be screened out, the competent authority cannot take into account any measures intended to avoid or reduce the harmful effects of the proposed development (i.e. mitigation measures)¹; however, a 2019 Irish High Court consideration² concluded that Sustainable Drainage Systems (SuDS) are "*as a matter of fact and law... not mitigation measures which a competent authority is precluded from considering at the stage 1 screening stage*";

¹ *People Over Wind v Coillte Teoranta* (Court of Justice of the EU, case C-323/17)

² *Kelly v An Bord Pleanála & anor* [2019] IEHC 84 (High Court)

- The screening must consider the cumulative impacts of any development: that already exists; for which a planning application has been made; which the applicant for permission intends to make an application in the future; and, which is a matter of public record and which is planned to be implemented in the future;
- Consideration of the cumulative effects of plans, including local area plans;
- Where an element of the proposed development is missing design detail or subsequent agreements, the assessment should assume the worst-case scenario (i.e. the design with the greatest environmental impact); and
- Making of findings explicit³.

3.3 Information Sources Consulted

This screening exercise is based on a desktop study which utilised the following sources of information in addition to a literature review:

- Information on the location, nature and design of the proposed development supplied by the RPS design team;
- Department of Environment, Community and Local Government – land use mapping⁴;
- Environmental Protection Agency – Water Quality⁵;
- Geological Survey of Ireland – Geology, soils and hydrogeology⁶;
- Information on the conservation status of birds in Ireland (Colhoun and Cummins, 2013);
- Information on the Eastern River Basin District⁷;
- National Parks and Wildlife Service – European sites network information⁸;
- National Parks and Wildlife Service – Information on the status of EU protected habitats and species in Ireland (NPWS 2013a,b,c)
- National Biodiversity Data Centre⁹;
- Ordnance Survey of Ireland – Mapping and Aerial photography¹⁰;
- Fingal County Development Plan 2017-2023 (Fingal County Council, 2017);
- Fingal Biodiversity Action Plan 2010-2015 (Fingal County Council, 2010); and

3.3.1 Consultation

No consultation was entered into in respect of the current project, although RPS are in receipt of consultative responses from IFI and NPWS for an adjacent Irish Water project in Ballalese, in East Donabate.

³ Connelly v An Bord Pleanála [2018] IESC 31 (Supreme Court)

⁴ Available online at www.myplan.ie/en/index.html. Accessed in June 2019

⁵ Available online at www.epa.ie and www.catchments.ie Accessed in June 2019

⁶ Available online at www.gsi.ie Accessed in June 2019

⁷ Available online at www.erbd.ie Accessed in June 2019

⁸ Available online at www.npws.ie Accessed in June 2019

⁹ Available online at www.biodiversityireland.ie Accessed in June 2019

¹⁰ Available online at www.osi.ie Accessed in June 2019

3.4 Desk Study

3.4.1 Desk Study

The proposed development site lies within the O24E Ordnance Survey 2km x 2km grid square. Records of rare and protected species of fauna from these grid squares was carried out using the National Biodiversity Data Centre (NBDC) online database¹¹. Records of Invasive Alien Plant Species noted for this area were also noted.

Based on these records and professional judgement an assessment was made for the presence and/or potential for all QIs/SCIs of European sites and scheduled¹² invasive species to occur, given their ecological requirements identified by Balmer *et al.* (2013) for birds, and the NBDC and NPWS for all other species/habitats (NPWS, 2013b,c).

3.4.2 Field Survey

This is a desk-based assessment only and no site visit or project-specific ecological studies were undertaken, although the authors are aware of the area owing to recent surveys in the locality centred on Lissenhall and Donabate.

3.5 Relevant European Sites

The identification of relevant European sites to be included in this report was based on the identification of the Zone of Influence (Zoi) of the proposed development, a source-pathway-receptor model of effects, and the likely significance of any identified effects.

3.5.1 Zone of Influence

The proximity of the proposed development to European sites, and more importantly QIs/SCIs of the European sites, is of importance when identifying potentially likely significant effects. During the initial scoping of this report, a 15km Zoi was applied for impact assessment. A conservative approach has been used in addition to this, which minimises the risk of overlooking distant or obscure effect pathways, while also avoiding reliance on buffer zones (e.g. 15 km), within which all European sites should be considered. This approach assesses the complete list of all QIs/SCIs of European sites in Ireland (i.e. potential receptors), instead of listing European sites within buffer zones. This follows Irish departmental guidance on AA:

“For projects, the distance could be much less than 15 km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects” (DEHLG, 2010; p.32, para 1).

Following the guidance set out by the NRA (2009), the proposed development has been evaluated based on an identified Zoi with regard to the potential impact pathways to ecological feature (e.g. mobile and static). The Zoi of the proposed development on mobile species (e.g. birds, mammals, and fish), and static species and habitats (e.g. saltmarshes, woodlands, and flora) is considered differently. Mobile species have ‘range’ outside of the European site in which they are QI/SCI. The range of mobile QI/SCI species varies considerably, from several metres (e.g. in the case of whorl snails *Vertigo* spp.), to hundreds of kilometres (in the case of migratory wetland birds). Whilst static species and habitats are generally considered to have Zois within close proximity of the proposed development, they can be significantly affected at considerable

¹¹ www.biodiversityireland.ie accessed in June 2019

¹² Invasive species scheduled following the EC (Birds and Natural Habitats) Regulations 2011-2015 (‘the Regulations’). Under the Regulations, it is an offence to plant, disperse, allow or cause to disperse, spread or otherwise cause to grow in any place any species scheduled to the Regulations without a licence.

distances from an effect source; for example, where an aquatic QI habitat or plant is located many kilometres downstream from a pollution source.

Hydrological linkages between the proposed development and European site (and their QIs/SCIs) can occur over significant distances; however, any effect will be site specific depending on the receiving water environment and nature of the potential impact. As a precautionary measure, a reasonable worst-case Zol for water pollution from the proposed development site is considered to be the surface water catchment. In this report, the surface water catchment is defined at the scale of Catchment Management Unit (CMU), as adopted in the River Basin Management Plan (RBMP) for Ireland 2018-2021 (DoHPLG, 2018).

3.5.2 Source-Pathway-Receptor Model

The likely effects of the proposed development on any European site has been assessed using a source-pathway-receptor model, where:

- A 'source' is defined as the individual element of the proposed works that has the potential to impact on a European site, its qualifying features and its conservation objectives;
- A 'pathway' is defined as the means or route by which a source can affect the ecological receptor; and
- A 'receptor' is defined as the Special Conservation Interests (SCI) of SPAs or Qualifying Interests (QI) of SACs for which conservation objectives have been set for the European sites being screened.

A source-pathway-receptor model is a standard tool used in environmental assessment. In order for an effect to be likely, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism results in no likelihood for the effect to occur. The source-pathway-receptor model was used to identify a list of European sites, and their QIs/SCIs, with potentially links to European site. These are termed as 'relevant' European sites/QIs/SCIs throughout this report.

3.5.3 Likely Significant Effect

The threshold for a Likely Significant Effect (LSE) is treated in the screening exercise as being above a de minimis level¹³. The opinion of the Advocate General in CJEU case C-258/11 outlines:

"the requirement that the effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on a European site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill."

In this report, therefore, 'relevant' European sites are those within the potential Zol of activities associated with the construction and operation of the proposed development, where LSE pathways to European sites were identified through the source-pathway-receptor model.

3.6 Screening Sequence

- Determining whether a project or plan is directly connected with or necessary to the conservation management of any European sites;
- Describing the project or plan;
- Identifying the European sites potentially affected by the project or plan;

¹³ Sweetman v. An Bord Pleanála (Court of Justice of the EU, case C-285/11). A de minimis effect is a level of risk that is too small to be concerned with when considering ecological requirements of an Annex I habitat or a population of Annex II species present on a European site necessary to ensure their favourable conservation condition. If low level effects on habitats or individuals of species are judged to be in this order of magnitude and that judgment has been made in the absence of reasonable scientific doubt, then those effects are not considered to be likely significant effects

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- Identifying and describing any potential effects of the project or plan on European sites, alone, in-combination and cumulatively with other plans/projects; and
- Assessing the likelihood of significant effects on European sites.

4 RECEIVING ENVIRONMENT

4.1 Overview of the Proposed Development

The proposed development is situated in North County Dublin between the County town of Fingal, Swords and the expanding environs of Donabate. The landscape is largely characterised by large open, arable fields, with scattered residences or farmhouses along the busy road corridor. The land is highly managed, although there are areas of mature woodland adjacent to the proposed development and further east associated with sylvan estate at Newbridge demesne.

While there are no EPA identified watercourses in close proximity to the proposed development (the Lanestown stream being approximately 360m due south across arable fields), occasional field ditches occur, although the final destiny of the scarce water they carry is unknown. There is no obvious connectivity from the proposed development via drainage ditches to the Lanestown stream, although the same cannot be said for field drains.

4.2 European Sites

There are eight Special Areas of Conservation (SAC) and ten Special Protection Area (SPA), collectively referred to as European sites, located within the Zone of Influence (Zoi) of the proposed development. The Zoi constitutes a 15km buffer of the proposed development site, listed in **Table 1** and projected in **Figure 1**.

SACs are sites of international importance due to the presence of Annex I habitats and/or Annex II species listed under the EU Habitats Directive (92/43/EEC). SPAs are designated for the protection of bird species listed on Annex I of the Bird Directive (2009/147/EC), regularly occurring populations of migratory species and areas of international importance for migratory birds.

Each European site as assigned Conservations Objectives (CO) and a list of Qualifying Interests and/or Species of Community Interest (SCI) (**Table 1**). The Conservation Objective (CO) concept appears in the eighth recital of Directive 92/43/EEC which reads: “*whereas it is appropriate, in each area designated, to implement the necessary measures having regard to the conservation objectives pursued*”. Article 1 then explains that “*conservation means a series of measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favourable status*”.

NPWS publish COs for European sites on their website¹⁴. NPWS advise in the general introductory notes of their site-specific Conservation Objective (SSCO) series publications, that an appropriate assessment based on their “*published conservation objectives will remain valid even if the conservation objective targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out*”. NPWS advise that to assist in that regard, it is essential that the date and version are included when objectives are cited.

¹⁴ Available at <https://www.npws.ie/protected-sites>. Accessed in June 2019

Table 1 European sites considered in the Assessment

Site Name and Code	Qualifying Interest Habitats and Species (*Priority Habitat)	Distance from the Proposed Development	Connectivity
Special Area of Conservation (SAC)			
Rockabill to Dalkey Island SAC 003000	Conservation Objectives Series version 1.0 (07/05/13)	ca.7.5km	No. The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.
	Annex I Habitats <ul style="list-style-type: none"> Reefs [1170] Annex II Species <ul style="list-style-type: none"> Harbour porpoise <i>Phocoena phocoena</i> [1351] 		
Baldoyle Bay SAC 000199	Conservation Objectives Series version 1.0 (19/11/12)	ca.7.5km	No. The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.
	Annex I Habitats <ul style="list-style-type: none"> Mudflats and sandflats not covered by seawater at low tide [1140] <i>Salicornia</i> and other annuals colonizing mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] 		
Howth Head SAC 000202	Conservation Objectives Series version 1.0 (06/12/16)	ca.13km	No. The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.
	Annex I Habitats <ul style="list-style-type: none"> Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] 		

REPORT

Site Name and Code	Qualifying Interest Habitats and Species (*Priority Habitat)	Distance from the Proposed Development	Connectivity
Lambay Island SAC 000204	<p>Conservation Objectives Series version 1.0 (22/07/13)</p> <p>Annex I Habitats</p> <ul style="list-style-type: none"> • Reefs [1170] • Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] <p>Annex II Species</p> <ul style="list-style-type: none"> • Grey seal (<i>Halichoerus grypus</i>) [1364] • Harbour seal (<i>Phoca vitulina</i>) [1365] 	ca. 10km	<p>No.</p> <p>The proposed development is hydrogeologically connected to the Lambay Island SAC through the Swords groundwater body (IE_EA_G_011), which flows towards the coast in relatively short paths - i.e. <1km (see Section 4.3.3).</p> <p>Because the Lambay Island SAC is located at a greater distance from the proposed development (i.e. > 1km), it is not likely that a hydrogeological pathway between the proposed development and the European site will be established.</p> <p>Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.</p>
	<p>Conservation Objectives Series version 1.0 (27/05/13)</p> <p>Annex I Habitats</p> <ul style="list-style-type: none"> • Mudflats and sandflats not covered by seawater at low tide [1140] • <i>Salicornia</i> and other annuals colonising mud and sand [1310] • Spartina swards (<i>Spartinion maritimae</i>) [1320] • 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]* 		<p>Yes.</p> <p>The proposed development is hydrologically connected to the Malahide Estuary SAC through runoff drainage that will eventually reach the estuary. There is also hydrogeological connectivity to the Malahide Estuary SAC through the Swords groundwater body (IE_EA_G_011). Because the groundwater body flows towards the coast, a pathway between the proposed development and the European site can be established.</p>

REPORT

Site Name and Code	Qualifying Interest Habitats and Species (*Priority Habitat)	Distance from the Proposed Development	Connectivity
Conservation Objectives Series version 1.0 (06/11/13)			
North Dublin Bay SAC 000206	Annex I Habitats	ca.11km	No. The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.
	<ul style="list-style-type: none"> Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] <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] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]* Humid dune slacks [2190] 		
Conservation Objectives Series version 1.0 (27/01/17)			
Ireland's Eye SAC 002193	Annex I Habitats	ca.11km	No. The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.
	<ul style="list-style-type: none"> Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] 		
Conservation Objectives Series version 1.0 (14/08/13)			
Rogerstown Estuary SAC 000208	Annex I Habitats	ca.1.5km	No. The proposed development is hydrogeologically connected to the Rogerstown Estuary SAC through the Swords groundwater body (IE_EA_G_011), which flows towards the coast in relatively short paths - i.e. <1km (see Section 4.3.3). Because the Rogerstown Estuary SAC is located at a greater distance from the proposed development (i.e. >1km), it is not likely that a hydrogeological pathway between the proposed development and the European site will be established. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.
	<ul style="list-style-type: none"> Estuaries [1130] 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]* 		

REPORT

Site Name and Code	Qualifying Interest Habitats and Species (*Priority Habitat)	Distance from the Proposed Development	Connectivity
Special Protection Area (SPA)			
Generic Conservation Objectives version 6.0 (21/02/18)			
Skerries Islands SPA 004122	<ul style="list-style-type: none"> • Cormorant (<i>Phalacrocorax carbo</i>) [A017] • Shag ((<i>Phalacrocorax aristotelis</i>) [A018] • Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Purple Sandpiper (<i>Calidris maritima</i>) [A148] • Turnstone (<i>Arenaria interpres</i>) [A169] • Herring Gull (<i>Larus argentatus</i>) [A184] 	ca.11.5km	No. The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.
Generic Conservation Objectives version 6.0 (21/02/18)			
Howth Head Coast SPA 004113	<ul style="list-style-type: none"> • Kittiwake (<i>Rissa tridactyla</i>) [A188] 	ca.13.5km	No. The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.
Generic Conservation Objectives version 6.0 (21/02/18)			
Ireland's Eye SPA 004117	<ul style="list-style-type: none"> • Cormorant (<i>Phalacrocorax carbo</i>) [A017] • Herring Gull (<i>Larus argentatus</i>) [A184] • Kittiwake (<i>Rissa tridactyla</i>) [A188] • Guillemot (<i>Uria aalge</i>) [A199] • Razorbill (<i>Alca torda</i>) [A200] 	ca.11km	No. The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.
Generic Conservation Objectives version 6.0 (21/02/18)			
Lambay Island SPA 004069	<ul style="list-style-type: none"> • Fulmar (<i>Fulmarus glacialis</i>) [A009] • Cormorant (<i>Phalacrocorax carbo</i>) [A017] • Shag (<i>Phalacrocorax aristotelis</i>) [A018] • Greylag Goose (<i>Anser anser</i>) [A043] • Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] • Herring Gull (<i>Larus argentatus</i>) [A184] • Kittiwake (<i>Rissa tridactyla</i>) [A188] • Guillemot (<i>Uria aalge</i>) [A199] • Razorbill (<i>Alca torda</i>) [A200] • Puffin (<i>Fratercula arctica</i>) [A204] 	ca.10km	No. The proposed development is hydrogeologically connected to the Lambay Island SPA through the Swords groundwater body (IE_EA_G_011), which flows towards the coast in relatively short paths - i.e. <1km (see Section 4.3.3). Because the Lambay Island SPA is located at a greater distance from the proposed development (i.e. > 1km), it is not likely that a hydrogeological pathway between the proposed development and the European site will be established. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.

REPORT

Site Name and Code	Qualifying Interest Habitats and Species (*Priority Habitat)	Distance from the Proposed Development	Connectivity
Generic Conservation Objectives version 6.0 (21/02/18)			
Malahide Estuary SPA 004025	<ul style="list-style-type: none"> Fulmar (<i>Fulmarus glacialis</i>) [A009] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Shag (<i>Phalacrocorax aristotelis</i>) [A018] Greylag Goose (<i>Anser anser</i>) [A043] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] Herring Gull (<i>Larus argentatus</i>) [A184] Kittiwake (<i>Rissa tridactyla</i>) [A188] Guillemot (<i>Uria aalge</i>) [A199] Razorbill (<i>Alca torda</i>) [A200] Puffin (<i>Fratercula arctica</i>) [A204] 	ca.1.5km	<p>Yes.</p> <p>The proposed development is hydrologically connected to the Malahide Estuary SPA through runoff drainage that will eventually reach the estuary. There is also hydrogeological connectivity to the Malahide Estuary SPA through the Swords groundwater body (IE_EA_G_011). Because the groundwater body flows towards the coast, a pathway between the proposed development and the European site can be established.</p>
Conservation Objectives Series version 1.0 (09/03/15)			
South Dublin Bay and River Tolka Estuary SPA 004024	<ul style="list-style-type: none"> Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Knot (<i>Calidrus canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Dunlin (<i>Calidris alpina alpina</i>) [A149] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Redshank (<i>Tringa totanus</i>) [A162] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Roseate Tern (<i>Sterna dougallii</i>) [A192] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Wetlands [A999] 	ca.13.5km	<p>No.</p> <p>The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.</p>

REPORT

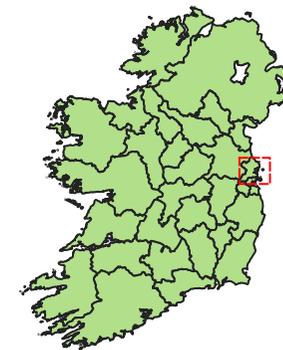
Site Name and Code	Qualifying Interest Habitats and Species (*Priority Habitat)	Distance from the Proposed Development	Connectivity
Conservation Objectives Series version 1.0 (09/03/15)			
North Bull Island SPA 004006	<ul style="list-style-type: none"> • Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Teal (<i>Anas crecca</i>) [A052] • Pintail (<i>Anas acuta</i>) [A054] • Shoveler (<i>Anas clypeata</i>) [A056] • Oystercatcher (<i>Haematopus ostralegus</i>) [A130] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Grey Plover (<i>Pluvialis squatarola</i>) [A141] • Knot (<i>Calidrus canutus</i>) [A143] • Sanderling (<i>Calidris alba</i>) [A144] • Dunlin (<i>Calidris alpina alpina</i>) [A149] • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Curlew (<i>Numenius arquata</i>) [A160] • Redshank (<i>Tringa totanus</i>) [A162] • Turnstone (<i>Arenaria interpres</i>) [A169] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Wetlands [A999] 	ca.11km	<p>No.</p> <p>The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.</p>
Conservation Objectives Series version 1.0 (27/02/13)			
Baldoyle Bay SPA 004016	<ul style="list-style-type: none"> • Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Ringed Plover (<i>Charadrius hiaticula</i>) [A137] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Grey Plover (<i>Pluvialis squatarola</i>) [A141] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Wetlands [A999] 	ca.7.5km	<p>No.</p> <p>The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.</p>

REPORT

Site Name and Code	Qualifying Interest Habitats and Species (*Priority Habitat)	Distance from the Proposed Development	Connectivity
Rogerstown Estuary SPA 004015	<p>Conservation Objectives Series version 1.0 (20/05/13)</p> <ul style="list-style-type: none"> • Greylag Goose (<i>Anser anser</i>) [A043] • Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Shoveler (<i>Anas clypeata</i>) [A056] • Oystercatcher (<i>Haematopus ostralegus</i>) [A130] • Ringed Plover (<i>Charadrius hiaticula</i>) [A137] • Grey Plover (<i>Pluvialis squatarola</i>) [A141] • Knot (<i>Calidrus canutus</i>) [A143] • Dunlin (<i>Calidris alpina alpina</i>) [A149] • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Redshank (<i>Tringa totanus</i>) [A162] • Wetlands [A999] 	ca.1.75km	<p>No.</p> <p>The proposed development is hydrogeologically connected to the Rogerstown Estuary SPA through the Swords groundwater body (IE_EA_G_011), which flows towards the coast in relatively short paths - i.e. <1km (see Section 4.3.3).</p> <p>Because the Rogerstown Estuary SPA is located at a greater distance from the proposed development (i.e. > 1km), it is not likely that a hydrogeological pathway between the proposed development and the European site will be established.</p> <p>Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.</p>
	<p>Conservation Objectives Series version 1.0 (08/05/15)</p> <ul style="list-style-type: none"> • Purple Sandpiper (<i>Calidris maritima</i>) [A148] • Roseate Tern (<i>Sterna dougallii</i>) [A192] • Common Tern (<i>Sterna hirundo</i>) [A194] • Arctic Tern (<i>Sterna paradisaea</i>) [A194] 		<p>No.</p> <p>The proposed development does not have hydrological connectivity with the European site. Therefore, the European site is not considered to be at risk from either the construction or operation of the proposed development.</p>



Legend



- River waterbodies
- Proposed Development
- Zone of Influence (ZoI)
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)

Source: NPWS (June, 2019)

Client **Comhairle Contae Fhine Gall Fingal County Council**

Project **Hearse Road Bend Realignment**

Title **Figure 2 European sites considered in the Assessment**



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4.3 Habitats and Flora

4.3.1 Terrestrial

No terrestrial habitats within the footprint or Zol of the proposed development have affinity to QI habitats or offer any significant supporting value to QIs or SCIs of any European sites.

4.3.2 Aquatic Environment

The EPA online mapping resource was used to review waterbodies present and the most recent WFD water quality status (2010-2015). The proposed development is located within the Nanny-Delvin WFD Catchment, Ballough[Stream]_SC_010 WFD SubCatchment. The larger area surrounding the proposed development is drained by three rivers, all assigned to the same WFD waterbody – Turvey_010 (IE_EA_08T020700): the Turvey 08, the Lanestown and Staffordstown 08 (**Figure 3**). The Turvey 08 river is distanced by approximately 500m northeast of the proposed development; the Lanestown river is the nearest, distanced by 350m, south of the proposed development; and the Staffordstown 08, distanced at approximately 1.5km southwest of the proposed development. While the Staffordstown flows into the transitional waterbody Broadmeadow Water (EA_060_0100), the Turvey 010 and Turvey 08 discharge to the Malahide Bay coastal waterbody (IE_EA_060_0000). Both the Broadmeadow Water transitional waterbody and the Malahide Bay coastal waterbody have a *Moderate* water quality status assigned for the 2010-2015 period.

The above-mentioned river, transitional and coastal waterbodies eventually discharge into the Northwestern Irish Sea (HA 08) coastal waterbody (IE_EA_020_0000). It is a larger coastal waterbody, classed as *Good* quality status for the period 2010-2015.

4.3.3 Groundwater bodies

The proposed development is also located within the Swords groundwater body (IE_EA_G_011 Swords). The WFD monitoring for the period 2010-2015 revealed a *Good* water quality status for this waterbody.

The Geological Survey Ireland website¹⁵ was consulted to understand the characteristics and sensitivities of this groundwater body. It is a mostly locally important aquifer, zonally moderately productive. The flow generally occurs towards the coast, in relatively short flow paths (i.e. <1km), of rapid velocity in the upper zone and through fissures and conduits at larger depths. The existence of springs along the coast within this groundwater body influence are also reported.

4.3.4 Flora and Invasive Alien Plant Species

There is little or no potential for QI flora, including Killarney fern *Trichomanes speciosum*, Marsh saxifrage *Saxifraga hirculus*, Slender naiad *Najas flexilis*, Slender green feather moss *Hamatocaulis vernicosus*, or Petalwort *Petalophyllum ralfsii* to occur within the footprint of the proposed development. None of these species were returned from the desk study data search and the proposed development is outside the favourable reference range of the species (NPWS, 2013c). The nearest known occurrence for Petalwort *Petalophyllum ralfsii*, is from North Bull Island, although the habitat in which it occurs does not occur within or adjacent to the proposed development.

The desk study noted the presence of the medium impact Invasive species Sycamore (*Acer pseudoplatanus*). No other invasive species scheduled to the European Communities (Bird and Natural Habitat Regulations) 2011-2015 are noted as occurring within the footprint of the proposed development.

¹⁵ https://secure.dccae.gov.ie/GSI_DOWNLOAD/Groundwater/Reports/GWB/SwordsGWB.pdf accessed in June 2019

4.3.5 Mobile Species

4.3.5.1 Species of Conservation Interest

Desk study results indicated no SCI mobile species recorded within the 2x2 km grid square O24E by *National Biodiversity Data Centre*¹⁶, conforming to the proposed development location.

4.3.5.1.1 Mammals

The desk study returned no results for European otter (*Lutra lutra*) in the searched area (i.e. 2x2km grid square O24E). The absence of suitable river waterbodies in the immediate vicinity of the proposed development makes this area unlikely for otter (*Lutra lutra*) to be present.

The proposed development is outside the favourable reference range of the lesser horseshoe bat *Rhinolophus hipposideros* (NPWS, 2013b), which is the only bat species designated as a QI in Ireland. The species is restricted to the western Atlantic seaboard and has never been recorded in Co. Dublin

4.3.5.1.2 Fish

As there are no river waterbodies in the vicinity of the proposed development and, therefore, there is no potential for QI fish species to be present in this area.

4.3.5.1.3 Invertebrates & Amphibians

The proposed development is outside the favourable reference range (NPWS, 2013c) and potential foraging range (i.e. 10 km; Zimmerman *et al.*, 2011) of QI Marsh fritillary *Euphydryas aurinia*. The favourable reference ranges of all QI whorl snails are outside the Zol of the proposed development (NPWS, 2013c).

The proposed development is outside the favourable reference range of both QI freshwater pearl mussel *Margaritifera margaritifera* and QI Irish freshwater pearl mussel *Margaritifera durrovensis* (NPWS, 2013c), and is not within any *Margaritifera* Sensitive Area (O'Connor, 2017) or within the same Catchment Management Unit as any *Margaritifera* SAC catchment¹⁷.

The proposed development is also outside the favourable reference range of QI white-clawed crayfish *Austropotamobius pallipes*, QI Kerry slug *Geomalacus maculosus*) and QI natterjack toad *Bufo calamita* (NPWS, 2013c).

4.3.6 Qualifying Interests and Special Conservation Interests

The results for the desk study are presented in this section.

4.3.7 QI Habitats, Flora and Scheduled Invasive Species

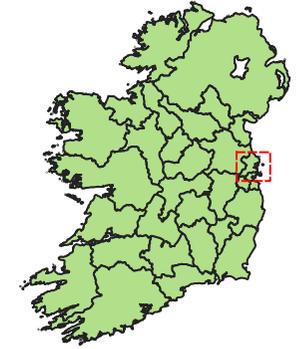
The desk study did not show any records for terrestrial habitats within the footprint or Zol of the proposed development which have affinity to QI habitats or offer any significant supporting value to QIs or SCIs of any European sites.

¹⁶ <https://maps.biodiversityireland.ie/Map> accessed in June 2019

¹⁷ Catchments of *Margaritifera* SAC populations listed in S.I. 296 of 2009.



Legend



- Proposed development
- - - Contour lines (10m)
- River waterbodies
- Transitional waterbodies
- Coastal waterbodies

Source: Hole-filled seamless SRTM data V1, 2004, International Centre for Tropical Agriculture (CIAT), available from http://gisweb.ciat.cgiar.org/sig/90m_data_tropics.htm.

Client 

Project Hearse Road South Realignment

Title Figure 3 Proposed development hydrological connectivity

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Issue Details

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5 SCREENING ASSESSMENT

5.1 Management of European sites

Screening for Appropriate Assessment is not required where a proposed development is connected with, or necessary for the management of any European site. In the case of the proposed development, it is not directly connected with or necessary to the management of any European site(s). As this proposed development is not connected with the management of an EU site, it is subject to AA.

5.2 Summary of Information Required

The screening assessment for AA follows the methodologies set out in **Section 3**, and analysis of the following information:

- Zol of effect from the proposed development; and
- Distribution of QIs and SCIs in relation to the Zol.

5.3 Assessment of Source-Pathway-receptor Model

As described in **Section 3.5.2**, the Screening for AA assessment report adopts a comprehensive and precautionary approach, for which the starting point is a complete list of all QIs/SCIs of European sites in Ireland.

5.4 Direct, Indirect or Secondary Impacts

Table 1 lists the European sites within 15km of the proposed development. The study area does not lie within or is it not adjoining the boundaries of any European site (see **Figure 2**). Therefore, no direct impacts are likely to occur through land take or fragmentation of habitats.

The likely significance of effects on any European site from the proposed development has been assessed using a source-pathway-receptor model (**Section 3.5.2**). Each element can exist independently, however an effect is created when there is a linkage between the source, pathway and receptor. Potential effects are discussed as follows.

5.4.1 Noise, Vibration and Human Presence

The effects of noise, vibration, lighting and human presence on SCI fauna species and/or QI habitats and species, during construction and operation of the proposed development, have been assessed. There is likely to be heightened noise and vibration during the construction of the proposed development. However, as there are no significant populations of QI or SCI species, within the vicinity of the proposed development, this is not predicted to result in any likely significant effects within the Zol.

5.4.2 Surface and Groundwater Pollution

Although there are not any river waterbodies in close vicinity of the proposed development, three branches of the Turvey_010 WFD river waterbody run at relatively short distance (see **Section 4.3.2**). Although the runoff direction from the proposed development is unknown, it will either flow to one of these three branches or directly towards the Malahide Bay. In any case, a potential hydrological pathway between the proposed development and the Malahide Estuary SAC and Malahide Estuary SPA can be established.

There is also a potential hydrogeological link between the proposed development and the Malahide Estuary SAC, Rogerstown Estuary SAC, Malahide Estuary SPA and Rogerstown Estuary SPA.

The effects of pollution from surface water runoff and ground infiltration on SCI fauna species and/or QI habitats and species, during construction and operation of the proposed development, have been assessed.

Construction

The National Roads Authority (2015) listed a number of potential impacts that the construction, maintenance or improvement of roads can give rise to. For the proposed development the likely impacts can be summarised thus:

- Pollution from mobilised suspended solids;
- Spillage of fuels, lubricants, hydraulic fluids and/or cement; and
- Pollution due to waste materials, dust or residues.

With regards to siltation and increased suspended solids concentration in the receiving receptor aquatic environment, the QI/SCI of the Malahide Estuary SAC and Malahide Estuary SPA (i.e. two European sites hydrologically connected to the proposed development) are not considered sensitive to discrete increments of sediment of the same magnitude as those associated with the construction of the proposed development. In fact, these habitats are dependent on sediment influxes to maintain their sediment balance and ecological functions.

In the case of spillages of hazardous materials, the construction of the proposed development does not involve any high spillage risk methods. Furthermore, the potential spillages would be of such magnitude and duration that would not likely lead to the occurrence of likely significant effects to species or habitats associated with the European sites hydrologically connected to it. This conclusion is further reinforced considering the nature (i.e. vegetated drainage ditch network) and length of the hydrological pathway (i.e. estimated to be more than 2km), which decreases the contamination potential.

It is then concluded that the construction phase of the proposed development does not have the potential to create likely significant effects on European sites.

Operation

The operation of the realigned road scheme will result in subtle redistribution of traffic off an existing section of road onto an adjacent stretch of newly constructed road (500m approximately). There should be no net change in traffic movements.

Therefore, it is not considered likely that the operation of the proposed development has any significant effect on any European sites.

5.4.3 Spread of Invasive Alien Plant Species

The effects of disturbance of Third Schedule (SI 477/2011) Invasive Alien Plant Species on SCI fauna species and/or QI habitats and species, during construction and operation of the proposed development, have been assessed.

As there are not any records of IAPS at the proposed development or its near surroundings, it is considered that either the construction or operation phases of the proposed development will not have any significant effects spreading IAPS to European sites.

5.5 Key Findings

The key findings of this AA Screening Report of the proposed development are that:

- It is not directly connected with or necessary to the management of any European site;
- It will not give rise to likely significant effects on the qualifying interests of the Malahide SAC, in view of best scientific knowledge and in view of the conservation objectives of the sites concerned; and
- It will not give rise to likely significant effects on the special conservation interests of the Malahide SPA, in view of best scientific knowledge and in view of the conservation objectives of the sites concerned.

5.6 Cumulative and In-Combination Effects

Legislation, guidance and case law (see **Chapter 2**) requires that in-combination effects with other plans or projects are considered. On this basis, a range of other plans and projects were considered in terms of their potential to have in-combination effects with the proposed development.

The assessment of in-combination effects has regard to developments potentially affecting both Malahide Estuary SAC and Malahide Estuary SPA, with which a potential pathway has been identified. The Natura Standard Data Forms for Malahide Estuary SAC (NPWS, 2017a) and Malahide Estuary SPA (NPWS, 2017b) identify the most important negative impacts (high and medium) and activities with high effect on the sites. The most important negative impacts (high and medium) and activities with high effect on the sites are identified as:

- **Malahide Estuary SAC**
 - J02.01.02: reclamation of land from sea, estuary or marsh;
 - A08: fertilisation in agriculture;
 - D01.05: bridge, viaduct;
 - G02.01: golf course;
 - I01: invasive alien species;
 - E01: urbanisation and human habitation;
 - G01.02: walking, horse-riding and non-motorised vehicles;
 - D01.02: roads, motorways;
 - G01.03: motorised vehicles; and
 - G01.01: nautical sports.
- **Malahide Estuary SPA**
 - G01.02: walking, horse-riding and non-motorised vehicles;
 - D01.04: railway lines;
 - I01: invasive alien species;
 - J02.01.02: reclamation of land from sea, estuary or marsh;
 - D01.01: paths, tracks, cycling tracks;
 - A08: fertilisation in agriculture;
 - D01.05: bridge, viaduct;
 - E02: Industrial or commercial areas; and
 - G01.01: nautical sports.

5.6.1 Plans

5.6.1.1 National Development Plan

The National Development Plan 2018-2027 (Government of Ireland, 2018) designates Housing and Sustainable Urban Development as one of the National Strategic Investment Priorities as a result of the existing patterns of development and demography. The National Planning Framework highlights the urgent requirement for an uplift of the delivery of houses within the existing urban areas which results in the allocation of €14.5 billion for the Housing and Sustainable Urban Development Strategic Investment Priority (2018-2027), doubling the annual housing output from 2016/2017 to an average of 25,000 to 30,000 new homes per year.

This Strategic Priority carries the potential for in-combination impacts with the proposed development on potential receptors, specifically designated sites/habitats and species. However, the National Development Plan 2018-2027 also set biodiversity as a priority (i.e. Enhanced Amenity and Heritage) and apportions €1.4 billion to, amongst other, support further deliver compliance with the Habitat's Directive. This compliance will, inevitably, implicate that all in-combination and cumulative potential impacts with other developments are contemplated and mitigated. The in-combination effects from the proposed development with the National Development Plan 2018-2027 is not considered significant.

5.6.1.2 Fingal County Development Plan

The Fingal County Development Plan 2017-2023 (Fingal County Council, 2017) sets out several relevant biodiversity objectives, including:

Objective GI24

Ensure biodiversity conservation and/or enhancement measures, as appropriate, are included in all proposals for large scale development such as road or drainage schemes, wind farms, housing estates, industrial parks or shopping centres.

Objective NH03

Implement the Fingal Biodiversity Action Plan 2015 (Fingal County Council, 2010) and any revisions thereof in partnership with all relevant stakeholders.

Objective NH09

Support the National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, in the maintenance and, as appropriate, the achievement of favourable conservation status for the habitats and species in Fingal to which the Habitats Directive applies.

Objective NH27

Protect existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character and ensure that proper provision is made for their protection and management.

Objective DMS01

Ensure that all plans and projects in the County which could, either individually or in combination with other plans and projects, have a significant effect on a European site or sites are subject to Screening for Appropriate Assessment.

5.6.1.3 Fingal Biodiversity Action Plan 2010-2015

The Fingal Biodiversity Action Plan (Fingal County Council, 2010) remains the Council guiding document that provides a framework for biodiversity action and sets a template for future actions in this regard. In relation to Donabate, it points out several biodiversity actions and objectives of relevance to develop an ecological network across the County. None of the actions and objectives address the proposed development location but **Table 2** provides a summary of the potentially relevant actions and objectives in this context.

Table 2 Town Biodiversity Plans - Donabate (Fingal County Council, 2010)

No.	Action	Objective
9	Carry out a hedgerow survey in Donabate	To assess the status of remaining hedgerows within Donabate and prepare a list of conservation actions for the individual hedgerows.
10	Initiate a campaign of bird, bat and insect box making for gardens throughout Donabate.	To encourage people to enhance their gardens and open spaces for wildlife

5.6.1.4 Water Quality

The Water Framework Directive (WFD) 2000/60/EC provides a framework for the protection and improvement of rivers, lakes, marine and ground waters in addition to water-dependent habitats. The aim of the WFD is to prevent any deterioration in the existing status of water quality, including the protection of good and high water quality status, where it exists. The second cycle River Basin Management Plan, covering the period 2018 – 2021, was published in April 2018. The Plan sets out a proposed framework for the protection and improvement of Ireland's water environment in line with Water Framework Directive objectives. It was determined that the multiple River Basin District approach used in the 2009-2015 Management Plan was not as effective as expected so the 2018-2021 Management Plan has defined a single River Basin District (DoHPLG, 2018). This national strategy outlined all the actions required to improve the water quality, with county councils and Irish Water playing an important role in the implementation of the plan.

There are binding obligations on all Irish local authorities, including Fingal County Council, to achieve good status of surface waters, under the terms of the EU Water Framework Directive 2000/60/EC [may be cited as European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272/2009)], and in related policies in the Fingal County Development Plan (Fingal County Council, 2017), e.g. Objective WQ01:

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

Furthermore, Irish Water, who has national statutory remit for wastewater and drinking water services, has committed to a 25 year programme of improvements to wastewater impacts on surface waters in their Water Services Strategic Plan (Irish Water, 2015).

5.6.1.5 Flooding

As the proposed development is located in an area with no river waterbodies in close proximity, no risk of flooding is anticipated. This conclusion is confirmed by the inexistence of records of historical flood events at that location and for the proposed development to be outside any probable flood extents, for both river and coastal floods¹⁸.

5.6.2 Projects

A search was conducted of planning applications (projects) within the vicinity of the proposed development, using the Fingal County Council planning portal map viewer¹⁹ and the Department of Housing, Planning and Local Government EIA portal map viewer²⁰. The search was limited to the five-year period preceding the date of issue of this report and excluded retention applications (i.e. typically local-scale residential or commercial developments where an impact has already occurred), incomplete, withdrawn, and refused applications. **Table 3** lists the projects/plans from the mentioned search with potential for cumulative effects to the environment with the proposed development. It also includes the Donabate Distributor Road Scheme project which, although approved with conditions in 2011, is of relevance in the present context as the works for its development are currently underway.

¹⁸ Available online at: <http://www.floodinfo.ie/map/floodmaps/>. Accessed in May 2019.

¹⁹ Available online at: <http://fingalcoco.maps.arcgis.com/apps/webappviewer/index.html?id=3fa7d9df584c4d93aab202638db9dd1a>. Accessed in May 2019.

²⁰ Available online at: <http://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1>. Accessed in May 2019.

Furthermore, a search of An Bord Pleanála’s website²¹ was completed to identify any relevant applications, including Strategic Infrastructure Development (SID) and Strategic Housing Development (SHD) in the past three years or in close proximity to the proposed development.

RPS is aware of another proximal project sponsored by Irish Water, the proposed Balllease Wastewater Pumps station, which is approximately 3km east of this proposed development. Planning documents, including Screening for Appropriate Assessment, have been submitted to the Local Authority.

Table 3 Planning Search Results from the County Planning and EIA Portal Maps

Planning Application Reference Number	Project/Applicant Name and Proposed Location	Brief Development Description	Application Status/ Outcome	Approximate Distance and Direction from Proposed Development	Date Planning Application Granted
06F.KA0018	Donabate Distributor Road Scheme	The proposed scheme comprises the construction of a distributor road approximately 4 kilometres in length. The road will also involve the construction of a new bridge (and associated embankments), footpaths and cycleways.	Permission with conditions	ca. 20m	19/07/2011
F17A/0113	McGarrell Reilly Homes, Hearse Road, Donabate, Co. Dublin	The construction of 196 houses, 62 apartments and a crèche, with two vehicular access points and access to two houses.	Permission	ca. 1km	01/12/2017
F17A/0373	E. Hopkins, Prospect House, Hearse Road, Donabate, Co. Dublin	A residential development of 151 no. residential units and 1 no. crèche/childcare facility; 1 no. new link road; 2 no. additional vehicular and pedestrian entrances to the proposed development; temporary foul pumping station to serve the development;	Permission	ca. 200m	17/04/2019

5.6.3 Cumulative Impacts Conclusion

A number of planning applications in proximity to the proposed development have potential to give rise to likely significant effects to European sites. The Donabate Distributor Road was subject to an Environmental Impact Statement which assessed its potential impacts and indicated mitigation measures to be implemented. It concluded that the mitigation measures will prevent the occurrence of any residual impacts on the Malahide Estuary or its habitats and species and would not adversely affect the integrity of its European sites.

The other applications listed in **Table 3** have been subject to Environmental Reports which ultimately indicated that these developments will not produce adverse effects on the integrity of European sites. Therefore, no likely significant effects can be predicted from these developments.

No other pathways have been identified by which any plan or project could have a likely significant in-combination effect on any of the European sites. It is concluded that there is no potential for cumulative or in-combination impacts

²¹ Available online at: <http://www.pleanala.ie/>. Accessed in May 2019.

6 SCREENING CONCLUSIONS AND STATEMENT

RPS has prepared this report to inform AA screening to assess whether the proposed development, individually or in combination with other plans or projects, and in view of best scientific knowledge, is likely to have a significant effect on any European site(s).

The screening exercise was completed in compliance with the relevant European Commission guidance, national guidance, and case law. The potential impacts of the proposed development have been considered in the context of the European sites potentially affected, their Qualifying Interests or Special Conservation Interests, and their Conservation Objectives.

Through an assessment of the source-pathway-receptor model, which considered the ZoI of effects from the proposed development and the potential in-combination effects with other plans or projects, the following findings were reported:

- The proposed development is not directly connected with or necessary to the management of any European site;
- The proposed development will not give rise to likely significant effects on the qualifying interests of any SAC, in view of best scientific knowledge and in view of the conservation objectives of the sites concerned; and
- The proposed development will not give rise to likely significant effects on the special conservation interests of any SPA, in view of best scientific knowledge and in view of the conservation objectives of the sites concerned.

On the basis of objective scientific information, it is the considered opinion of RPS that, in completing its report to inform Screening for Appropriate Assessment in respect of the proposed development, the project either individually or in combination with other projects and plans, is not likely to have a significant effect on European sites.

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